

# BUILDING GIS TOGETHER

STORIES FROM  
THE ESRI COMMUNITY  
EXPERIENCE



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INTRODUCTION BY JACK DANGERMOND

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# INTRODUCTION

By Jack Dangermond, President of Esri

FOR MORE THAN 50 YEARS, I HAVE WORKED ON GROWING **F** and applying the application of geography and GIS to various kinds of organizational problem-solving. This journey has been thrilling for me, starting right out of school when I attended a professional meeting at Urban and Regional Information Systems Association (URISA) in Los Angeles. There, people from many disciplines and backgrounds came together to share their work and learn from each other, building a community. This experience showed me the power of a community and how people could depend on each other and form lasting relationships. Some of those people from so long ago are still among my close friends.

Not long after my wife, Laura, and I founded Esri® in 1969, we started the Esri User Conference, which has grown to tens of thousands of attendees who share their work and learn in an accelerated, collaborative way. Informal interactions in hallways, people bumping into each other and sharing what they do—their real experiences—have been a significant part of this learning exercise.

Looking to the future, we envisioned a continuous User Conference, leading to the creation of the Esri Community, an online community that allows people to build friendships, share information, help each other, and grow as an organization.

Today, hundreds of thousands of individuals are members of the Esri Community, which continues to evolve. We participate in this Community by sharing our understanding and watching people grow as an overall body.

The Community is growing the profession, the reach, and the effectiveness of GIS. We are committed to supporting our users, partners, and employees in sharing, learning from each other, and growing the impact of our collective work on the world's big problems and challenges. These interactions make individual work more efficient and enable collaborative missions such as conservation, COVID-19 response, and education. I encourage everyone to take this connection seriously and grow together as a community.

Thank you,

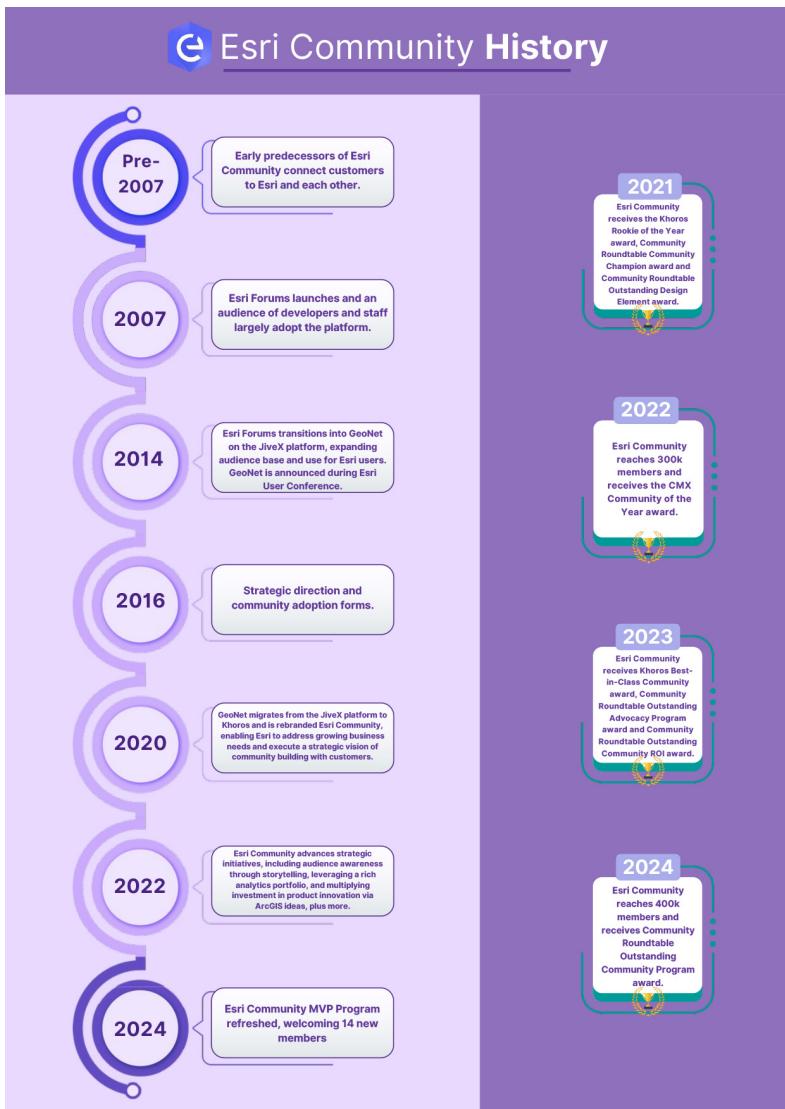
A handwritten signature in black ink, appearing to read "John H. Moore".

# WHAT IS ESRI COMMUNITY?

**C**OMMUNITY AS A CONCEPT—BRINGING PEOPLE TOGETHER to collaborate, share ideas, combine perspectives, and support each other—has been part of Esri since it started in 1969. That mentality permeates all corners of Esri and is unambiguously recognized as essential to the company’s success.

Esri has a more than 30-year history of hosting various forms of online community that have led to the award-winning experience made available in today’s Esri Community platform that began in 2020—an online gathering place where Esri users from around the globe connect, collaborate, and share knowledge.

This timeline is a celebratory reminder of the growth, transformation, and impact of Esri Community over the years. It also reflects the continued investment of time, resources, and people to support our customers and their work with the power of community.



## What is the mission of Esri Community?

Esri Community provides a central online destination where members can gather to exchange ideas, solve problems, accelerate success, and build relationships to create a better world through the use of geospatial technology. This mission is encapsulated in a simple description at the top of the Esri Community home page: *A global community of Esri users where you can find solutions, share ideas, and collaborate to solve problems with GIS.*

## How will it help me?

As a member of the Esri Community, you can

- Connect with and learn from other users of Esri products,
- Ask questions to get help from other GIS professionals,
- Share knowledge, feedback, tips, and best practices,
- Collaborate with other GIS professionals to expand the reach of what is possible with geospatial technology, and
- Submit ideas for feature requests and product enhancements or vote for others' ideas.

In Esri Community, you will find

- Questions and answers about Esri products and the GIS industry,
- Resources and updates on Esri products and services, and
- Opportunities to be heard, get involved, and collaboratively build an Esri knowledge base that benefits everyone.

Though much of the information in Esri Community can be viewed without ever having to log in, we recommend registering your account and setting up a profile for the best experience. Member-only features include posting, voting on ideas, and subscribing to content for notifications of new activity. Esri Community registration and use are free.

## What is my role and responsibility in the Esri Community?

Even if all you ever do is read messages or articles that someone else has posted, you are an essential part of Esri Community. We encourage you to visit often and participate. Ask your toughest questions. Chances are someone has a solution or can point you in the right direction. If you find a solution that works, let others know by passing on your tips and insights. You might have the answer someone else needs.

It's always good protocol to thank Community members who have helped you. Show your appreciation by giving kudos to helpful posts, using the Accepted Solution feature when a member's response answers your question, or posting "thank you" replies.

We want the Community to be appropriate, friendly, informative, and fun for everyone. Be sure to read the [Community Terms of Use](#) and [Community Guidelines](#) so that you know what to expect and what is expected of you.

## Available communities

**Communities** represent the highest category of locations within the Esri Community platform. They host major areas of interest to Esri and its users. Available communities include:

- **Products:** Ask, learn, and share info about Esri software products, apps, extensions, and related tools.
- **Industries:** Connect with Esri Industries and professionals on software and related topics.
- **Developers:** Ask, learn, and share about general developer topics or specific Esri APIs and SDKs.
- **Global:** Collaborate locally in Esri global communities.
- **Services:** Esri Training, Technical Certification, Support, Implementation, and My Esri.

- **Learning:** Discuss and share with the Esri Press books and education communities.
- **Networks:** Esri initiated Networks of people with common interest.
- **Events:** Learn about Esri Conferences and Events and connect with event attendees.
- **User Groups:** GIS and geospatial professionals centered on a common topic or interest.
- **Community Resources:** Find help, share feedback, and learn more about the Esri Community.
- **ArcGIS Ideas:** Discover Idea Exchanges across the community and explore recent idea activity.
- **ArcGIS Topics:** Join conversations spanning a variety of subjects not covered in other communities, including user research surveying, broad GIS concepts, and more.

# ESRI COMMUNITY'S STORIES: FOCUS AREAS

This book presents user stories collected into four themes focusing on the benefits that Esri Community participants draw on every day:

- **Solutions to Big Challenges:** Esri Community is full of GIS professionals helping take on the world's most pressing issues. You will be inspired by how members work together and share what they know in order to solve tough problems with significant impacts.
- **A Career and Learning Resource:** Esri Community is a go-to spot for career growth and learning. Discover how members harness the abundance of educational information, find mentorship, and seize on opportunities to build their skills and knowledge.
- **Connection and Networking:** Making meaningful connections is a hallmark of Esri Community. Learn how the Community is full of networking opportunities for GIS professionals to connect, share experiences, and support each other in their careers.
- **Innovation and Product Empowerment:** Esri Community offers an environment that sparks innovation and helps users get the most out of Esri products. See how members work together and share ideas that drive product development and improvements.

## Stories and strategies

Building GIS Together: Stories from the Esri Community Experience presents a collection of real-life stories illustrating how GIS professionals lean on Esri Community to achieve wonderful things when faced with a spectrum of challenges—from boosting career growth

and developing a supportive peer network to tackling real-world problems, and more.

The book concludes with a section about getting started with Esri Community and recommends strategies on how to generate the most value through participation. If you or your organization are not fully using Esri Community to enhance your geospatial work and capabilities, this book can be used to help you identify specific features and approaches applicable to your own needs. What's more, the included member stories connect the dots between a wide variety of real-world use cases and the benefits available through Esri Community.

## How to use this book

This book is designed to familiarize you with Esri Community and the benefits that Esri users from all walks of geospatial involvement stand to gain from it, serving as a guide for those ready to take their first steps with Esri Community and for providing inspiration for existing members who want to deepen their involvement. Participation is easy and free and offers a support network of GIS peers and collaborators, a continuously growing library of GIS and ArcGIS knowledge, and a voice in the ArcGIS product enhancement process, to name a few things.

Learn more about Esri Community and find links to more resources by visiting the web page for this book:

[go.esri.com/bgt-resources](http://go.esri.com/bgt-resources)



## PART 1

# SOLUTIONS TO BIG CHALLENGES

“The Community serves as a valuable resource, providing a window into what works in real-life situations.”

— Doug Browning, GIS Data Systems Analyst and Esri Community MVP

WEATHER DISASTERS, BIODIVERSITY LOSS, EXTREME POVERTY, disruptive pandemics, human rights violations, war and violence: These threats have the potential of steering humanity toward a deeply troubling future. The forces that drive them are complicated, requiring the best tools, intelligence, and, above all, widespread cooperation to address.

Fortunately, technology has furnished us with capable tools. Excellent and rapidly expanding intelligence is more accessible than ever before. Disparate locations are no longer a barrier to collaborative partnerships, but an asset.

GIS and its practitioners are among the best positioned to create alignment and direct resources against these pressing challenges. In this section, you will get to know a few of the many GIS professionals who turn to Esri Community to connect with peers,

access valuable information, and find innovative ways to apply ArcGIS to real-world problems. Whether through the coordination of wildfire response efforts, the development of housing solutions for vulnerable populations, or the conservation of endangered species, the stories in this section demonstrate how Esri Community empowers GIS professionals to drive positive change in the world.

# WILDFIRE TAKES THE PLENARY STAGE

Featuring the NIFC Org Team, National Interagency Fire Center

“Do you know what keeps me up at night?”

Outfitted in wildfire fighting gear and framed by a panorama of screens showing flame-decimated wilderness, Sean Triplett cast his question to a shadowed crowd of thousands at the 2023 Esri Federal GIS conference. Sean is the Fire & Aviation Management Tools & Technology lead for the US Department of Agriculture’s Forest Service.



Left to right: Sean Triplett, Katie Hansen, and Skip Edel on the 2023 Esri Federal GIS conference plenary stage.

“Do I have the information I need to mitigate risk to myself and my firefighters? Do I have situational awareness on where the fire is and how the terrain, weather, and fuels are going to drive that fire?”

It is understood that Sean has reason to be concerned, and that the need for reliable, rapidly accessible data is a critical requirement in the work to address catastrophic fires across the country.

Sean, along with his Tools & Technology team members, are tasked with evaluating resources that can give wildfire professionals an edge against catastrophic fires even as atypical weather, drought, and other impacts of climate change increase the threat they pose. That is why the Forest Service, along with federal and state agencies connected through the National Interagency Fire Center (NIFC), and many others working on wildland fire use ArcGIS products to rapidly collect, modify, and distribute information needed across teams handling many aspects of wildfire response and prevention.

Beside him on the plenary stage were Katie Hansen and Skip Edel, two of just four people who run The NIFC Org and who administer ArcGIS data and tools for 23,000 users across the United States. Katie is NIFC ArcGIS Online administrator for the National Park Service and Skip is the Fire GIS Program lead for the National Park Service. With Sean, they introduced the vital work NIFC and ArcGIS do in coordinating the fire community.

## Getting to know NIFC

NIFC is one of many organizations or interest groups who have set up their own dedicated place in Esri Community—what is called a User Group. The NIFC User Group hosts nearly 1,500 member accounts and is currently the largest of its kind in the Esri Community platform.

Following their plenary presentation, Katie, Skip, and Sean met with the Esri Community team on the FedGIS expo floor to talk more about their work and how they have benefitted from using Esri Community.

When asked to describe NIFC, Skip answered, “It’s a place. A physical location in Boise, Idaho where the coordination happens with the various member agencies.” These include the US National Park Service, Fish and Wildlife Service, and the Bureau of Indian

Affairs, to name just a few. Each of the eight participating agencies have an office at the location which facilitates close cooperation. Between them, they manage wildland fires for nearly 700 million acres of federal public land. And when it comes to The NIFC Org, the online component of NIFC, anyone involved in wildland fire can participate and make use of the ArcGIS Online benefits it extends.

Skip elaborated on NIFC's purpose. “[NIFC recognizes] that fire doesn't stop at agency boundaries. Between Forest Service and BLM and Park Service, fire is just going to cross those boundaries.

“So there needs to be some coordination in the response to the fires as they cross all these various boundaries,” he said. “Any one agency does not have enough resources to respond to all the fires, so we coordinate together. We all work together.”

Katie underlined the need by voicing a growing challenge the fire community faces. “The fire seasons are getting longer, so our support is just getting more and more intense and more involved,” she said, pointing to the Marshal Fire that raged through densely populated Colorado neighborhoods in December 2021 as an example of the eroding predictability of fire season. “We don't let our guard down like we did previously on the shoulder seasons or over the winter, knowing that we could have a catastrophic wildfire any day of the year now.”

## Good tools make the difference

No more than a handful of years ago, paper was the predominant method for distributing crucial location data among teams managing wildfires. Information worked on a 24-hour planning cycle, with GIS specialists spending significant amounts of their time printing maps for crews in the field to obtain during 6 a.m. briefings. When those crews returned from the field with new data 16 hours later, the GIS

specialists would rush to make updates and print fresh maps in time for the next early morning briefing.

Skip recalled, “It was a lot of work and a lot of scrambling at the last minute, trying to get that data processed and everything printed out in time. Moving to ArcGIS Online, that’s really cut down on a lot of that because users can update their data throughout the day.” All the necessary data goes into a single common database, updated in real time and almost instantly available to those who need it.

With the adoption of mobile devices running apps like ArcGIS Field Maps and ArcGIS Survey123, the use of ArcGIS resources that NIFC administers has soared. Users can not only see data, but they contribute to it as well while working together to enable a more informed, more rapid, and safer fire response.



