GOLDEN GOVIT AWARDS

CAST YOUR VOTE

Don't Delay! Voting Closes Monday, November 26.

ABOUT THE GOLDEN GOVIT AWARDS

The Golden GOVIT Awards recognize government agencies and other public sector institutions that have advanced government technology through collaboration, innovation and service.

The Government IT Symposium provides a natural forum to feature and celebrate the products, services, systems and solutions that improve government IT services and benefit citizens. All nominees will be honored at an awards ceremony during the Symposium's award reception the afternoon of December 5, 2018 (immediately following the Wednesday sessions). In addition, there will be a dedicated space and scheduled times throughout the Symposium for nominees to discuss their projects/initiatives to attendees.

INTRODUCING THE 2018 NOMINEES

An individual who champions and implements innovation, inspires collaboration, is focused on improving service, and demonstrates a personal commitment to advancing the professional and career development of him/herself as well as others in their agency.

Bruce Zimmerman, IT Supervisor, IT Network

Bruce Zimmerman has and will continue to be an asset to the State of Minnesota and MNIT. His previous private sector experience working with MN Public Sector entities has prepared him well for his State employment. He leads by example and always works hard to understand the business needs of the customers he works with. That desire to fully understand the problems allows for better solutions. He directs his staff with clear instructions, attainable goals and allows for plenty of independence to encourage creativity.

Bruce oversees the State's Wide Area Network that connects ~2,000 customer locations in 459 cities and is how State Agencies communicate with each other and the Public. The dynamic nature of the network requires a leader who can manage a high volume of activity amongst his team while providing the best customer service. The coordination between Communications vendors, customers and MNIT staff is critical to the success of the network.

Bruce has proved himself time and time again with his leadership and knowledge of what MNIT IT offers to Executive and non-Executive Agencies and how to get it delivered. He also has excellent people management skills that are needed in today's leaders. I have had the pleasure for working for him, as well as part of a team with him. I believe he is worthy of this award. He is a true champion in the technology field with a tireless commitment to serving our customers and being a positive, motivated leader to his team.

Al Fjerstad

PSAP Manager / Emergency Management Director Local ARMER Radio System Administrator MN Certified COML & COMT BCA Agency TAC DNR Fire Technical Specialist, Mille Lacs County Sheriff's Office

The U.S. Department of Homeland Security (DHS) offers technical assistance to states to address emergency communication needs. The Minnesota Department of Public Safety Emergency Communication Networks (DPS-ECN) oversees these technical assistance programs. With the new broadband service, FirstNet, which is built with AT&T and is now live and available to first responders, it has become important that public safety personnel understand the coverage that is available from these types of services. Mr. Fjerstad saw this need early on and encouraged DPS-ECN to pick Mille Lacs County as the pilot for this type of assistance.

In March of 2018, Mille Lacs County was awarded the pilot program. OEC shared with the state-wide project team their preliminary stats about the county as well as information about the reporting and expectations of the study. In order to do the drive testing, Mr. Fjerstad reached out to two organizations specifically: the Minnesota Department of Natural Resources and the Mille Lacs Tribe. Because of the relationships that Mr. Fjerstad has established, the project team was able to test in wildlife management areas and the Grand Casino facility.

On May 2, the team met at the Mille Lacs County Sheriff's Office. This was the first face-to-face meeting with federal, state and local participants. We shared maps on screen as well as on paper. OEC did some preliminary testing prior to the meeting to demonstrate what to expect from the results of the test. Mr. Fjerstad pushed to get as much of the county tested as possible in the time frame allotted, as well as key in-building areas. He also made it possible for a representative from surrounding counties to get hands-on experience with this type of testing. All LTE bands were tested through a scanner as well as user-experience-based testing. The testing resulted in cell spectral efficiency ratings, which demonstrates the success of the network's design.

It was important that this exercise be as transparent as possible, because this was a learning experience for Minnesota Statewide Emergency Communications Board (SECB) committees. The testing would be used as an example not only for other public safety agencies in Minnesota, but also for future similar studies that DHS performs. Mr. Fjerstad will lead the project team in April 2019 to discuss the Radio Spectrum Coverage Assessment study at the annual Minnesota Public Safety Communications Conference.

The Federal Legislation that established the First Responder Network Authority and oversees the progress of the FirstNet network, built by AT&T, which requires that states are consulted on the design of the radio access network, placement of towers, assignment of priority to public safety users and training. Mr. Fjerstad is assuring Minnesotans have their voice heard. He is able to tell you the quality of the design of all the LTE networks in the county, and where better coverage is needed for first responders to use their life saving tools.