The screenshot shows the Wildfire Response GIS group page on the Esri Community website. The top navigation bar includes links for 'All Communities', 'ArcGIS Ideas', and 'Community Basics'. The main header is 'Wildfire Response GIS' with a subtitle 'A Place for Fire GIS Specialists to get updates, ask questions, and discuss topics related to the GISS position.' Below the header, the breadcrumb navigation shows 'Home > User Groups > Wildfire Response GIS'. On the left, there is a circular logo for the 'NATIONAL INTERAGENCY FIRE CENTER' with 'Boise, Idaho' written at the bottom. The group information section displays a member count of '1468 members', ownership by 'WalkerHenry\_NIFCAdmin, KatieHansen\_NIFCAdmin, Skip\_Edel\_NIFC\_Admin, NIFC\_Administrator', and a note that it is a 'Closed group' created on '05-22-2019'. A 'Send request to join' button is visible.

The nearly 1,500-member Wildfire Response GIS User Group in Esri Community is managed by Katie, Skip, and a few others. The group is private to maintain relevance between content and membership.

Alongside ArcGIS, there is another Esri offering that Katie and Skip say has made a difference in their work.

“We use Esri Community quite a bit,” Katie said. “It’s a place for our users to go and communicate with each other, crowdsource information, ask questions of their peers, ask questions of us,” Katie pointed to herself, “The administrators.”

Esri Community has proven to be the only truly viable option for users in the NIFC network.

### The right option

Federal employees are likely to be familiar with the rules and regulations that carefully govern work communications. That, coupled with hurdles inherent to email communication—key feature limitations, dead addresses created when users switch agencies, and even friction generated by the all-too-common exhaustion of overfull inboxes—have meant that the NIFC team needs a more effective tool to keep their user community both connected and informed, and it must meet the stringent seal of government approval. That is a bit of a tall order. Luckily, Esri Community fit the bill, and in 2019 NIFC opened the doors of their Wildfire Response GIS User Group to other members of the NIFC organization.

Whether it’s being used to notify members about required trainings, host conversations where users help each other source incident computers needed for wildfire events, or even share out the much-anticipated annual fire season information post that includes such details as what version of ArcGIS Pro all agencies will need to be on, or any of the numerous other use cases being practiced, Esri Community provides NIFC a platform where their members can give and get the information they need quickly and effectively.

“Now we have this platform to be able to engage our users and have them engage amongst their peers and their community as well.

Because it really is a community of like-mind folks who have an interest in wildland fire, but also geospatial aspects,” Katie said.

Skip emphasized Esri Community’s impact, “We’ve moved to [Esri Community] because of its capabilities, and we don’t really have any other option from the government side of things to do email lists and all that kind of stuff. It’s very beneficial.”



Left to right: Katie Hansen (NIFC ArcGIS Online Administrator for the National Park Service), Sean Triplett, (Fire & Aviation Management Tools & Technology Lead for the U.S. Dept. of Agriculture’s Forest Service), and Skip Edel (Fire GIS Program Lead for the National Park Service) represent some of the people directly involved with the National Interagency Fire Center (NIFC) in Boise, Idaho, where eight federal and state agencies participate in a coordinated approach wildland fire management. Their work makes significant use of ArcGIS technologies and a private Esri Community User Group, as participating agencies tend to nearly 700 million acres of federal public land.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: The NIFC Org Team” on the *Esri Community Blog* on March 1, 2023.

# TRANSFORMING UNDERUTILIZED PROPERTIES INTO HOMES

## Featuring Luiza Fernandes, Arcadis

Enter the Map Gallery. This collection of GIS ingenuity has become a beloved fixture at Esri's annual User Conference (UC). If you have not experienced it, picture a soaring, open room with walls distant enough to dull sound. An obscured glass ceiling softens the San Diego sun, gently illuminating the large room and its exploring crowds. The feel is pleasantly outdoors-y.

The main attraction—scores of tall rows of panels—channel curious visitors through the space. The panels are covered in an array of maps, frequently colorful, that are submitted by Esri users to compete in the annual Map Gallery contest.

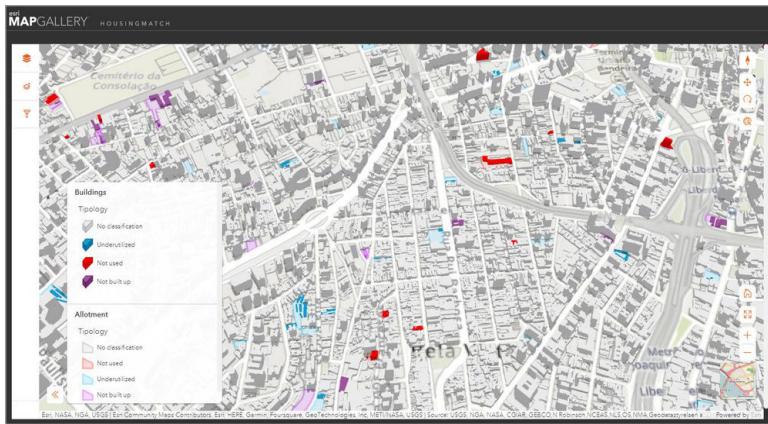
It was in the UC 2022 Map Gallery where our Esri Community team came across a map with the ability to change lives. That is not hyperbole. Luiza Fernandes and five of her team members at Arcadis had submitted Housing Match, a map that identifies un-and-under-utilized properties in São Paulo, Brazil, which can be retrofit with housing units for those experiencing homelessness.

Because she represented her team at the event, Luiza's presence gave us the unique opportunity to connect in person and learn more about their map and how she, as a member of Esri Community, has been putting our platform to use.

## Tackling homelessness with GIS

“The idea of the project was to find housing for people, and we started to think about the homeless people in the city center of São Paulo and thinking what we can do to help them,” Luiza said in response to a question about the map she and her team created at Arcadis.

“We have this database for São Paulo that shows which buildings are not being used or are under-used, so we mapped this,” she said. “We find that if we get this building and construct here, housing for people,” she added, pointing to a printout of the map, “how many units and how many houses we can have from that.”



Housing Match is an interactive map of São Paulo, showing properties that may be suitable to retrofit as housing for the homeless.

Luiza's role in the project involved building the web GIS that identified property with potential to be turned into housing units and creating additional layers with important contextual data. She and other team members want the map to be used as an aid for connecting investing stakeholders with data needed to make a marked difference on housing, mobility, and quality of life for vulnerable populations.

While the map reflects a starting point of São Paulo, the intention is for the concept and tools to be used more broadly, multiplying the impact of what it can mean for better resourcing the global challenge of housing for all.

## An Esri Community connection

At Esri, one of our greatest points of pride is that we make mapping products that help businesses and organizations solve the world's biggest challenges. Luiza and the team at Arcadis are a part of that momentum while using GIS to connect people with their fundamental need of shelter.

Esri Community is a key tool for empowering GIS professionals in accomplishing this and other work, resourcing individuals with vast communal knowledge generated by a network of hundreds of thousands of users from all around the world. Esri Community has been a big help in supporting her work, Luiza said.

Luiza spends much of her time working with JavaScript API, Python API, ArcPy, and more. The resources and readiness of members to answer her questions help ensure she has the information she needs to solve challenges along the way. Luiza even credits Esri Community with helping her become a developer.

“It’s the place where we can find, for GIS people, all the information we need.”



Luiza Fernandes is a senior digital innovation analyst at Arcadis. She and five colleagues developed a web map that identifies properties in São Paulo, Brazil, which may be repurposed as housing for the city’s homeless.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Luiza Fernandes” on the *Esri Community Blog* on October 17, 2022.

... you will often see threads where there's a lot of communication, and maybe multiple users get involved, and there's a lot of back and forth. And that is really the key strength about Esri Community: That the communication can be very quick.

— Kory Kramer, Esri Senior Product Manager for ArcGIS Pro

# THE FRAGILE STATE OF EARTH'S BIODIVERSITY

**Featuring Mervyn Lotter, Mpumalanga Tourism & Parks Agency**

The future for many plant and animal species has grown increasingly uncertain due to suffocating conditions created by shrinking habitat, over-fishing, pollution, climate change, and a series of other environmental pressures. The Living Planet Index, a measurement of global biological diversity, estimates an average 69 percent decline in the relative abundance of monitored wildlife populations around the world has already occurred between 1970 and 2018. Some scientists estimate that without remediation efforts to reverse these trends, half of the world's estimated 8.7 million species of plants and animals will become extinct in the next century.

Growing awareness of this complex problem and the staggering scope of damage already underway has led to greater investments aimed at protecting biodiversity. Some efforts have even demonstrated that there's still time to preserve biodiversity and prevent the worst impacts on species, including those that will endanger humanity in a world robbed of diverse and richly habited ecosystems. Human behaviors that contribute to hostile conditions for many species still far surpass the reach of efforts made to protect them. The message is clear: Fully equipped and empowered conservation programs are needed now more than ever.

As a biodiversity planner and GIS manager for the Mpumalanga Tourism & Parks Agency in South Africa, Mervyn Lotter knows well the uphill battle he and his peers in the field of conservation face. He also understands the consequences likely to unfold should humanity fail to rise to the challenge. The capabilities of modern GIS can help support new, stronger methods of addressing the biodiversity crisis.

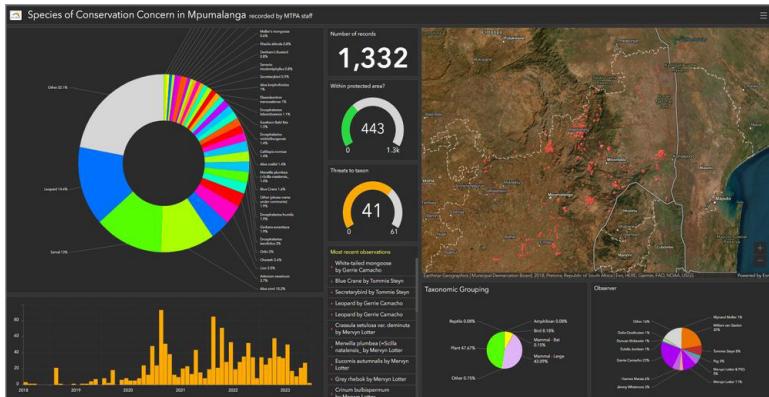
## GIS-fueled conservation in Mpumalanga province

The Mpumalanga province is home to thousands of diverse plant and animal species, including 313 species of flora and fauna which are considered vulnerable, endangered, or critically endangered. An additional 310 species are considered species of conservation concern. The province hosts three centers of endemism and a fourth is proposed. These centers of endemism host a high number of endemic species (usually plants), meaning that they are found nowhere else on the planet. The rich diversity and unique genetic material in these special areas make identifying and delimiting them vital so that they may receive appropriate conservation attention to ensure their protection.

Through his work with the Mpumalanga Tourism & Parks Agency, Mervyn directly supports the agency's commitment to preserve and protect all animal and plant species in their province—going beyond the protection of those that are either threatened or of conservation concern.

Building awareness of the local environment is central to Mervyn's work as he manages his organization's spatial databases and GIS and coordinates the collection of species data being gathered by scientists in the field using ArcGIS Survey123 and ArcGIS Field Maps. With this information, he is able to run a systematic conservation plan for the Mpumalanga province and bring together all the spatial data they have gathered on species, ecosystems, threats, and areas currently under protection. Displayed or used to derive new datasets using ArcGIS software, the field data is included within the agency's systematic conservation plan where conservation targets are being set, and the extent to which each target is met within protected areas is assessed. Where targets are falling short, additional areas outside of existing protected areas are prioritized for conservation. Clear identification of these shortfalls informs the team's

planning and are combined with knowledge of the surrounding landscape, demystifying where limited resources should best be directed to expand protected areas in support of the most vulnerable species and ecosystems.



ArcGIS Dashboard showing species of conservation concern in Mpumalanga.

Having reliable, detailed information about their environment's needs is not only for internal guidance. It is also essential for attracting partnerships, building public support, and securing financial support in an area of the world where conservation funding is in decline. Mervyn recognizes that the way data is presented can matter as much as the data itself and that maps and web apps are an effective vessel to get important messages across.

For products to be considered and used, their data must be available in a format that municipalities can access and understand, he said.

## Run fast or run together

Mervyn's career at The Mpumalanga Tourism & Parks Agency began as a botanist in the mid-1990s. Later, after a mentoring colleague

introduced him to GIS by demonstrating how ArcGIS could be used to predict the distribution of plant species, a new realm of possibilities opened. Eventually, Mervyn moved into his mentor's post. His GIS knowledge was still at a young stage, and he lacked access to a teacher.

Mervyn became aware of a scholarship program offered by the Esri-supported Society for Conservation GIS (SCGIS), a non-profit that supports scholars around the world who struggle to find GIS training. In 2011, he joined 16 other recipients in receiving the SCGIS scholarship, which included training in ArcMap and the opportunity to attend Esri User Conference as well as SCGIS's own conference.

“No other training event had had such a positive impact on my life ever.” Mervyn said.

There was still plenty more to learn, though, and his ongoing need for education found a ready resource in Esri Community.

“I would never have been able to learn to use GIS to its full potential on my own,” Mervyn said of that time. “Through the Esri Community, you’re much more able to reach out to a broader network to get their advice, their support, and learn from where others are stumbling.”

Mervyn reflected on another way to describe the role Esri Community continues to play in supporting the success of GIS professionals. “There’s a lovely African proverb, which is, ‘If you want to run fast, run alone. But if you want to run far, run together.’”

## **Giving and the spirit of Ubuntu**

Now the better part of three decades into his conservation work, markers of Mervyn’s community-mindedness are told in part by the hundreds of kudos he has received for his Esri Community messages and the numerous answers he has provided to other members’

questions. He has also served as a board member for the Society for Conservation GIS and as a Train-the-Trainer, helping others in conservation achieve needed GIS training just as he received.

Within Esri Community, Mervyn has been inspired along the way by other members. “There’s a lot of real stars who go out of their way to help others, and I think it’s just in their personality to want to help others.” Mervyn says. “I admire them, both the Esri staff and the non-Esri staff.

Mervyn captures his philosophy around giving back to the GIS community by sharing another African term, “‘The Spirit of Ubuntu,’ which is taking care and having care and concern for your neighbors or your community.”

“That’s kind of where I see a little bit of Esri Community having that Spirit of Ubuntu—of helping one another, because you can’t do everything on your own. We need to help and support others.”



Mervyn Lotter is a biodiversity planner and GIS manager for the Mpumalanga Tourism & Parks Agency in South Africa. Until recently he also served on the board of the Esri-supported Society for Conservation GIS, and has a Ph.D. in Forest Classification and Systematic Conservation Planning. Using GIS, he works with his agency to protect and conserve biodiversity within the Mpumalanga province of South Africa.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Mervyn Lotter” on the *Esri Community Blog* on December 22, 2023.

# SUSTAINING PUBLIC LANDS WITH LOCATION DATA

**Featuring Doug Browning, Sanborn Map Company**

Preparing for an eight-day excursion into some of the most remote areas in the world takes time and careful planning under any circumstances. For the Bureau of Land Management's (BLM) Assessment Inventory Monitoring (AIM) team, this task comes with added challenges, beginning with the preparation and packing of the equipment they will need to assess natural resource conditions across the 245 million acres of US public lands that BLM manages.



AIM team members take measurements and collect field samples for input into ArcGIS Survey123.

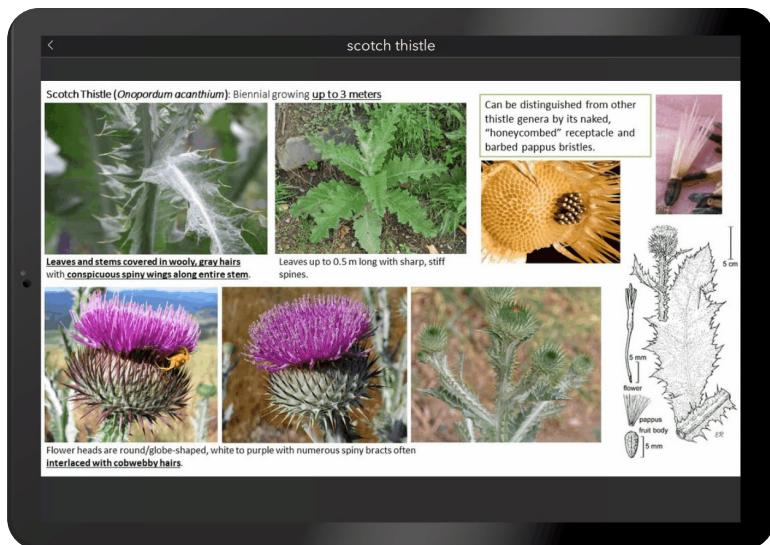
The enormity of the area being monitored—10 percent of the US land base—presents no small challenge. Every year, though, crews of three to five AIM team members head into the field to collect large samples of data that will later be used to inform policy and decision-making for the BLM’s mission: “To sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations.”

Doug Browning, a geospatial systems architect contractor with the Sanborn Map Company, relies on a foundation of ArcGIS in his work to support the AIM team. This ArcGIS-enabled work includes everything from navigating its field members to isolated survey sites, capturing massive data sets over repeated day-long assessments, and converting that data into useful information that’s linked to location.

### Forms built for a huge task

“That is an extremely complex problem to monitor what’s going on out there,” Doug said of the challenge he and the AIM team take on.

Doug primarily focuses on the ArcGIS Survey123 forms AIM team members will use to enter data at each location they visit. He designed this suite of forms so that they remain applicable regardless of the area of the country and environment they are being used in, while using ArcGIS Survey123’s ability to account for key differences across locations.



A species lookup is built right into an ArcGIS Survey123 form, saving time and effort.

Once you're on site, we use ArcGIS Field Maps to launch Survey123, and pass over configuration variables and things like that, allowing the forms to adjust on the fly," Doug said. "That way, we can have one form for the entire nation, and we don't have to adjust it by state, but we can adjust it by state."

"Each form has, say, their own species list that could be anywhere from 20 to 30,000 different species. And each state has a different one—like a plant might be native in one area but invasive in another. So, it all needs to dynamically change."

Team members in the three AIM programs collecting and entering the data visit around 8,000 sites and collect 100,000 images per season—working at each location to complete a series of 10 to 15 of Doug's surveys. Breaking up the surveys this way is intentional,

enabling each person on teams of three to five members to contribute on their own tablets simultaneously while together filling the 1,700 fields that must be completed by each program per site visited. These forms represent some of the most complex and intricate examples that Esri's ArcGIS Survey123 team has put into action.

### Collaborating with the ArcGIS Survey123 team

Doug also keeps Esri Community in a toolkit of Esri products that include ArcGIS Field Maps, ArcGIS Survey123, and ArcGIS Dashboards. When asked how he first started using Esri Community, Doug describes himself as always having been someone who reads official help documentation and scours message boards to help him learn and solve challenges. He finds that both resources make Esri Community particularly valuable to him.

“I think the Community is that window into what’s going to work in real-life situations or might work in a kind of a funky situation.”

He has also seized the chance to collaborate with Esri staff directly in the platform, particularly when it comes to exchanging ideas and insights with the ArcGIS Survey123 team.

“We did a lot of back and forth with our forms with the ArcGIS Survey123 team.” Doug said. “In my 30 years of software development, I’ve never had that kind of interaction, and that all came from Esri Community.”

And the benefits flow both ways. Where Doug has encountered opportunities to improve ArcGIS Survey123 through his own hands-on experience, he has fed those insights back to the Esri product teams through the ArcGIS Ideas Exchange—in some cases helping fuel new features available to all users.

## A team of peers and pros in Esri Community

Across more than 10 years of using Esri Community, Doug has published thousands of posts, nearly 400 of which are Accepted Solutions that have helped others overcome difficulties and solve problems they have faced in their own work. Due to his high degree of engagement and contributions, Doug became an Esri Community MVP in 2021.

“I always learn a lot. It improves what I do,” Doug said while reflecting on what it has meant to not just receive help in Esri Community, but to also spend time offering help back to others.

“It gives me problems that I might not normally have and encourages me to work with techniques that I might not have used before.”

“It’s almost like living documentation,” he said. “We need to simulate something that’s a real work problem, continuously testing your skills to really branch out your knowledge.”

Doug encourages ArcGIS users who have not yet joined Esri Community to get involved by pointing out the hundreds of thousands of GIS folks who already use the platform to collaborate. “I mean, why wouldn’t you want a whole team of real experts there to help you?”



Doug Browning is a geospatial data systems architect contractor with the Sanborn Map Company, where he designs and manages large integrated workflows that combine ArcGIS Online, ArcGIS Field Maps, ArcGIS Survey123, and more on behalf of the BLM. He is also an Esri Community MVP who has contributed thousands of posts and hundreds of solutions to others’ GIS challenges over the years.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Doug Browning” on the *Esri Community Blog* on October 19, 2023.

# IMPROVING PUBLIC SAFETY WITH GIS

**Featuring Tari Martin, National Alliance for Public Safety GIS Foundation**

When Tari Martin and her team at the National Alliance for Public Safety GIS Foundation (NAPSG) demonstrate how GIS enhances emergency response capabilities, there is often an abrupt click of comprehension from the audience. An atmosphere of enthusiasm takes over the space.

“It’s like a lightbulb goes off,” Tari says. “You know when you see someone from the first responder community—they get so excited about GIS because they just get it. They know how it can support their jobs.”

NAPSG is a nonprofit organization based out of Washington, DC, that provides free, nationwide support toward the adoption of GIS in public safety. Through its work, NAPSG bridges gaps between public safety disciplines, aids in the implementation of GIS tools and strategies, and provides no-cost resources to improve outcomes for emergency and disaster survivors.

Tari is NAPSG’s director of National and Federal, where she has worked for the better part of a decade. Through NAPSG’s work, public safety departments that integrate GIS into their operations experience tremendous benefits.

Having the opportunity to view GIS within the context of its own community’s needs transforms the thinking in public safety departments from a “this is how we’ve always done it” approach to data-driven decision-making that can protect more lives and livelihoods.

## Preparing for emergencies during blue skies

With a mission that extends to all corners of the United States, the scope and versatility of NAPSG's work must be extensive if it is to be successful. The top three to five threats facing one community may be entirely different than those looming over another, stunting one-size-fits-all solutions. What's more, practices that have long been the standard for disaster preparedness are becoming increasingly ill-equipped to handle some of the greatest public safety risks currently facing the United States.

“We are notoriously bad at predicting what disasters are coming,” Tari said of the larger public safety community. She elaborates that, for a long time, disaster preparedness plans have been almost entirely based on hazards that took place in the past.

That is a problem when key factors surrounding emergencies are changing the way disasters manifest—factors like climate change, larger numbers of people living in vulnerable areas, and aging populations. These and other challenges are expected to grow in the coming decades.

Tari stresses the importance of pre-planning as an essential part of the public safety framework. She informs that data can change the way we prepare by making it possible to better predict what disasters may look like in the future and how their impacts can be mitigated.

She explains, “There’s a lot of data out there on vulnerable populations. There’s a lot of data out there on communities that have potential challenges to resilience, and all of that is in geospatial format. Emergency managers can take advantage of that to understand what things they need to put in place during blue skies—before a disaster happens—to understand how they can reach those communities and get them ready ahead of time.”

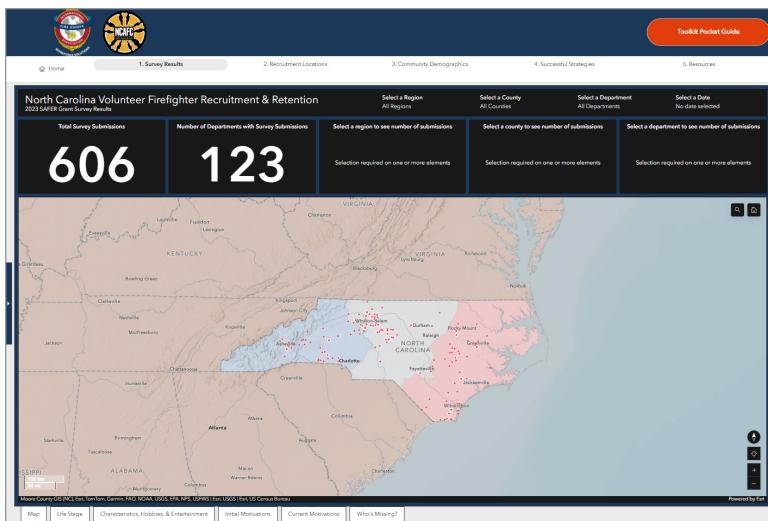
## ArcGIS boosts recruitment and sharpens decision-making

GIS-informed planning is just one aspect of the framework NAPSG brings to public safety before an emergency ever takes shape. Workforce improvements that ensure adequate personnel and securing grants to fund necessary response resources are examples of crucial components within public safety that GIS data supports.

Tari illustrates this through some of NAPSG's work with the International Association of Fire Chiefs (IAFC). "Right now, they're building firefighter volunteer toolkits for states to use. We've helped them build one for North Carolina, and it started with an ArcGIS Survey123 survey to several associations with the goal of understanding why someone became a volunteer firefighter and why they've stayed. We used that information to build out a toolkit to help them recruit and retain future volunteers."

With most fire departments in the United States being fully volunteer or reliant on volunteers, recruitment is falling short of population growth. With emergency calls increasing, there is a paramount need to boost the ranks of volunteer firefighters.

The toolkit NAPSG helped the IAFC develop uses ArcGIS Experience Builder and ArcGIS Survey123 to help fire departments recruit and retain volunteers by helping them tap into patterns of inspiration and by distilling reasons that sustain long-term volunteer involvement. GIS data provided through the kit helps departments identify recruiting event locations and track their results via a dashboard. Departments also receive community demographic data from NAPSG, enabling them to perform a review of their own teams to identify who may be missing as they seek to bring in under-represented talent and better reflect the populations they serve. This toolkit is in the process of being distributed to all 50 US states.



## North Carolina Volunteer Firefighter Recruitment & Retention survey results dashboard.

Another program out of NAPSG, the Search and Rescue Common Operating Procedure (SARCOP), is changing the game in a big way for emergency responders when catastrophe finally strikes.

Situational awareness is often extremely limited during the early hours of a disaster. Incident command overseeing response may have little visibility over the areas or people being impacted or the degree to which assistance is needed. With the clock ticking and an escalated need to prioritize which resources go where, developing a picture of on-the-ground data is a top need.

In many cases, the first opportunity to gather important data comes from search and rescue personnel. Through the SARCOP program, search and rescue teams are being trained to use Esri mobile products that feed data to dashboards that decision makers can closely monitor—often in real time. From making damage

observations, assessing ongoing risks, noting who needs rescue, and disclosing already searched areas, those initial responders provide information invaluable to an efficient and effective response.

## A Community for public safety GIS

A great deal of useful information is generated during disaster events. Groups like FEMA, the US Army Corps of Engineers, and the US Geological Survey—all agencies that NAPSG works closely with—collect and publish data directly applicable to what is taking place. All too often, though, that information is not picked up by the GIS practitioners who could best use it.

“During disasters, we often see a lot of data getting created and it’s not often getting where it needs to go,” Tari states. “A lot of folks working in GIS and public safety are a one-person shop and they’re head down during a disaster. They’re not always able to stop and look around to see what’s available.”

This challenge in mind, NAPSG began looking for a mechanism they could use to close the gap between information available and the people who needed it. At that point, Tari had already been using Esri Community for some time to find answers to her questions or keep up to date on information about ArcGIS products she was using. NAPSG’s need for a solution to under-accessed, valuable data intersected with Tari’s own realization that Esri Community offered more than a place to find answers to her questions. She began to recognize it as being a place to connect and collaborate. She worked with the Esri Community team to create a user group in which useful data could be centralized.

“We were trying to make sure that if imagery was being collected, if models were being run, if certain models were performing well, [that information was shared]. So, we started putting that

out through the Community and that seemed to receive some good traction.”

“One of the great things about Esri Community is that you do build up this network and it’s particularly important for public safety GIS folks to have that network during blue skies.”

Over the years, Tari has continued to turn to Esri Community as a multifaceted tool and encourages other GIS professionals in the public safety sphere to think of it the same way. Whether it be used to find answers to questions, learn about the ArcGIS tools available, exchange mutually beneficial insights, or network with peers, Esri Community is keen to what the GIS community is like.

“We love to share,” she said. We love to be helpful. It all kind of culminates in Esri Community.”



Tari Martin is director of National and Federal at the National Alliance for Public Safety GIS Foundation (NAPSG). There, she supports all of NAPSG’s nationwide contracts to equip them with the free training and resources needed to bring GIS into public safety response before, during, and after threats occur.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Tari Martin” on the *Esri Community Blog* on September 23, 2024.

## PART 2

# A CAREER AND LEARNING RESOURCE

“There is no greater feeling than being able to go to the Esri Community and find a Community member’s question, be able to share your experience, and hopefully answer their question. There have been many times that a question has caused me to look deeper into the issue that the member is asking about and even find some better ways to handle it in my own daily workflow.”

—Robert Scheitlin, GISP & Esri Community MVP Emeritus

**N**O TWO GIS PROFESSIONALS SHARE THE EXACT SAME career journey. Many take a traditional route through formal education, charting a course marked by degrees and certifications. Others find alternate paths, sometimes stumbling across GIS while pursuing work in an unrelated field before developing an unanticipated passion for all the possibilities it enables.

Whether by design or by chance, people who land in a GIS career face an exciting landscape of rapidly evolving tools and technology. Those just starting out have much to learn about the basics. And, if they are the sole GIS practitioner in their workplace as many are, they may sometimes find themselves adrift at sea without the compass of mentorship or peer expertise. Even those more veteran professionals who have years of experience using ArcGIS products can run up against gaps in their knowledge or grapple with the unfamiliarity of tools that are new to them. They need educational resources that speak through the lens of real-world circumstances and that dynamically update at the pace of conversation.

This section features stories about GIS professionals who turned to Esri Community as an invaluable learning resource that not only helped launch their careers but serves as an ongoing source of intelligence to further mature skill sets. By providing an environment known for its patience towards all levels of ability, along with the readiness of members to share their expertise with others, Esri Community marks a welcoming, essential destination for all Esri users to advance their abilities while drawing from the collective knowledge of a vast global network of GIS professionals.

# INVESTIGATING FOODBORNE ILLNESS

**Featuring Brandon Adcock, California Department of Public Health, Food and Drug Branch**

Every year, 48 million people in the United States are sickened by foodborne illnesses caused by bacteria, viruses, or parasites. Of those, about 128,000 cases will be severe enough to lead to hospitalization, with 3,000 fatalities, according to the Centers for Disease Control and Prevention.

Statistics like these are familiar to Brandon Adcock, who is senior environmental scientist for the Emergency Response Unit of the California Department of Public Health's Food and Drug Branch. He and his unit investigate foodborne illness outbreaks across the state while collaborating with other state teams to make sure that California's food and food products are safe for consumption.

And with over a third of the country's vegetables and three-quarters of the country's fruits and nuts being grown in the Golden State (source: [cdfa.ca.gov](http://cdfa.ca.gov)) and its abundance of animal products, California's role as the largest state producer of agriculture in the United States means that foodborne pathogens originating there don't necessarily stay there. The job that Brandon helps shoulder has serious implications and at scale reaching far beyond the borders of his home state.