David Bornus
Policy and Compliance Director, Minnesota Sex Offender Program, Minnesota Department of Human Services

David has championed and implemented innovation since becoming the Policy and Compliance Director of the Minnesota Sex Offender Program in 2009. David organized a system for program policy and procedure development, coordinated, guided, and refined several hundred program procedures, and administrated an internal policy website with hyperlinks and integrated forms. In doing so, David has enabled program staff to take ownership of their work processes by articulating and ensuring timely update and executive approval. This system of decision guidance has brought effective structure and clarity to program operations while also constituting a robust architecture for ongoing change management and coordinated implementation.

David's leadership in coordinating policy and procedure development inspires collaboration through bringing together "drafting committees" of subject matter experts and program stakeholders to articulate work processes, integrate regulatory mandates, harmonize with other policy requirements, and develop communication/implementation plans that include any required training. David provides individual guidance to drafting committee chairs and assists them to address and overcome challenges and conflicts, and helps with final editing and wordsmithing. David ensures that affected stakeholder reviews are performed, and schedules and moderates meetings for executive review and final approval of new or updated policies.

Through his work, David is focused on improving service to staff, clients, and the public by ensuring that all policies undergo needed vetting and annual review, as well as expeditiously handling any emergent "at-need" updates when required. David's system of subject matter experts ensures that everyone knows who to consult with questions about interpretation and application of a policy, as well as respond to new needs, challenges, technology, or opportunities. Through all of these, David ensures that the policies and procedures remain a dynamic, living document system providing timely and effective decision guidance to program staff and clients.

David has always demonstrated a strong personal commitment to advancing the professional and career development of himself as well as others in his agency. At his own initiative, he has attended the following state-provided trainings: Project Manager Fundamentals, Supervisory Effectiveness for Aspiring Leaders (SEALS), Emerging Leaders Institute, Senior Leadership Institute, the Department of Human Services' "L4" leadership academy, Lean 101, and Six Sigma/Green Belt process improvement training. During his state service he has also earned a Master of Science in Criminal Justice. David regularly encourages and inspires others to pursue individual opportunities for advancement and growth. Two coworkers he has mentored have received promotions as agency policy system coordinators in other parts of state government.

Libby Caulum
Director of Communications and Media Relations, Minnesota Department of Revenue

Libby Caulum, Director of Communications and Media Relations at the Minnesota Department of Revenue, focuses on the audience. Whether internal or external, the audience always earns her respect, and this provides the starting point for all communications she oversees.

This respect translates into all aspects of Libby's career at Revenue. It has led to several effective and innovative communications campaigns to inform, educate, and motivate internal and external audiences. #OurMN is a video and infographics campaign highlighting the work state employees do to improve the lives of Minnesotans. Partnering with state agencies, each video describes services or resources – from parks to adoption services – available as a result of tax dollars.

Revenue Successes is an internal video campaign to highlight agency accomplishments. Shared at monthly agency-wide meetings, the short videos bring the work of Revenue employees to life, fostering a sense of pride and enhancing employee engagement.

In addition to campaigns, Libby prepares the commissioner and senior staff for legislative hearings, public events, and media interviews. She drafts and edits speeches, monthly editorials, and PowerPoint presentations ensuring complex tax information is tailored to the audience. Libby's feelings of respect continue when interacting with other Revenue employees. She believes that diversity is important and leads to a better result.

When starting at Revenue, Libby was brought in to chair the newly formed Outreach Team. The Outreach Team was the first time employees of all Revenue divisions were in the same room and focused solely on the department's external customers. She provided a general direction and strategy for the team, but encouraged members to define the team's role and responsibilities, as well as their own within it. Libby leads by example and keeps an open mind, empowering Revenue staff at all levels. "Part of being a leader is creating space for work that happens in a way that is different from my process. I might have done it differently, but I want people to feel empowered to do their work. I don't always need to put my own stamp on it."

Libby's understanding that her way is not the only way allows her to successfully develop others. She encourages those she supervises to find opportunities to improve their skills and knowledge, believing everyone should do what they love even if it is not their current role.

From volunteering for the Peace Corps to attending the competitive Minnesota Senior Leadership Institute at University of Minnesota's Humphrey School of Public Affairs, Libby recognizes her own personal and professional development never stops. She is not satisfied with the status quo and seeks a greater understanding of current theories and practices in leadership and communications.

The empathy and understanding Libby has for the audience, no matter who they are, allow her to excel as an effective communicator and a respected individual leader.