Distribution map showing the source and destination of product associated with an E. coli outbreak.

The impacts of his work are not lost on Brandon. He had joined the California Department of Health with no formal GIS training and successfully made a career jump from high school educator to investigate food borne illnesses before going on to champion GIS as a fundamental tool in those investigations.

## Learning ArcGIS

Brandon graduated from California State University, Sacramento, in 2005, having studied microbiology. He spent his early career in biotechnology and teaching high school science. Some repeated career setbacks, including the frustration of layoffs, led Brandon to realize he was ready to move on to something new.

After applying to different jobs within his home state of California, there was a hit. In 2012, Brandon was hired as an inspector

to investigate foodborne illness outbreaks and food contamination events in the Food and Drug branch's Emergency Response Unit.

From the get-go, maps played a role in Brandon's work. He and his unit would make maps—mostly hand sketches—to aid in their investigations. They even had some handheld GPS units that he remembers as being outdated and clunky for the time.

Perhaps it's in part due to his observant nature that Brandon spotted a problem. Spatial information was an important part of his unit's work, but the tools they used could only do so much. There was not an organized GIS for the geospatial data his unit would collect. Even if there had been, no one had enough time to make full use of it.

With his GIS knowledge limited to GPS and map use during favorite pastimes of hiking and geocaching, Brandon set his intimidation aside and began opening ArcMap between projects to see what more could be done with the investigation data they were collecting.

“I made maps and analyzed whatever I could get my hands on and had the time to work with. Simple things, like putting a rectangle area on a map and using hillshade basemap to see drainage patterns or using the data from our GPS cameras to put points on a map of interesting observations.”

Brandon was driven by the knowledge that GIS could enable new, more powerful ways of achieving food safety.

“All I knew was GIS data and maps were helping make better decisions and ultimately protect public health and prevent illness. I just kept going and learning more as I could.”

## Making the case for GIS

Brandon faced more than one uphill climb in the pursuit to get GIS's value recognized in his workplace. Not only did his mission have to fit in piecemeal around his regular work investigating outbreaks,

but he was attempting to learn ArcGIS tools without the benefit of a formal GIS education or local mentors who could offer guidance. If Brandon could manage to clear both of those obstacles, he would face a final challenge of convincing others to help make his vision a reality.

Brandon is quick to point to Esri Community as one of the first resources he was introduced to and identifies the crucial role it's played in helping him navigate the ins and outs of ArcGIS.

“The Esri Community has definitely been my primary source of training, I'll say, for GIS work. I know I can always go in there. I can put in a question, and I will get an answer.”

As his familiarity with ArcGIS gradually grew over several years, Brandon began evangelizing the benefits he was uncovering. He would engage everyone he could—managers, co-workers, assistant directors, federal partners—anyone who would listen—that GIS could provide valuable insights beyond what was possible with their usual tabular data and written reports.

With many examples in hand, he persuaded his managers to create a new position within his unit, one that remained immersed in outbreaks and food contamination events, but with an explicit focus on data collection systems and GIS.

In 2019, seven years into his work with the state of California, Brandon was promoted to senior environmental scientist, the role he currently fills. In this position, he is charged with looking at outbreaks and food contamination from a spatial perspective while continuing to improve the Emergency Response Unit's digital data collection and visualization tools.

His assurance on the importance of GIS in this field has only grown with time.

“Maps, surveys, and dashboards are powerful tools that need

dedicated attention to help us in our mission to prevent illnesses in Californians and all people who eat food from California.”

### An always present Community

Having successfully made the case for GIS and earning himself a role administering it, Brandon has settled into the routine of his current job duties. He describes his ArcGIS skills in humble terms and says the need for help from a greater community of GIS peers and pros leads him back to Esri Community regularly.

It is not difficult for Brandon to conjure examples of Esri Community members making a meaningful difference to his work.

One time, Brandon was struggling with a monster of his own making. He had cobbled together a process that allowed him to download and file photos from an online feature service from ArcGIS Survey123. Through the process, Brandon would move and rename photos of every sample his unit collected during outbreak events. This could easily encompass hundreds of photos and had to be repeated every time new samples were gathered. Manually, it could take hours to complete.

Using the process he designed, the work could be done faster, but its complexity and the number of steps involved meant that it was still burdensome—never working quite the same way twice.

“It was a Frankenstein of a process,” Brandon reflected. “But I was able to go on to the Esri Community. I asked if anyone else had this.”

A little searching revealed what Brandon was after. An openly shared Python script from Community MVP Doug Browning was just what Brandon wanted. Using that script as the framework for a slightly modified ArcGIS Pro task, he was able to get a vastly more efficient process that met his needs while simplifying procedures for

others involved. Brandon credits Doug and the community of users with making that possible.

As Brandon and the team at the California Department of Health persist in their important work of preventing and responding to foodborne illness, Brandon is reassured by the knowledge that Esri Community and the support of his GIS peers found there will be a continual aid when needed.

Voice confident, Brandon assures, “No matter how specific or complex, I know I’ll get the answer I need from the Esri Community.”



Brandon Adcock is senior environmental scientist for the Emergency Response Unit of the California Department of Public Health’s Food and Drug Branch. During his decade-plus career with this unit, Brandon has participated in and led many investigations designed to protect public health from foodborne illness. After championing the role of GIS in this work, Brandon now specializes in developing and improving tools for digital data collection and in using geospatial intelligence to better understand how location is related to food contamination events.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Brandon Adcock” on the *Esri Community Blog* on March 27, 2023.

“Every educator wants their students to care, to be engaged, to think critically, and to be gainfully employed in a career that they love, and also to become change agents in their workplace and in their communities. The Education Community also is a place where we can in some ways more easily develop and publish content that people are looking for.

— Joseph Kerski,  
Esri Education Manager & Geographer

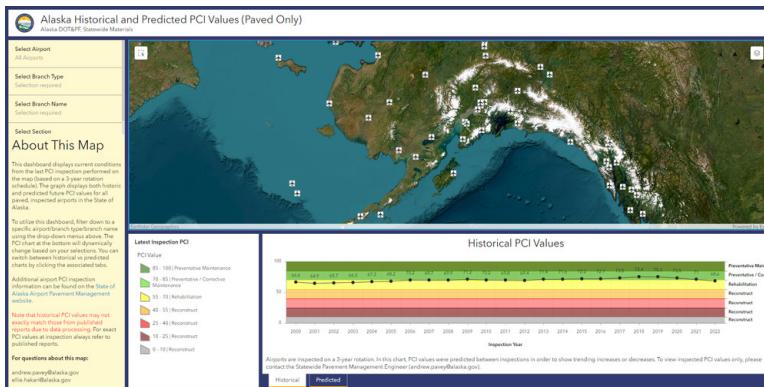
# NATURAL THREATS TO ALASKA TRANSPORTATION

**Featuring Ellie Hakari, State of Alaska Department of Transportation and Public Facilities**

Typhoon Merbok struck Alaska on September 17, 2022, ferociously clawing its way across more than 1,300 miles of the state's coastline. In places, pummeling winds ripped siding and roofs off buildings while rising water and pounding rain unmoored houses from their foundations, flooded roads, and broke apart the landscape. The National Weather Service would come to describe Merbok as "historically powerful," while others would say it was the worst storm the state had endured in about a half century. Incredibly, and despite disastrous conditions, no one perished.

Over the course of that one weekend, erosion stole more than 100 feet of coastline in places—exceeding loss that was not supposed to happen for decades.

Events such as Typhoon Merbok are on Ellie Hakari's mind while working with the state of Alaska Department of Transportation and Public Facilities, where she wields GIS to maintain awareness of Alaska's roads—the condition pavement is currently in—and estimate future threats to roads. More importantly, she seeks to reduce risk to people who will be impacted if and when roads fail.



Alaska's Historical and Predicted Pavement Condition Inspection Values map of airport pavement enables planners and the Federal Aviation Administration to analyze the performance of projects and provides a starting point for initiating new projects.

Ellie says that the typhoon was just one of a number of natural disasters that have struck Alaska in recent years. “We also had a massive earthquake in 2018 that destroyed roads,” Ellie points out, “which was a big deal considering that even our largest cities are typically ‘one way in, one way out.’

“We’ve had wildfires, floods, windstorms, ice storms, and the response to all these events relied heavily on Esri products: Maps to communicate locations, ArcGIS Survey123 to collect information from our staff and the public, ArcGIS Dashboards to filter for priorities, and ArcGIS StoryMaps<sup>SM</sup> to track and communicate progress.”

## A curious road to GIS

If you were to follow the breadcrumbs that led Ellie to where she is now in her role at Alaska’s Department of Transportation & Public Facilities, you might get a bit dizzy. From civil engineering to early education, computer sciences, ballet, theater, arts, and music, Ellie

spent her college years sampling a variety of possible careers. Like many navigating that early crossroads, committing to a single direction was anything but easy.

During her exploration, Ellie came across an internship that quickly turned into a full-time materials technician job.

“It’s dirt shaking, as we call it.” Ellie said. “Kind of learning about how asphalt is pulled together.”

In this work, she found herself surrounded by engineers who were just beginning to use GIS in their work in new, interesting ways. Witnessing its applications in action first-hand—those that combined her love for art and math—Ellie’s curious nature took over, and she declared her interest in learning more about GIS.

Ellie chuckles as she recalls the initial response she received. “I had a co-worker who was kind of heading that GIS effort at the time. Because I was new and an intern, I don’t think he took me seriously. He just kind of threw an ArcMap textbook on the desk in front of me and was like, ‘Okay, just read through this front to back, you’ll learn some stuff.’”

She smiles at the memory. “I sat there and looked at the manual and thought, there’s no way I’m learning anything from this.”

While Ellie identifies herself as the type of person who withers under the shadow of a thick textbook, she thrives on other forms of learning. Ellie turned to the internet to see what other people in the GIS world were doing.

“That is when I came across Esri Community, and it just blew open the doors. I learned everything I could. I soaked it all in and asked questions. People were more than happy to give me answers and that drove all my learning and experience. I’m so thankful because it’s how I got to where I am now.”

## Developing nationwide road resilience

Ellie's passion for GIS and her steadily growing talents garnered attention. In 2022, she was nominated to be on a project run by the National Academies of Science, Engineering, and Medicine. Through this, she and a select group of participants focused on developing resources that can be used by transportation agencies across the country to assess risks to their assets and the public due to extreme weather, climate change, and other threats or hazards.

When she was first flown to Washington, DC, for the project and met her new colleagues, Ellie felt certain that her presence must have been a mistake.

“I got in the room with all of these incredible people who are directors—you know, top level individuals—and engineers who have been in the field for decades. And then I’m a GIS analyst. I was thinking: ‘What am I doing here?’”

No sooner had she questioned her own qualification to be in the room than the picture came into focus. Many of the people she found herself speaking to and hearing from worked in roles facing climate change. Like her, they were and are acutely tuned to the position of peril it poses to their own states and were seeking solutions.

Ellie was given assurance: Her involvement was no mistake. The group had awareness of the important role GIS could play in the work before them. Ellie’s understanding of data level analysis and processing would generate crucial insights needed to prepare their risk and resilience manual that will, when complete, serve the nation.

This convinced Ellie. “I was like, ‘Okay, I do need to be here. I’m going to try and provide whatever I can to make sure that the final product is exactly what the US needs.’”

## Life changing community

Despite the strides she has made and the unmistakable importance of her work, Ellie is open that she has long harbored some insecurities about her GIS journey. Her nontraditional route to GIS has, at times, struck her as contrasting with those around her—GIS analysts, engineers, and geologists who went to school for what they wanted to do and confidently stayed that course into the heart of their careers. At least that is the way it can feel to her.

Ellie resolved to put her assumptions to the test. Was her meandering, curiosity-driven career path to GIS uncommon? She logged into her leading resource for all things GIS, Esri Community, and posted her question: How many of you have fallen into a GIS career without a degree? After sharing a little about herself, she left it to others to fill in their own stories. And they did.



by [KarenCarr](#) 09-27-2023 03:55 PM

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I have a BS in English/Journalism about as far from GIS as you can get. Graduated college and went into graphic design. Somewhere along the way I got a job doing data analysis for sewer systems so I had a basic idea of how sewer systems worked. Went back into graphics design, learned HTML and how to create web pages using notepad (the horror!). Heard about a job in 1999 for a "desktop specialist" at a water/sewer utility. Applied thinking it was something to do with maps, sewer and graphic design. Technically it is. I am now a GIS Analyst and moved our department from paper maps to Portal and ArcGIS online. Always striving to learn new things!

Esri Community Member Karen Carr shares about their nontraditional route to GIS.

“I was so happy to hear from lots of people!” Ellie gushed. “We had biologists and journalists, people working in criminal justice ... so many different avenues people started in that eventually morphed into GIS. I think it speaks to just how useful GIS is in just about everything.”

That communal reassurance that she is hardly alone in her journey reflects the hallmarks of her experience on the platform. It is also

a big reason why she invests some of her own time back into helping other members who have questions.

“I was that person who had no idea what I was doing,” Ellie recalls of her own early days in Esri Community. “I’m sure I could look back and just cringe at some of my questions because I really didn’t know what I was doing, but people were so patient, kind, and helpful. It’s because of them that I’ve made it to where I am now.”

She urges others to recognize the impact they are capable of having on those learning the ropes.

“You can always share,” she says. “I bet you anything you’re going to change someone’s life because many people in Esri Community changed mine.”



Ellie Hakari is a GIS analyst III for the State of Alaska Department of Transportation and Public Facilities’ Office of Data Modernization and Innovation. Ellie works to ensure the integrity of Alaska’s roads and airports by monitoring pavement conditions and evaluating threats, including those related to weather disasters and climate change. She uses GIS to provide the public with information it needs to understand impacts and needs of the roads they rely on for travel.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Ellie Hakari” on the *Esri Community Blog* on November 20, 2023.

# A FOUNDATION OF CAREER SUPPORT

## Featuring Hussam Al Jabri

Hussam Al Jabri is a GIS lead with a large city infrastructure building company in Saudi Arabia, where he focuses on the business's electric distribution tier. In this work, Hussam brings with him over a decade of GIS experience that has earned several awards that include being named an Esri Electric GIS Hero in 2022 and, in a prior role, helping lead a team that received a prestigious 2021 Special Achievements in GIS (SAG) Award.

Hussam is equipped with another key resource he is eager to advocate for—one that has made an ever-increasing difference in the latter half of his GIS career.

“Basically, the Esri Community was the key for me in my career path to develop my skills in the products themselves, like [ArcGIS] Survey123,” Hussam said during an interview while attending Esri User Conference 2023.



Hussam poses at an Esri Community advertisement while attending User Conference 2023.

When it comes to what drives him to regularly return to Esri Community, Hussam makes clear the benefits it continues to supply.

“So, where I found challenges—many challenges in my career, my day-to-day works—my first destination is Esri Community, where I can find my peers to share my challenge with them and they support me and help me.

“Esri Community is helping me a lot with getting insights, engaging with people there. They are active, super active there, and I found this is the most important thing that make this community the first destination [for] me.”

### Lifelong community

Hussam is humble about his accomplishments, which include being one of just three individuals recognized as a 2020 Esri Community Rookie of the Year for his high degree of involvement on the platform. For him, awards and recognition aren’t a goal but a side-effect of his real mission—to improve his GIS abilities and develop more expertise. Hussam pairs this mission with a motivation to contribute to a better world.

Because GIS technology is evolving rapidly, Hussam is continuously learning and growing in the field. “So, my passion is—it’s like unstoppable, I can say—because of the technology itself. It’s unstoppable for making the world better. So, I want to ensure that I’m on the track to contribute to making this kind of world. Peaceful world, sustainable world.”

Many of the greatest challenges to achieving the world Hussam and so many others strive for are becoming steadily more pronounced and in need of solutions that GIS can play a role in addressing. To do that, ArcGIS technology will continue to pursue greater capabilities as the need increases for GIS professionals to rapidly connect and collaborate with each other.

Hussam reflected on his experience with having access to that type of connection through Esri Community and summed up its long-term value, “I think I will be in the [Esri] Community for all my life. Even if I grow to the—like a senior management level—I will be engaged there with more insights in that field.”



Hussam Al Jabri is a GIS lead focused on electric distribution at a large infrastructure building company in Saudi Arabia. Hussam has won and contributed to several notable awards, including Esri Electric GIS Hero in 2022 and a prestigious Special Achievements in GIS (SAG) Award in 2021. He also received recognition for his exceptional involvement in Esri Community, which he regularly turns to as a top resource for assistance and collaboration with GIS peers.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Hussam Al Jabri” on the *Esri Community Blog* on September 11, 2023.

## PART 3

# CONNECTION AND NETWORKING

“There is much talent out there amongst the users in Esri Community. If people spent more time sifting through the posts in a particular Community, they might find answers to their questions or interesting things to pursue. It has been great in the last few years that some of the Esri staff have become active in providing answers in their areas of expertise.”

—Dan Patterson, retired university instructor and Esri Community MVP

**N**AMING AN INDUSTRY THAT HAS YET TO SEIZE ON THE power of location intelligence becomes a more challenging task with every passing year. The list of those weaving GIS into their operations keeps growing because of the technology’s broad applications and pronounced usefulness. And yet, there are cases where

just one person may be the sole GIS practitioner for their workplace—effectively cut off from others whom they might locally learn from or collaborate with. In other cases, barriers to partnership can appear where a member working within a larger GIS team might specialize in tasks or tools in ways that colleagues are not equipped to assist with when challenges emerge. Or a more seasoned team lead may be the principal source of GIS knowledge on a team, presenting a bind when they eventually find themselves stumped.

Where does a person go for support and connection when circumstances act as a chasm separating them from their peers?

In this section, meet GIS professionals who have lived the struggles of working in settings absent of GIS mentorship or equally experienced colleagues but who found others ready to meet those needs in Esri Community. From gleaning the experience of others with unfamiliar ArcGIS products and joining group advocacy around product feature requests to building networks with others sharing complimentary pursuits, these stories illustrate Esri Community’s role in building bridges between Esri users, regardless of distance or setting.

# THE SOLO PRACTITIONER

## Featuring Marvin Davis, City of Morgantown, West Virginia

They say no person is an island and that everyone relies on connections with others to navigate their way in life. When it comes to the GIS profession, though, there can seem to be an abundance of workplaces determined to challenge that adage.

At Esri, we hear from many folks grappling with the demands of being the only GIS practitioner where they work. Working this way can become a sometimes lonely and difficult challenge. The benefits of shared understanding and the cooperative shouldering of burdens aside, settings with a limited body of experience can mean overcoming hurdles is a whole different undertaking than in those where mentors sit at nearby desks or are a quick message away.

Conditions like these require a degree of self-sufficiency that Marvin Davis can relate to. He is the GIS analyst for the city of Morgantown, West Virginia, and is the sole GIS practitioner in his workplace, where he carries out projects for state and local governments.

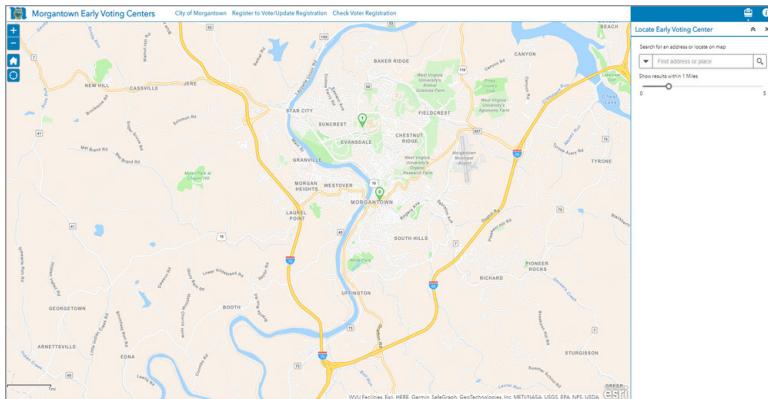
Our team had the opportunity to meet Marvin at Esri User Conference 2022 to learn more about how Esri Community has become his go-to support system of GIS peers and professionals who can collaborate regardless of any individual workplace's setup.

### You are not alone

Marvin began using Esri Community in 2014 when he was a graduate student at West Virginia University, and it has been at the top of his toolbox ever since. That reliance has only become more acute in recent years as he found himself working with ArcGIS Enterprise—a product whose usefulness can come with a learning curve.

Whether through a Google search or going to the platform directly, Marvin almost always goes to Esri Community after butting

up against an error code or when something simply is not shaping up the way he expected. That includes solving challenges he encountered while helping the Morgantown implement a series of GIS solutions to make voting processes more accessible and efficient for the public and workers during its 2021 municipal elections.



Learn how the city of Morgantown improved 2021 municipal voting using GIS in Marvin's StoryMap.

Following an enthusiastic response from voters and election officials and relying on hindsight, Marvin and the city engaged in deploying GIS solutions to prepare for when candidates filed for the 2023 elections in early January that year. The vast, searchable library of member collaborations and the opportunity to pose new questions to others in Esri Community continued to be a resource along the way.

“You’re not alone,” Marvin reflected when describing what Esri Community has meant to him. He has long recognized that his experiences usually are not unique; others have likely encountered them as well and shared their solutions with the goal of helping those who follow.

What's more, Esri Community is a resource that Marvin has found to be particularly time economical.

"I think the Esri Community, especially in the past few years, has been absolutely critical to my work." Marvin noted that he could be looking at hours of work to get a resolution via other means, whereas going to Esri Community can reduce that time to minutes, saving money as well.

### Returning the favor

There is more to Esri Community than just benefiting from the answers of those who have come before. At their heart, all communities are ecosystems that operate at their full potential when people take and give back to them. It is a process on Marvin's mind.

One of the best ways he's found to connect and contribute is through ArcGIS Ideas. There, he has observed other people coalescing around ideas for how to enhance certain Esri products. He has witnessed some of those ideas get adopted so that they become part of a product release.

"I see [an idea] getting upgraded in status from being thought of to being implemented," he said. "I've been really excited to help contribute—however little that may be—but helping contribute to seeing it come to fruition."

Thanks to the collaborative efforts of members like Marvin, hundreds of user-submitted ideas are implemented in Esri products every year. That is a powerful pipeline running directly between customers and the product teams at Esri.

"You are able to not only learn but contribute your own experience toward improving the geospatial community, improving the technology, and helping Esri improve their product."

Marvin's win-win mentality assures a community that better

supports its users every day and improves a space where people can find solutions, share ideas, and collaborate to solve problems with GIS.



Marvin Davis is the GIS analyst for state and local government in the city of Morgantown, West Virginia. Among his projects, Marvin's work to help the city integrate GIS solutions that improve municipal voting for the local public and election officials is captured in his ArcGIS StoryMap report.

This story by Jesse Cloutier originally appeared as "Esri Community Member Spotlight Marvin Davis" on the *Esri Community Blog* on November 21, 2022.

We recently launched the Esri Young Professionals Network space [in Esri Community], where visitors can post and express their interest in connecting with others and events, or post about industry trends and training and mentoring opportunities. This space offers a way for visitors to connect and talk to each other.

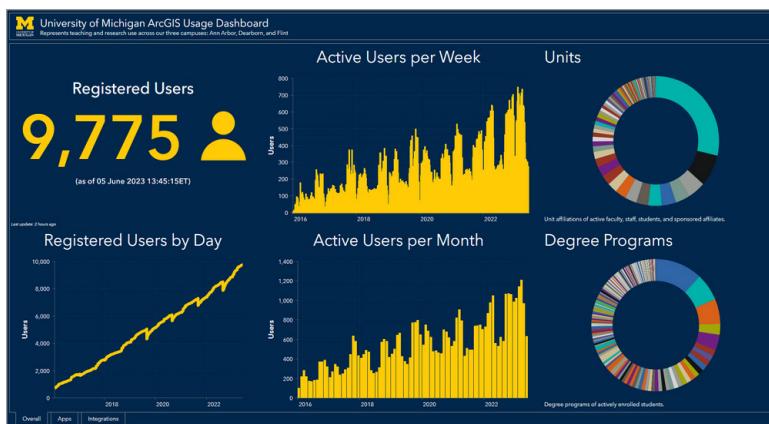
— Rosemary Boone, Esri senior industry marketing manager

# A SUPPORT FOR 10,000 ARCGIS USERS

Featuring Peter Knoop, University of Michigan

At the University of Michigan, thousands of students, faculty, and staff use the school's ArcGIS system, and the numbers have grown in recent years, illustrating the growing level of GIS adoption within the school.

They use GIS for their research and projects that can vary drastically in scope and degree of complexity. And when an individual finds they need some guidance in their work, they will often seek help from a modest group of on-staff consultants that includes Esri Community member Peter Knoop.



Peter's article on building a GIS dashboard links to this University of Michigan ArcGIS Usage Dashboard.

We met with Peter at Esri Developer Summit 2023, where he shared with us that on a typical day, he connects with about a dozen people or groups regarding their projects.

“Of course, a lot of it ends up being troubleshooting when people

run into problems on [their] project, and they need help trying to figure out what to do,” Peter said. “And sometimes, I know what to do; other times, I have to turn to other resources, like Esri Community, and get some help.”

Because of the size of the group that Peter and his colleagues support, it is impossible to be an expert in the entire suite of more than 100 Esri products that their users may be drawing from in any given instance. As a result, Peter finds Esri Community to be a great resource, especially in areas beyond their knowledge base.

“I think Esri Community is one of the best resources out there when you need to step past the documentation, or you don’t have time to sort through the documentation,” he said.

### Advancing collective higher education objectives

The nature of Peter’s work and physical distance between peers performing similar functions in other higher education settings has presented a collaboration challenge. Though Peter has a cadre of colleagues he can partner with in many circumstances, the absence of outside perspective from others with similar industry experience can be limiting. Viewed from another angle, there are significant benefits to be had when acting within a broad partnership of like-minded individuals.

Through Esri Community, Peter has found other professionals working at the intersection of GIS and higher education.

“One of the things that’s been helpful about the Esri Community for us in higher education is it’s helped us find other people at peer institutions doing similar things,” he said. “We get together and sort of talk about what would help us the most as a whole sector of higher education and then talk with the [Esri Developer] teams from that perspective of what would help us all.”

Through connections facilitated in part by the Esri Community,

Peter and this network of members compare product enhancement needs and find agreement on priorities while also pinning down shared questions. As a collective, they have taken their results to Esri teams—through direct meetings, ArcGIS Ideas submissions, and in-platform interactions—to advance their shared objectives in a way that is united, efficient, and effective.

When it comes to using ArcGIS Ideas, Peter and the other members have developed a system to capture their institutions' top product ideas submitted to Esri Community in a shared document, followed by discussion and rank voting them. After reaching consensus, they bring prioritized ideas to select Esri Development teams for more in-depth discussion. This process helps Esri teams maintain efficiency through their established workflows while maximizing attention and understanding around the higher education group's biggest needs and exposing their suggestions to the entire Esri Community, which can comment on and add kudos to the ideas.

The Ideas Exchange has the added benefit of helping people understand and refine what they are asking for when they submit an idea, Peter said.

“[It gets] you to step back a bit and think more about, ‘What’s really my underlying problem here? What’s my use case? What scenario or goal am I trying to achieve?’” Peter noted. “A lot of times, people get sidetracked by the solution.”

## A karmic exchange

Even while thinking as a representative of his university and the higher education community, Peter realizes he has an additional role to play that benefits the broader GIS community. Among his many contributions across Esri Community forums are dozens of answers to others' questions and a number of blog articles he's authored.

Peter wants his knowledge to be in service to the higher

education community, though there's a personal benefit to embracing this process as well: It lightens his email response workload in a single post by answering questions that arise numerous times in the course of his work.

Peter highlighted how he's begun using the comments section of his articles in much the same way. "I also am starting to try to encourage folks from other institutions who ask me a question directly via email, which others might have as well, to repost in the Community, and I'll answer it there."

There is a third reason Peter makes the time for contributions in Community—a more poetic vision in that he sees in giving back as a form of karmic equity. "It's often easy just to type out a quick response and then share it out there. Sort of balancing out that karma if you've got good answers, so you better contribute something to keep getting."

With an ultimate goal of connecting the University of Michigan's ArcGIS users with GIS resources that propel them forward, Peter knows his own contributions help ensure the value available to those faculty, students, and staff keeps growing.



Peter Knoop is a research consultant at the University of Michigan, where he works with faculty, staff, and students who are interested in using GIS, extended reality, and cloud computing in their work. With thousands of registered users in their ArcGIS system, Peter frequently uses Esri Community services to help find answers to questions and give students career insights, connect with other GIS peers in higher education, and more. He has a background in oceanography and field geology, where he gained much of his exposure to GIS during undergraduate and graduate school.

This story by Jesse Cloutier originally appeared as "Esri Community Member Spotlight: Peter Knoop" on the *Esri Community Blog* on June 12, 2023.

# BETTER BUSINESS DECISIONS THROUGH TARGETED SOLUTIONS

## Featuring Christian Patton, GEO Jobe

Smart organizations know that good business decisions are the result of good information. Clear data presented through well-appointed tools brings all the right points into focus, illuminating obstacles and steppingstones alike. Singularly suited to this task, GIS has emerged as a valuable tool for securing the high degree of awareness that businesses need for charting an optimal course to their goals.

It is no wonder that a rising number of organizations around the world have become serious about making GIS a key component of their business. Of those, more than 10,000 have turned to Esri Partner GEO Jobe for help since it first launched in 1999.

Christian Patton is director of professional services at GEO Jobe, one of several divisions that together assist clients in tailoring ArcGIS to fit their organizations' unique needs. Christian joined the company in 2021 as a developer and rapidly advanced to become manager of GEO Jobe's GIS Services and Software Services teams.

“My day-to-day typically involves working with our solution engineers and software developers to ensure we’re utilizing ArcGIS Pro or ArcPy—or any tools that we need for our necessary workflows—in the most efficient and ideal way for clients,” Christian says.

GEO Jobe clients represent virtually every business sector—from those managing natural gas pipelines to some of the top accounting firms in the world. Bringing extensive ArcGIS product knowledge to bear and being capable of solving a broad spectrum of challenges are baseline requirements for success in Christian’s line of work. The facts on the ground, though, make clear that task is anything but simple: The breadth of changing information and its frequent complexity, in addition to the numerous differences between one

application versus another, can humble anyone—or any team—trying to operate in a silo.

That is why Christian has been a regular user of Esri Community dating to his time as a developer. He is not the only one.

### Community-fueled support for a whole organization

“Everybody across the board is using Esri Community,” Christian said of the GEO Jobe team. “There are a lot of situations where I work with our solution engineers to figure out why a tool isn’t working. Sure enough, we’re able to find a thread on Esri Community that has the answer.

“We’re seeing it even support our products division.”

The easily accessed peer-to-peer support available on Esri Community represents just a portion of the value Christian and his team receive from the platform. He cites the presence of Esri staff who use Community to distribute useful information, such as upcoming release details or solution fix notifications, as just some of the additional resources that the GEO Jobe team relies on. And with their US-based support team having doubled in size, Christian notes that they’re expanding the number of people who use Esri Community every day.

If he cannot find an exact solution for the challenge he is trying to solve, Esri Community often provides important pieces he can pair with other resources to craft something that’s custom fit.

### Finding the thread of connection

Christian also finds a sense of connection through Esri Community, recounting a time he searched Community for help with an issue and came across a post that he responded to with a solution. While there, he noticed that another member of the GEO Jobe team

had also added to the conversation in that same thread a couple of months prior.