The delivery of digital information and transactional services that makes a difference in the lives of citizens. Nominations should meet these criteria: a strong focus on the end-user's accessibility and experience, a high level of citizen engagement, incorporation of the technologies used by today's citizens, and timely, informative content.

The New Ulm Story of Service and SIP, *City of New Ulm*

Project Implementation: June 15, 2018

The City of New Ulm was facing a change to their phone system. Their local telephone company, which provided city hall with 214 phone lines, was discontinuing the Centrex service in which New Ulm subscribed. This left the City of New Ulm looking for a new telephone system. Nate Beran, Information Technology Supervisor for the City of New Ulm, wanted to use this as an opportunity to improve the service to New Ulm residents. The city was facing a significant increase in operational expenses to cover a new hosted service.

Nate wanted to use newer technology, such as SIP and digital connectivity through existing fiber which could now carry both data and voice services. The problem was his local telco was not offering SIP service. To pursue this option, the city would have to turn its back on the long-standing local telco relationship. A SIP solution would have to come from a provider via the internet. Using a SIP solution would deliver information at a lower cost, focus on the needs of residents and make a difference in the lives of citizens, including avoiding a tax levy. SIP is future proof. Features were unlimited and could provide end-user accessibility as needs change. Unfortunately, going with an internet-based vendor meant New Ulm would have to change all their local phone numbers and rely on uncertain internet connectivity. Even in the cell phone era we now live in, the city could not imagine forcing all residents to use new numbers to contact their city. For the best customer experience, It was important that their long-standing published numbers remain.

Nate Beran proves that persistence pays off. Over many months, he worked with his local telco to modify their offerings and bring in an option that operates very much like SIP. The City was able to keep their long-standing published numbers, take advantage of new numbers, and implement a better strategy for using the local numbers they have. The partnership with the local telco yielded better reliability, improved call quality, and stabilized operational costs without budget increases.

By New Ulm working with the telco and essentially helping them keep the city as a customer, the outcome created a product offering for other telco customers in New Ulm – economic vitality. The easy way out would have been to go to an internet-based provider. However, with service in mind and being fiscally responsible, New Ulm residents have an improved experience and a decrease in communications costs.

A Day in the Life of a Tax Return, *Minnesota Department of Revenue*
Project Implementation: April 12, 2018

One of the most common questions the Minnesota Department of Revenue is asked during tax season is *"Where's my refund?"* When the department explored this question further, we realized that one reason people ask this is that they do not understand what happens to their tax returns after submitting it. To address this gap in understanding, the department created a campaign to inform taxpayers on "A Day in the Life of a Tax Return."

The campaign consisted of a short video posted on the department's social media accounts and website before the annual individual income tax deadline in April 2018. The goal was to showcase a process that can be seen as too technical or complex.

Releasing the video right before the individual income tax deadline ensured that the video was timely and would help answer the question "Where's my refund," which often arises immediately after the deadline.

The department chose video as the medium to make the topic more engaging. Video is easy for the majority of people to consume, and it is easy to share through multiple media channels.

Although the main goal was to inform and educate customers about tax return processing, the video also presented a unique opportunity to highlight the department. Beyond educating our customers, we used the video to:
• Highlight the important work Revenue employees do to ensure the right amount of tax is refunded or paid: no more, no less
• Show that paper returns are more labor intensive and take longer to process than electronic returns
• Direct taxpayers to a self-service portal on our website to check the status of their refund

"A Day in the Life of a Tax Return" was posted on the department's social media accounts and the website. On Facebook, LinkedIn, Twitter, and YouTube, the video has over 8,500 views and has reached over 6,100 other people since being posted in April 2018.

Feedback on social media has been positive with other Minnesota agencies and Revenue departments from other states sharing the video with their audiences.

The video helped significantly reduce the number of questions received about refunds through webmail and Facebook messages.

Phone calls about refunds also decreased in 2018 as compared to 2017. From mid-April to mid-August 2017 to 2018, the number of phone calls decreased by 15,730 from 92,504 to 76,774. For the week immediately after the filing deadline in 2017 compared to 2018, the number of phone calls decreased by 1,176 from 6,087 to 4,911. Some of these declines have been attributed to the release of the "A Day in the Life of a Tax Return" video.

The standalone campaign was able to showcase a process that impacts over a million taxpayers each year, and can often feel like a mysterious process. After the success of "A Day in the Life of a Tax Return" video, there is already discussion of using the video as a template for similar topics.