“I realized right then and there how easy it is to cross-pollinate across even your own organization, for that thread itself and also when solving the same issues that everybody comes across.”

Christian notes that involvement in the platform has also revealed itself to be a beneficial link between himself and GIS professionals in other networks, explaining that he often encounters people at conferences who bring their shared use of Esri Community into a conversation.

When asked what he would say to other Esri users and partners to encourage them to get involved in Esri Community, his reply is quick: “I’d be surprised if they aren’t.”

“I’d definitely encourage it because you can spend so much time and resources trying to figure out an issue when there’s [already] a solution out there a lot of times.”

Christian describes the inspiration and impact Esri Community continues to have on his work: “Esri Community has empowered me just from seeing the sheer support we have in the GIS community.”

“Oftentimes, I can look in Esri Community and piece [information there] with some forum I came across on another thread in Esri Community. Based off that, I can conceptualize some solutions and work with some of our team members to figure out some solutions.”



Christian Patton is director of professional services at GEO Jobe, an Esri Platinum Partner. There, he manages both the GIS Services and Software Services teams to develop ArcGIS-based solutions on behalf of GEO Jobe’s worldwide clientele of over 10,000 organizations.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Christian Patton” on the *Esri Community Blog* on June 24, 2024.

# MANAGING PROPERTIES FOR JOHNS HOPKINS UNIVERSITY

## **Featuring Jonathan Dandois, Johns Hopkins University**

In October 1876, Johns Hopkins University formally opened to its first class of students. The entire university was comprised of just two buildings tucked between North Howard and North Eutaw streets in downtown Baltimore. Though modest during those first young years, a sprawling legacy lay ahead.

Shortly after opening, a chemical laboratory was added to the group of buildings. Less than a decade later, the university obtained some additional land where it would build the biological laboratory, and more structures and growth would rapidly follow. Nearly 150 years later, Johns Hopkins now includes 10 divisions on campuses across the state of Maryland and several out-of-state and international locations.

Once easily tracked, the university's list of properties has become a much larger, far more complex project.

Jonathan Dandois is the GIS manager for the university's Facilities & Real Estate operations, and with so much to monitor, he ensures that all the properties the university owns are adequately tracked. His department manages all the property work, construction, planning, and architecture that keeps things running. With ArcGIS as the foundation for his toolset, Jonathan and his team ensure that these important assets show up on a map where key information can be added to each location.

“We have a lot of information to put in maps, obviously,” Jonathan says.

## The perfect middle ground

Thinking back on his days as an undergraduate while studying geography and environmental sciences in the late 1990s and early 2000s, Jonathan recalls a particular lesson his professors would emphasize: The importance of being able to search product documentation when it came to navigate the tools of their trade. They were expected to develop self-sufficiency; after all, they would be entering a field where there was every likelihood they would have to use programs or troubleshoot challenges without ready access to more knowledgeable peers. Practice in hunting down relevant information became a memorable part of Jonathan's education.

Roughly two decades on, Jonathan has become good at searching for answers. Depending on his need, official product documentation tends to be the first place he looks when he considers an ArcGIS conundrum. There are times, though, when the questions surrounding that issue do not fit the mold of something that would be included in documentation. Sometimes, he is not sure where to even begin a documentation search. And unless what he is dealing with has evolved into a real problem—something he would contact Esri Customer Support about—he turns to what he has found to be the perfect middle ground between both resources: Esri Community.

Having a place where he can connect with others working at or above his same level of expertise has been a huge help. It turns out that the challenges of essentially being on one's own that his former professors had worked to prepare him for remain as common today as they were then.

“It’s really just me in my GIS shop, right, and one or two people,” Jonathan said of his work environment. “I’ve got some junior staff, but I don’t really have any peers that I can go across the hall [to] and say, ‘Hey, have you dealt with this before?’ or ‘What we do here?’”

Because Esri Community posts are stored indefinitely,

interactions published at any point in the past can still prove helpful in the present.

“Often, you’ll stumble on some post from last week, or a couple years back, and it’s like, ‘Oh, this really sounds like what I’m working on.’”

### Leaving a mark for others

Among his peers, or “tech nerds,” as he warmly dubs other GIS professionals in Esri Community, Jonathan recognizes that he is not the only one turning to the online group for access to the knowledge of industry peers. Because of that, he has spent the last few years becoming more involved in not just seeking out the help of others on the platform, but in providing help back.

Jonathan’s experience in June of 2022 stands out in his memory as an example of putting that community mindset into action.

At the time, he had been running into an issue between two of the Esri products he manages for the university.

“I had this really weird problem that was happening between [ArcGIS] Enterprise and Field Maps.” Jonathan explains, “And something was just going really wrong. Something was getting stuck.”

Home > All Communities > Products > ArcGIS Field Maps > ArcGIS Field Maps Questions > How to delete Offline Sync Version created by Field Maps

How to delete Offline Sync Version created by Field Maps

by JonathanDandur 06-07-2022 10:31 AM

Subscribe

Post Options

Probably just missing a step, but I keep missing it consistently. I have a Traditional versioned dataset in our Portal. The Web maps and layers is configured for sync with a version per user. Creating offline area, editing and syncing all works fine. But when I go to delete the version created for this user I get the error "Operation not allowed on a version with dependent children." I know how to fix this in the SQL Server backend, by manually deleting all the dependent children first. But am I missing a step in a typical offline editing process? Thanks!

Solved! Go to Solution.

Add tags: field work, offline, sync, version

Reply

0 Kudos

Related

- Failure to create Field Maps offline map areas in...
- Offline Map Area Package Failure
- Field Maps, Offline Map, Arcade Calculation Express...
- Peer-to-peer syncing of Field Maps while offline?
- FeatureSet not working offline in Field Maps

Jonathan posted about an ArcGIS Field Maps challenge and closed the loop by sharing the solution.

He checked in Esri Community to see if others had already encountered and resolved the same issue he was experiencing—a process that has served him well. There were references to similar instances, but nothing summed up quite right as a match to his own circumstances, so he turned to the Esri Technical Support team for help.

Through in-depth work that advanced him through multiple technicians all the way to communicating directly with the Spatial Database Team, a solution was uncovered. Together, they determined the problem was one that some others could encounter. Still, the nature of the issue was not something that would fit neatly among other product documentation. They agreed on a plan for making the useful information available.

Answers in hand, Jonathan headed back to Esri Community to share his experience and the solution that had come out of it.

“And so, I posted that there as a note for the future. ... ‘If you have this problem, maybe you’ll get some insight from it.’ So that felt like I was leaving a little mark in the Community.”

He knows what that kind of information made available could mean for others, whether that be today or down the road. Leaving posts in Esri Community gives him the sense of collaboration, that everyone is helping the next user who may have the same problem. “And that just feels like we’re all helping.”



Jonathan Dandois is the GIS manager for Facilities & Real Estate at Johns Hopkins University. He manages the department’s ArcGIS Enterprise products, using ArcGIS as the foundation for mapping the university’s expansive list of properties as they oversee all related work, construction, planning, and architecture that keeps things running.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Jonathan Dandois” on the *Esri Community Blog* on April 24, 2023.

# PART 4

# INNOVATION AND PRODUCT EMPOWERMENT

“The Community is really good for having other experts help me out, and then, in turn I can help others with the information I gather.”  
—Ken Buja, Senior Applications Developer &  
Esri Community MVP

**A**RCGIS PRODUCTS IN HAND, GIS PRACTITIONERS around the world are improving the ways they accomplish organizational goals. More than that, they’re pushing the boundaries of what their organizations can achieve. Sources of pressure drive home the demand for solutions to insistent challenges—business competition, environmental threats, growing customer bases, increasingly complex stakeholder needs—the list is long and varies from case to case. But a shared reality remains: Answers to these

tough circumstances do not just materialize out of thin air. They can be elusive, requiring time and effort to unravel.

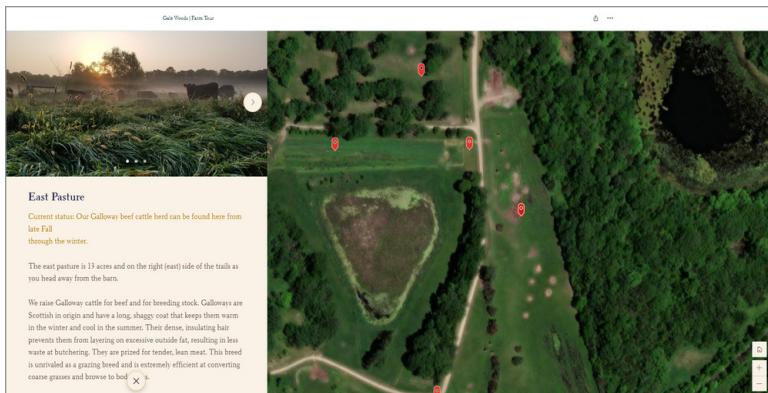
The degree of difficulty inherent in situations like these can dial up or down depending on whether quality resources are available to help guide users to solutions.

In this section, learn from the real-life experiences of GIS professionals who were confronted with the need for help while navigating the world of ArcGIS products or whose future plans relied on planting seeds of innovation in advance. From tapping into peers' product knowledge while developing a widget that helps researchers efficiently share finite resources, to overcoming hurdles while implementing a new Utility network, to evaluating which ArcGIS products will best serve organizational needs, these stories follow Esri users who repeatedly set themselves up for success by turning to Esri Community for its supply of insights and support.

# PROMOTING PARKS AND FARM LIFE THROUGH GIS

**Featuring Amanda Huber, Three Rivers Park District**

The pleasant charms of pastoral life are found in abundance on Gale Woods Farm—a 410-acre working educational farm in the town of Minnetrista, Minnesota. There, visitors of all ages engage in learning about agriculture, food production, and land stewardship by immersing themselves into the farm’s daily doings. More than 20 buildings and areas on the property impart natural lessons: Sugarbush, a stand of sugar maples, feeds a modest syrup-boiling operation. Gardens supply people and livestock with fresh crops. And a selection of friendly fungi in the Mushroom Forest educates visitors about decomposition while supplying the farm’s Community Supported Agriculture program; and much more. Supplementing the farm staff and livestock are Mardi the llama and two Pyrenees, Orion and Ursa, who together guard the farm’s sheep. Rutabaga and Spud make up the barn cat brigade to keep the rodent population in check.



The Gale Woods Farm Tour is an ArcGIS StoryMap submitted to the 2023 Esri User Conference Map Gallery.

Gale Woods Farm is just one of many areas overseen by the Three Rivers Park District, a Minnesota park system established in 1957 whose mission is “To promote environmental stewardship through recreation and education in a natural resources-based park system.” The park system manages 27,000 acres of parks and trails in the state’s western Hennepin County, an area roughly the size of Rhode Island. From art parks, winter sports hills, golf courses, nature centers, land restoration, and more, the park district enacts its mission through diverse amenities capable of coaxing people out into nature and their community.

As a GIS administrator for Three Rivers Park District, Amanda Huber is part of a three-person team that assists other departments—Planning, Engineering, Maintenance, Forestry, Water Resources, and Wildlife—with all their geospatial needs.

Amanda distills the numerous tasks and complexities involved in her team’s role by summarizing, “We wear a lot of hats in the organization.”

### **Esri Community for questions and product research**

As a longtime user of the Esri Community, Amanda is glad to discuss how it continuously supports her needs and the district’s many stakeholders.

“I learned about it as being a great place to ask questions and learn more information. It’s a very rich and robust database of user contributions.”

That library of information and network of members is so useful, in part, because the GIS products that Amanda creates and manages serve the public.

“My boss likes to say it’s easier to list the Esri products we don’t use with our organization,” Amanda says, “because there are so many that we do use.”

That need for Esri products sets the stage for another use case Amanda’s team leans into: collecting intel from other users on new products they are thinking about adding to their stack.

“If there’s a product that you’re interested in purchasing, or that your organization could maybe benefit from, Esri Community is a great way to see what questions people are asking about it or ideas that are being submitted,” she says. “And so, it’s a really great place to learn about those products from another person’s perspective.”

There are times, though, when Amanda has scoured Esri Community only to find that information she is seeking or a question she has is new so that answers are not readily available. When this happens, she is ready to be the first to ask and pose her question to the collective expertise of her GIS peers.

### Connecting about ArcGIS Monitor capabilities

In 2023, Amanda’s team installed ArcGIS Monitor 2023 as part of the suite of Esri products they were beginning to leverage for the park system. The product was still new at the time and Amanda found that official documentation sometimes did not have a piece of information she was researching. As in similar circumstances, Amanda turned to Esri Community as her next key source for information. She discovered that her team was not alone. Others had already published similar questions about the new product. Amanda joined the ongoing conversation by contributing perspective and data and asking questions, such as whether there was a way to find a list of IDs to track down where alerts were coming from.

Derek Law, a senior product manager at Esri, and other Esri team members active in the Monitor space were present and exchanging information with members, including addressing Amanda’s question.

Though Derek had to confirm there was not a way of doing

what Amanda was asking at the time, he took the opportunity to collect use case details from her to add to the development backlog for a future release. What's more, through their conversation Amanda and Derek were able to make plans to discuss the case in greater detail at the Monitor kiosk at User Conference 2023.

"It's really cool to be able to have that one-on-one conversation and not feel like you're unheard," Amanda said.

### A safe space to connect and learn

Amanda's embrace of the give-and-receive nature of Esri Community and her frequent, constructive participation in the platform gradually gained a unique level of recognition. At the start of 2024, Amanda, along with 13 other highly engaged individuals, were welcomed into the Esri Community MVP program.

When asked what motivates her to contribute her own knowledge to other members seeking help, she reflects on the variety of needs she sees: "Sometimes it's students that are working on a school project and don't know how to do something in GIS. Sometimes if it's a professional who's in a position where they haven't worked with a certain product before, I feel as though I can help. For example, an organization may be moving from ArcMap to ArcGIS Pro. We've been in ArcGIS Pro for a while now so we can help as subject matter experts."

Amanda points out the forgiving environment of the platform as an important part of what has made Esri Community such a welcoming space to participate in. She wants others who might worry about looking silly or being perceived as an amateur to know they can feel safe opening up.

"Anytime you have a question, obviously look it up and see if you can find it in the documentation first—do your due diligence. But

if you can't find that answer, ask the question. It doesn't hurt. You're not going to embarrass yourself."

She underscores the value she has received, "Esri Community has been an indispensable resource to myself as a GIS administrator and to my team.

"It's really cool when you're able to collaborate with a lot of different users from around the world and ask questions or hear from other people on how they're using GIS or answering questions that you may have."



Amanda Huber is a GIS administrator for Three Rivers Park District, a local government agency in Minnesota. She also serves as a Minnesota GIS/LIS Consortium Board member and volunteer chair of the Minnesota GIS/LIS Communications Committee. In her free time, she freelances for Blue Water GIS, a small GIS company based in Bellingham, Washington. Amanda also joined Esri Community's prestigious MVP program.

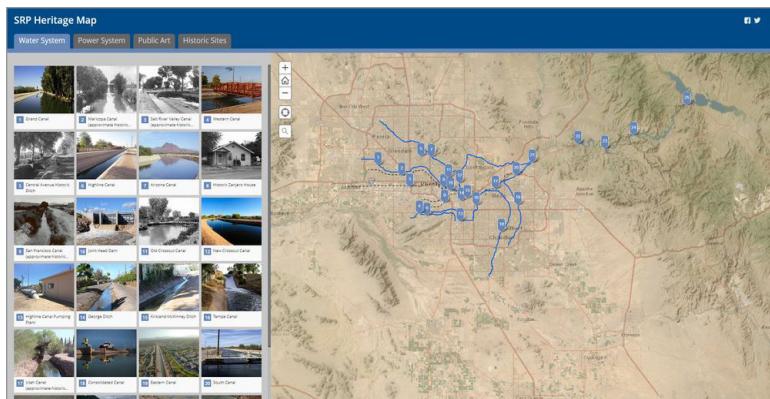
This story by Jesse Cloutier originally appeared as "Esri Community Member Spotlight: Amanda Huber" on the *Esri Community Blog* on February 26, 2024.

# GETTING TO KNOW THE SALT RIVER PROJECT

## Featuring Brian Colson, Salt River Project

Positioned in central Arizona, the Salt River Project (SRP) is a non-profit utility that supplies power and water to more than 2 million residents. Its founding organization, the Salt River Valley Water Users' Association (Association), was established in 1903, nearly a decade before Arizona achieved statehood.

The association began when a collective of local farmers and ranchers, desperate to parry threats from droughts and flooding, put their land up for collateral to secure a loan through the National Reclamation Act—funds they used to build the Theodore Roosevelt Dam.



You can explore SRP's storied past in its ArcGIS heritage map and historical timeline.

After more than 120 years and many milestones in between (including the association taking on management and operation of the Salt River Project in 1917) recipients of SRP's production are

now more urban than agricultural. The need for water supply and energy stability remains as important as ever, though, and perhaps more so as climate change threatens Arizona's water resources and increases pressure on energy systems.

Enter Esri Community member Brian Colson, senior GIS administrator\* at the Salt River Project. When our Esri Community team discovered that Brian was present at Esri User Conference 2022, we met to learn more about him and how our platform supports the important work he does for SRP.

### A utility network proof-of-concept

We quickly discovered that Brian was at User Conference as a presenter for the session Utility Network Migration Lessons Learned for Water Utilities—a walkthrough on using ArcGIS to support gravity-fed irrigation systems. What's more, the subject of his presentation included a direct connection to Esri Community.

Brian and his team migrated to ArcGIS Pro in 2018, beginning the process of getting SRP's analysts familiar with the application ahead of moving to the Utility Network.

That work toward implementing Utility Network meaningfully advanced in May of 2020 when Esri's ArcGIS Solutions team published a Prototype Utility Network Data Model for Irrigation Districts to Esri Community. This model was created in collaboration with Salt River Project and another irrigation district. It is the framework that SRP is building its Utility Network data model on for their project and aided the team in scripting out their entire process.

Because of how Esri Community works, the collaboration did not end at the prototype's publication. "When I've had questions with [the prototype], I've put my questions in the Esri Community and those Solution Engineers that we work with responded in the Community, actually, relatively quickly."

## A great place to ask or answer questions

When Brian first heard about Esri Community at a prior User Conference, he was not sure how he would use the platform. But he joined anyway.

Brian soon enough came to recognize that, as someone working on a specialized solution, Esri Community has a lot to offer someone in his position.

He is tuned into the cyclical nature of the platform by not just seeking help but also offering it to others when encountering posted questions within his expertise to answer.

Brian was not bragging when he reflected, “I’ve seen where other users have posted questions about how to do something, and I’ve gone on the Community site and answered their questions for them.”

He summed up the communal benefits: “It’s been a great place to be able to answer questions or get questions answered as a part of being on the Esri Community.”

\*In the time between interviewing and publishing this story, Brian’s title changed from Senior IT Systems Analyst to Senior GIS Administrator.



Brian Colson is senior GIS administrator at the Salt River Project in Arizona. He and his team began migrating to ArcGIS Pro in 2018—the first step in building a new utility network for SRP’s irrigation system, a process that has included aid from the ArcGIS Solutions team and Esri Community.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Brian Colson” on the *Esri Community Blog* on January 23, 2023.

# OCEAN SYSTEMS UNDER PRESSURE

**Featuring Ken Buja, National Centers for Coastal Ocean Science**

In the story of humanity's relationship to the natural world, few examples rival that of our bond with the ocean. These bodies of water are invaluable sources of food, medicine, minerals, and energy. Their currents moderate heat distribution around the globe and stabilize the climate. Their coasts offer homes and livelihoods. Most life forms on Earth are found beneath the waves.

The health and viability of our oceans are inseparable from our own health and viability.

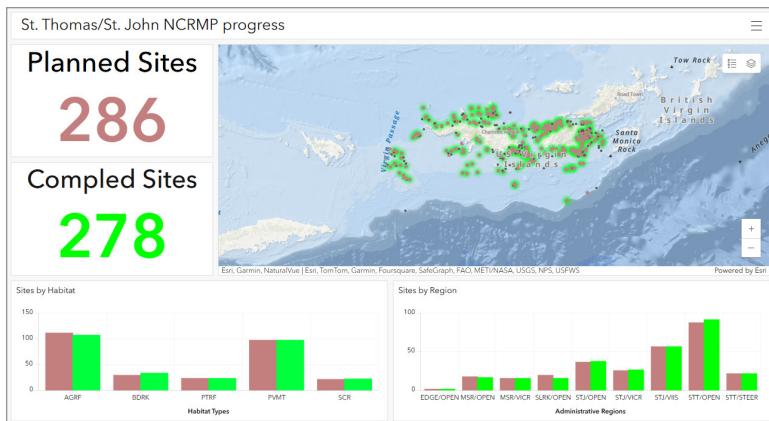
Chemical contaminants, harmful algal blooms, pathogens, ocean acidification, and water depleted of oxygen are a few of the major hazards that threaten the vitality of oceanic ecosystems. These profound challenges jeopardize not just the ocean's integrity but also human health, safety, and economic stability. As a result, there's a need for data that can inform community responses to these threats, revealing where and how to strike a balance between preserving systems we rely on while simultaneously developing a network of approaches to mend, withstand, and recover from the adverse impacts of oceans under strain.

## Turning data into marine management decisions

Ken Buja is an Esri Community MVP. He has been involved in Esri's online community platform since before the current Esri Community and even its predecessor, GeoNet. He is also the senior application developer at the National Centers for Coastal Ocean Science (NCCOS). NCCOS is a focal point for the National Oceanic and Atmospheric Administration's (NOAA) coastal ocean science efforts. It helps NOAA meet its coastal stewardship and management responsibilities and provides coastal managers with the scientific

information needed to decide how best to protect environmental resources and public health, preserve valued habitats, and improve the way communities interact with coastal ecosystems.

For Ken, analysis and development are central to his role at NCCOS.



ArcGIS Dashboard showing progress on collecting samples as part of NCCOS's coral monitoring work.

“We have scientists who are gathering terabytes of data,” Ken explains. “We have sensors that collect real-time and near real-time information on toxins in the water column. We have other toxin data coming in that we collect from onsite locations. We have autonomous underwater vehicles that collect information on mesophotic and deep benthic coral communities. We also have divers that go out into shallow water coral communities and their ecosystems to collect information about the health of the corals and the types of fish that populate those corals.”

Ken and the NCCOS team use those large datasets to make models that combine raw information into something scientists

and coastal communities can understand and act on. These models include highly detailed 3D models of coral or forecasts of upcoming harmful algal blooms. The sphere of Ken's impact extends wider to include supporting projects related to aquaculture and wind energy development, embracing the broad spectrum of coastal community needs that are tied to the ocean.

"My job," Ken summarizes, "is to create different types of applications that our scientists can use to analyze the data and create models. I also create applications to serve our data out to the public because one of our key jobs for NCCOS is to provide all this information out to the coastal communities."

### Turning to Community for widget-building guidance

"What I use most often is ArcGIS Online. We have our own organizational version of ArcGIS Online called the NOAA Geoportal," Ken says while explaining his work on developing applications that process large datasets. "I use ArcGIS Enterprise or Experience Builder to create web maps, create pop-ups, and to design aspects of the tools that are used to send this information [NCCOS collects] out to the public," adding that he also uses ArcGIS Pro.

Ken counts another Esri offering among his frequently used resources: Esri Community.

"One of the really good illustrations of how I've utilized the Community, and I've really gotten a lot of advantages from that, is a tool I developed many years ago. It's called the Spatial Prioritization Tool."

Ken describes the Spatial Prioritization Tool as an online collaboration tool that collects details about the mapping needs of researchers to find areas of alignment. It is used to allocate mapping resources and create partnerships between diverse groups running projects that seek overlapping information.

Ken emphasizes the virtue behind this approach, “It really feeds into NOAA’s mantra of ‘map once, use many times.’”

The tool was initially a one-off project running on JavaScript, but Ken and the NCCOS team quickly recognized its broader usefulness. He decided to make the tool more customizable and give others the ability to use it at the same time. ArcGIS Web AppBuilder became the chosen product in which to recreate the tool as a widget. As he launched into the project, Ken discovered that the then-available product documentation did not contain all the information he needed to create his custom widget. It would somehow need to be supplemented.

“So that’s where I turned to the Community to get a lot of information.” Ken says. He credits his knowledgeable peers on the platform with being instrumental in providing the details he needed to produce the widget.

Now, years later and with the introduction of ArcGIS Experience Builder, he is remaking the widget in Esri’s most up-to-date offering.

“Again, I’m turning to the Community and the up-and-coming experts, such as Jeffrey Thompson, who know about making custom widgets for ArcGIS Experience Builder.”

“The Community is really good for having other experts help me out, and then, in turn I can help others with the information I gather.”

### Fun and altruism fuel participation

Altruism is at the center of Ken’s reasons for taking on the role of an Esri Community MVP, where he actively contributes back to other members through knowledge sharing. He wants to help other people and knows that it is not always easy to look to others for help.

“I’ve been through the same process myself where I don’t know something, and I have to reach out and ask somebody else: ‘How do I do this?’ And that can be tough.”

Ken finds a sprinkle of fun in the process as well.

“And obviously there’s also the gamification factor,” he says. “Everybody wants to gain that nice little point or kudos for answering someone’s question. That’s just a little feel good extra. But it’s really the idea that I’m helping somebody else is what drives me.”

Ken views Esri Community as providing knowledge and offering information that sometimes cannot be found anywhere else. He has some advice for others getting started on the platform.

“Sort of just dip your toes in the water, you know, reading as much as you can and maybe you can participate in a conversation. As you get more confident in your knowledge of the different products, you can start providing your own answers and your own help to other people,” Ken says. “And you start becoming known as an expert in the field.”



Ken Buja is a senior application developer at NOAA’s National Centers for Coastal Ocean Science (NCCOS). With over 30 years of experience using Esri products, he creates applications that transform large datasets into models used by scientists and coastal communities in their work to protect environmental resources and public health, preserve valued habitats, and improve human interactions with coastal ecosystems. Ken is also an Esri Community MVP whose involvement in Esri’s online community platforms goes back many years.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Ken Buja” on the *Esri Community Blog* on November 4, 2024.

By actively and transparently communicating with our users, we bring them on a journey with us and [show] that they are part of the team with the same goal: to make the product better, to make the app more useful.

— Jianxia Song, Esri Product Manager for ArcGIS Web AppBuilder and ArcGIS Experience Builder

# A PLACE FOR THE NOVICE AND THE ADEPT

**Featuring Krishna Murthy, Beans.ai**

The most fundamental circumstance in which supportive relationships make a difference is often at the beginning of a new journey. A prime example would be when someone enrolls as a student of GIS, beginning the demanding work of getting their bearings amidst a new world of thinking. Who among us has not attended a formal orientation designed to help us get started?

A not-so-secret goal of an orientation, though, is not to relay the rules and show fresh faces where they can find help documents. Rather, it is to encourage the process of connecting people to each other through collaboration, reliance, and sharing experiences.

Krishna Murthy began his GIS journey while working on a geo-engineering degree in 2008 when he crossed paths with a predecessor of what is now Esri Community.

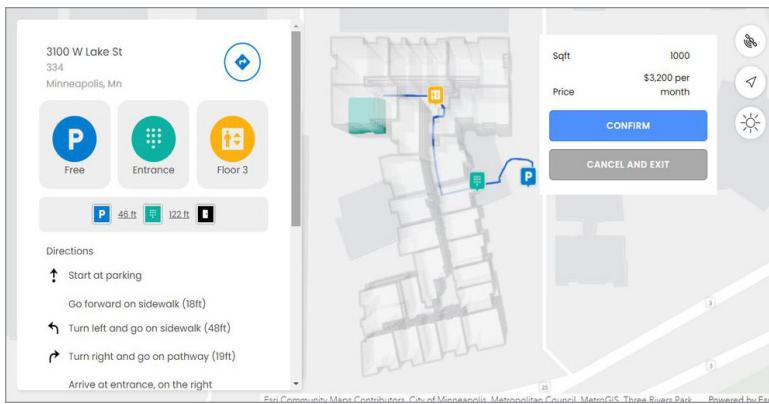
When people ask GIS questions, Esri Community is often at the top of the list in seeking answers. Krishna found a lot of people who were new to GIS collaborating there.

Now with years of experience in GIS and Esri Community, and with a master's degree in geospatial science, Krishna leads the GIS team at Beans.ai. He continues to lean on the resources provided by Esri Community even as his industry knowledge has dramatically evolved.

## Providing a foundation for product development

Beans.ai is an Esri Partner, meaning it is an organization that, through their expertise, solutions, services, and content, helps others use ArcGIS technology. Among their product lineup is a solution that uses ArcGIS 3D Analyst<sup>TM</sup> and ArcGIS Indoors<sup>TM</sup> data to supply walking directions that can take users throughout indoor locations,

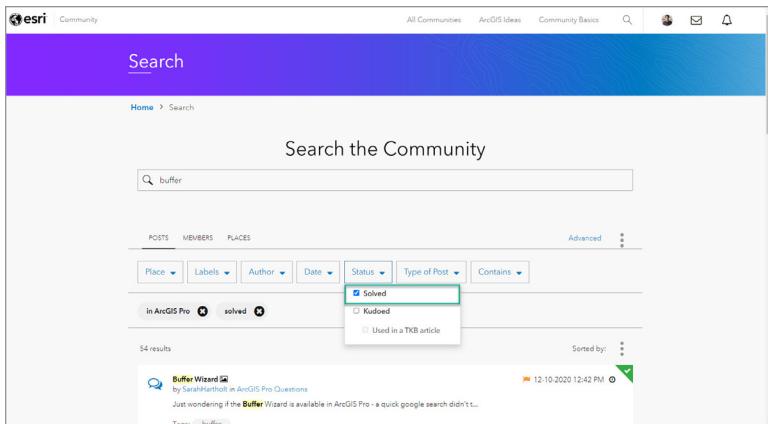
going beyond road direction solutions that have become so familiar. A map gallery submission showing the product even won a People's Choice Award at Esri User Conference 2022.



Indoors for Apartments is an award-winning Map Gallery submission by Krishna and the Beans.ai team.

During the beginning stages of product development, Krishna and his team of developers were doing a lot of research that primarily revolved around ArcGIS Network Analyst and how it would mesh with 3D models. Numerous questions emerged throughout the process—during which Esri Community was among their leading resources for getting quick, helpful answers. Krishna identified what an advantage Esri Community's worldwide membership can bring, pointing out that it is even possible to post and receive a response during the middle of the night.

With the Esri Community platform as a bedrock in his resource ecosystem, Krishna has found that his team's questions are often resolved within 5-10 minutes—whether that's via a response from another customer, an Esri team member, or, often, simply finding an existing question-and-answer post that addresses what they're after.



Finding Question posts with answers is made easier by using the "Solved" filter in a search.

And when it comes to looking through Esri Community's large database of already-compiled questions and answers, Krishna makes sure to use the platform's most helpful features in his search.

"Anytime there is a technical question that I have, it most likely has already been answered, so I don't have to go through all of that research trying to figure out the nitty gritty details of it," Krishna said. "Somebody has already done the research for me, and I can just plug it in and get the answer," adding that he uses the accepted solution filter in Esri Community to find answers.

## Making the future with Esri Community

Working at a company that develops new and innovative products can sometimes present the need to conceptualize tools and resources that may be needed later but do not exist yet.

From that future-facing position, Krishna has made a practice out of imagining what yet-undeveloped ArcGIS features could make

new things possible in Beans.ai products. This exercise gives him time to make the case for enhancement ideas and to champion their value with Esri product teams.

“I would try to go six months ahead of the product plan that we have. I try to think of things that we might need and if it’s something that Esri has not already built, I would just make that as an idea and post it into the Community so that by the time Esri builds up that idea into a feature into the solution we’ve already synced up on the product map.”

While feature requests submitted to the ArcGIS Ideas Exchange are not guaranteed to be implemented in a new product version, a great many are. Hundreds of ideas contributed by Esri Community members are implemented in products every year. This is further supplemented by investment in a new Esri Community role focused on facilitating and expanding the impact of ArcGIS Ideas.

Whether he is bringing forward an idea himself or a member of his team, Krishna’s embrace of that opportunity to get requests on Esri’s radar represents a cycle of partnership that does not just benefit Beans.ai. It accelerates the advancement of GIS.



Krishna Murthy is head of GIS at Beans.ai, an Esri Partner. He and his team of developers create location intelligence products with the use of ArcGIS. Krishna has used Esri Community for many years and uses the platform as a primary resource for finding answers to questions and championing new product features that hasten the GIS of tomorrow.

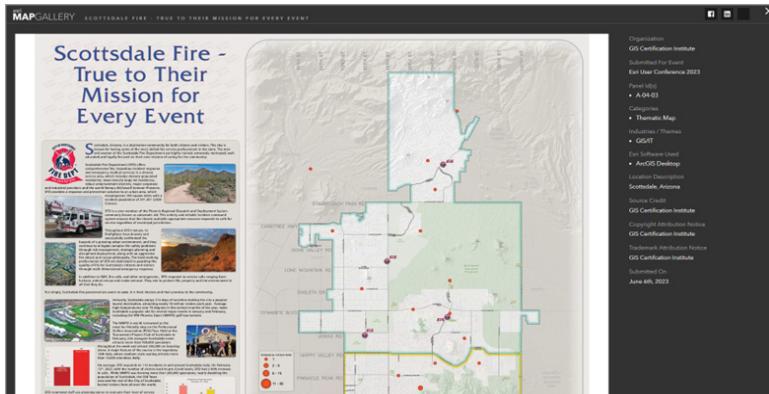
This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Krishna Murthy” on the *Esri Community Blog* on December 19, 2022.

# GIS IN THE WEST'S MOST-WESTERN TOWN

## Featuring Mele Koneya, City of Scottsdale, Arizona

Outfitted with the cowboyish motto “The West’s Most Western Town,” Scottsdale, Arizona, is treasured for nurturing a small-town, Western heritage even as its many modern appeals have fed population growth well beyond anything describable as “small.” Sought out for its business opportunities, schools, shopping, cultural history, recreation, residential areas, and more, Scottsdale is a wellspring of life and activity within the northern edge of the Sonoran Desert and the challenging conditions a desert environment.

Meeting the needs of Scottsdale’s more than 240,000 residents and the millions of visitors who stop in annually requires dependable infrastructure built on a bustling network of amenities and services. To great benefit, the city has a long history of integrating GIS into its operations, which officially moved to an ArcGIS framework in the early 2000s.



True to Their Mission for Every Event is an award-winning map and Map Gallery submission by Mele Koneya that details the crucial work of the Scottsdale Fire Department and how GIS equips it to maintain exceptional responsiveness, even during times of increased calls for service.

GIS is no stranger to playing the role of behind-the-scenes hero, and it is probably not surprising that most people in Scottsdale do not realize the extent of geospatial information's reach, even as it touches on nearly every aspect of the services they rely on. In fact, City of Scottsdale GIS now maintains more than 130 enterprise feature classes that are used by many city departments—from economic development to police and fire, transportation, water, and more.

Mele Koneya is a GIS Analyst with city of Scottsdale GIS, where he has been working with their nine-person team to support Scottsdale's GIS needs for the better part of two decades. When describing the prevalence of GIS in the city's operations, he describes a deeply embedded relationship. "We're very rich in data, and a lot of the backbone of the city has a GIS component to it," Mele reports.

### **Staying true to "We Care for You"**

Virtually all aspects of city infrastructure are critical, but it is easy to argue that public safety ranks at the top. Scottsdale is commendably served by the Scottsdale Fire Department (SFD), which dispatches aid from 15 individually situated stations. Together, they cover a 184.5-mile area that includes urban environments and the abutting McDowell Sonoran Preserve. Prepared to deliver everything from emergency medical response and human rescue to fire defense, SFD also steps in to assist with more modest domestic challenges such as lockouts, animal rescue, and snake removal. It is often this multidimensional capability that Scottsdale residents and visitors rely on for the protection of their lives, property, and surrounding environment. The SFD's motto "We Care for You," distills the fundamental level of caretaking while understating the breadth of their service.

With these responsibilities, the SFD needs all the advantages it can get to faithfully fulfill its mission. GIS services provided by Mele and the Scottsdale GIS team are a key part of that toolset. As one

example, Mele shares that the locations of a full one-third of the city's fire stations were chosen using four-minute response polygons (places reachable within four minutes) and years of incident response data, helping get SFD to where it is most needed more quickly.

Mele captured the work of the Scottsdale Fire Department and its intertwined relationship with GIS via a map that won a first-place award from the GIS Certification Institute and was entered the 2023 Esri User Conference Map Gallery: Scottsdale Fire—True to Their Mission for Every Event. His map demonstrates that even when hundreds of thousands of visitors from all over the world flock to the city during events like the Barrett-Jackson Collector Car Auction or the WM Phoenix Open golf tournament, the SFD's high standards never falter. The benefits of a geospatially aware public safety force mean that it is equipped to carry out its mission despite steeply increased workloads that can climb from an average of 110 daily calls for assistance to nearly double that during events that multiply peak activity.

### Troubleshooting ArcGIS Field Maps during events season

From his position within the nervous system of Scottsdale's operations, Mele is proud to be a longtime user of Esri Community where he finds support from the global community of Esri users while solving challenges on behalf of the city. Mele has contributed hundreds of posts in the nearly 15 years he has made use of Esri Community and its predecessor versions, some of which include sharing his own expertise with others to help them overcome obstacles.

Reflecting on the value Esri Community has provided him over the years, Mele shares about a time the platform made it possible for his team to overcome a significant problem during the lead-up to Scottsdale's busy 2023 event season—what he describes as a “heartburn moment.”

“During our event seasons, where we were supporting our fire

and police crews at the WM Phoenix Open major golf tournament in Scottsdale, we ran into some issues we weren't aware of with a tracking view in ArcGIS Field Maps."

Much of the technology was new to Mele and his fellow administrators, but it had been working fine. "Then we handed it off to someone else, and it didn't work for them. I was like, 'What are we missing here?'"

Halted in their tracks and unable to figure out how to get location sharing working for non-administrators, Mele turned to Esri Community where he uploaded his question. No more than a few hours had passed when Esri staff member Justin Colville spotted the question and replied with a follow-up question. The connection was made and an hour later, Justin was able to supply the solution Mele needed.

The speed of Justin's response and its usefulness in resolving the issue in time for the WM Phoenix Open has stuck with Mele as a point of gratitude. "It definitely saved me there," he says.

### You cannot do it all by yourself

Mele has more stories to share about times when the members and information found in Esri Community supplied support that made all the difference, such as community resources on ArcGIS Experience Builder and ArcGIS Monitor that have played a role in helping the Scottsdale GIS team achieve big improvements in monitoring the performance of services in 2024. Also top of mind for Mele are the thorough ArcGIS GeoEvent Server Blog articles and posts that have aided the team while learning the software—supporting their ability to track more than 200 police officers and fire department staff at one time.

From participating in the ArcGIS Ideas Exchange, to information in documents and blog articles, to the accumulating knowledge

gained from back-and-forth Question posts, Mele has gained value from Esri Community that he does not want others to miss.

“One of the things I say to people is that you can’t do it all by yourself. There’s no way,” he says. “I’ve been doing this for almost 30 years, but I don’t know everything. Nobody knows everything.

“The Community is important to be part of so that we can share and learn from others.”



Mele Koneya is a longtime GIS analyst with the city of Scottsdale, Arizona where he and others on the city’s GIS team manage geospatial data for infrastructure and services that residents and the millions of visitors who visit the city every year rely on.

This story by Jesse Cloutier originally appeared as “Esri Community Member Spotlight: Mele Koneya” on the *Esri Community Blog* on April 23, 2024.

# NEXT STEPS

**A**DDING ESRI COMMUNITY AS A RESOURCE IN YOUR GEO-spatial toolbelt means unlocking an extensive collective network of knowledge and comradery built by hundreds of thousands of Esri users over time. Using that connection can mean organizational money saved through faster or more efficient solutioning, improved project outcomes through collaborative problem solving, and personal career growth achieved through an environment of mentorship and knowledge transfer.

Here is how to get started using Esri Community. For additional resources and links to live examples, visit the book web page:

[go.esri.com/bgt-resources](http://go.esri.com/bgt-resources)



## SIGN IN TO CREATE YOUR FREE ACCOUNT

Esri Community accommodates several simple ways to create an account. Users logged into a My Esri or ArcGIS Online account can click on the Profile & Settings navigation bar icon for a dropdown with links that read either “Esri Community” (My Esri) or “Community and Forums” (ArcGIS Online). Visiting Esri Community via either of these links for the first time will initiate the profile creation process.

Alternately, users can visit [Esri Community](#) directly and use the [Sign In](#) icon found on the navigation bar. Users who do not have an ArcGIS public account username to enter can begin by using the available option to [create an ArcGIS public account](#).

Esri staff and distributor team members should specifically access Esri Community by using the Esri Community chiclet in Entra. Doing so provides access to an account with staff-level permissions and the green Esri pill beside the account’s username.

After creating an account, new members receive an email prompting them to verify. Completing this step enables use of certain member-only features, such as the ability to subscribe to content.

# WHAT CAN I DO IN ESRI COMMUNITY?

Esri Community facilitates better geospatial outcomes and experiences for Esri users around the world by connecting users to each other as a living library of resources. Some of the most impactful ways those results manifest are through the following participation opportunities.

## Build your network and knowledge

In Esri Community, you can find solutions, share ideas, connect with other ArcGIS users, and collaborate with other community members. Esri staff and select permissioned members author blog or document articles that cover everything from new product version release details to product roadmaps, inspiring user stories, workarounds, FAQs, and much more.

Esri staff and User Group Owners may publish event posts to advertise virtual or in-person meetups. From them, members with access can gather relevant event information, RSVP to attend, interact with other attendees, and receive event updates.

Members of any level can post questions or engage in conversations on others' posts, joining the communal give and take that leads to solving real-world problems.

## Gain recognition as a Top Collaborator or MVP

Answering others' questions or actively contributing to the Community by sharing best practices, tips, and workflows can be a rewarding experience for members! Not only will you earn higher ranks and badges, but you can also be recognized as a top collaborator or be nominated as an MVP.

Esri Community MVPs are an elite group of superusers recognized for their outstanding impact within the Esri Community

ecosystem. Through active, constructive participation and by embracing characteristics that exemplify Esri Community values, these members enrich the member experience for everyone.



Esri Community MVPs embody the platform's core values in all their interactions

New MVP program candidates are evaluated annually. All members interested in joining are encouraged to regularly and constructively participate in Esri Community, including answering others' questions and contributing useful knowledge. MVPs receive special benefits that include direct interaction with a rotating selection of Esri staff during quarterly virtual meetings, the opportunity to compete in the highest level of the annual [Esri Community Contest](#), access to a private MVP-only User Group, a username pill identifying MVP status, and inclusion in recognition initiatives.

Learn more about the [Esri Community MVP Program](#).



## Contribute to innovation at Esri

Visit [ArcGIS Ideas](#) to learn more about how you can submit feature and enhancement requests for Esri products. Browse current ideas submitted by users like you, where you can vote on or support them with comments about your own use case. Or create your own idea if you have a request no one else has already suggested.

Hundreds of ideas are implemented every year, creating a direct link between Esri users and the evolution of ArcGIS products.

A screenshot of the ArcGIS Ideas website. The header is purple with the text 'ArcGIS Ideas'. Below the header is a search bar and a dropdown menu. The main content area has a blue gradient background. At the top left of this area is the text 'Welcome to ArcGIS Ideas'. Below this is a paragraph of text. To the right is a white box with a title 'How it works' and three numbered steps: 1. Search, 2. Participate, and 3. Create. Each step has a brief description. At the bottom of the white box is a blue button labeled 'Get Started - Find the right Idea Exchange'.

ArcGIS Ideas landing page.

## Community Feedback

If you discover any issues while using the Community platform, please comment about your experience in our [Community Feedback](#) section of the platform. The Esri Community team monitors conversations in this location while working to help Esri Community best serve the needs of its members.

## Community Blog

For information on what's new with Esri Community, follow our [Community Blog](#). There, you will find inspiring member stories like those found in this book, announcements regarding new or updated platform features, tips to improve the Esri Community experience, quarterly reports, event information, and more.

## Use your profile

Esri Community members receive a personal profile (accessed via the My Profile link in their avatar dropdown) containing these and other details about their Esri Community experience:

- Badges earned through different forms of participation
- Records of activity, such as posts created, kudos given/received, and solutions authored
- Ideas submitted
- User Groups belonged to
- A history of post, reply, and comment contributions



Badges like these are awarded to members who have achieved certain participation milestones in Esri Community, such as commenting on a certain number of blog articles (left) or replying to other members a certain number of times (right).

- Members can also visit others' profiles to review their public activity or Direct Message that user, where enabled.

## Adjust your settings

Members have ownership over customizing parts of their experience in the **My Settings** area of their account. From within the My Settings dashboard, users may update their Esri Community username (your display name within Esri Community—not an ArcGIS public account username), toggle notification preferences, adjust subscriptions, and the ability to customize a number of other details to fit one's preference.

## Introduce yourself in Member Introductions

Greeting new Esri Community members is an enjoyable tradition all new members are encouraged to take advantage of by posting about themselves in the **Member Introductions** board. While doing so, share details about yourself you are comfortable with others knowing. Information about the ArcGIS products you use, areas of GIS focus, or geospatial background will help inform responses from others than often include personalized recommendations and links to areas of Esri Community most likely to benefit the individual.

## Learn more

There is no need to practice GIS in a silo. Connect to a global network of peers and experts by joining Esri Community today. From getting the help you need to solve challenges, to honing your ArcGIS and GIS skills, to participating in the evolution of ArcGIS products, and more, Esri Community is your free people-powered engine for GIS success.

For additional resources, visit the book web page at:

[go.esri.com/bgt-resources](http://go.esri.com/bgt-resources)



# ABOUT THE ESRI COMMUNITY TEAM

**F**OR MORE THAN THREE DECADES, ESRI HAS HOSTED AN ever-evolving online community that has grown into the Esri Community platform. The Esri Community team nurtures and promotes this virtual space by maintaining its day-to-day functionality, preserving community health via post moderation and spam prevention, facilitating the creation of features and pages that support users' needs, and developing content that educates and inspires members in their use of Esri Community.

## Team members

**Chris Catania** | Head of Community

**Simi Basu** | Community Operations Manager

**Michelle Mathias** | Manager, Community Experience and Programs

**Jesse Cloutier** | Community Manager, Engagement and Content

**Brianna Ettley** | Community Manager, Engagement and Content

**Nairi Sevajian** | Community Manager, ArcGIS Ideas

Connect with us by email: [esricommunity@esri.com](mailto:esricommunity@esri.com)