Volunteer Impact: Volunteer Management Software for DNR Volunteer Programs, *Minnesota Department of Natural Resources*
Project Implementation: February 20, 2017

Moving into the digital age, the DNR must keep up with technology in our recruitment and retention, recordkeeping, and training of volunteers. The long-term goals of the DNR Volunteer Program are to build a larger, more modern, vibrant, responsive and safety-focused volunteer program and enhance our ability to evaluate the conservation impacts of volunteers. To meet these goals, we are offering citizens easy online access to explore the variety of volunteer opportunities the DNR has to offer along with an efficient application method.

Volunteer Impact software was purchased by MN.IT for the DNR. Staff and approximately 1,000+ volunteers have been piloting it for the past two years. Their input on bugs they've encountered has assisted in enterprise level templates and application processes being designed to streamline volunteer coordination and make this more user-friendly for volunteers.

To date, the test group of volunteers, as well as the public, have been accessing the software to apply for select volunteer positions advertised on the DNR volunteer opportunities webpage here.

Features of Volunteer Impact for staff include the ability to:
• Create volunteer activities and schedules in real time
• Select standardized application forms and processes
• Store private data in a secure location
• Recruit and schedule volunteers
• Track hours, training, and run reports on feedback and conservation impacts
• Find tutorials on the Volunteer Impact Help page here.

Features of Volunteer Impact that make it user-friendly for volunteers include the ability to:
• Access the software by computer or mobile app here.
• Find tutorials on the MyVolunteerPage.com Site Guide here.
• View a list of public volunteer opportunities they qualify for within the DNR and can apply here.
• Create and access one profile for the entire department on MyVolunteerPage.com here.
• Apply for DNR activities and schedule themselves
• Log their hours and provide feedback

When agency-wide rollout of this volunteer management tool happens next year, the DNR will be able to evaluate the conservation impacts of all 23,000 volunteers now on our rolls. Citizens will have easy online access to explore and sign up for DNR volunteer opportunities and staff will have an efficient process to manage volunteers. Staff will run their own volunteer reports, plot trends, and evaluate the impact citizens have in helping achieve our mission. As a result, staff will be successful volunteer managers and volunteers will be engaged in meaningful projects that assist in managing our state's natural resources.

Hennepin County Human Service Center QFlow Kiosk Project, *Hennepin County*

Project Implementation: April 11, 2018

Previously, when a client arrived at a Human Service Center, they were required to interact with multiple staff members and retell their story (explain the reason they came in) before they receive the correct service. Kiosks allow clients to check themselves in to the specific services they need.

Process:
A project team consisting of Health and Human Services staff from the IT Records Management (ITRM) and Integrated Planning and Analysis (IPA) service areas was created. The vendor, Automated Customer Flow (ACF), was consulted to procure hardware and provide advice with initial design, programming and integration with the existing Qflow system.

The IPA team worked with staff at the service centers to gather requirements and translate the questions which were asked of a client into virtual buttons on a touch screen kiosk. Based on feedback received during the pilot phase, incremental changes were made to the product in an effort to improve and enhance the tool in the production phase.

The IT staff were tasked with rendering these requests in a digital space while accommodating three different language translations and meeting all ADA compliance requirements. Once the hardware and virtual rendering of the wire frames were in place, a 3 month pilot period began. Throughout this pilot, a workgroup with Human Service Center staff was created to keep in close contact and proactively address any concerns.

Significance:
The objectives of this project included:
- Lessen the number of times a client had to tell their story to staff
- Shorten the amount of time it took a client to check in
- Create a user friendly environment that is universally understood by our diverse client base

The developed kiosk system correctly routes clients to staff and partners who can serve them based on options selected at the kiosk. The initial interaction time has also lessened to an average 68 seconds per touchscreen interaction compared to the original reception process which took an average of five minutes. To gauge client approval, a survey pertaining to experience with the kiosks was distributed to clients. Based on the recorded results, the clients were overwhelmingly pleased with their kiosk experience.

Impact:
The kiosks have logged over 34,000 interactions. The project has consistently received positive feedback from staff and clients. The system design proves to be truly user friendly and easy to navigate according to clients. Administrative staff can focus their efforts on other projects and duties and allocate significantly less time to client check-in procedures. Because of the kiosk project, the client experience has significantly improved and has given staff the ability to serve clients faster and more efficiently.

An individual who champions and implements innovation, inspires collaboration, is focused on improving service, and demonstrates a personal commitment to advancing the professional and career development of him/herself as well as others in their agency.

Savage Elko New Market Partnership, *City of Savage*
Project Implementation: February 7, 2011

In the early 2000's, the communities in Scott County began an organization called SCALE (Scott County Alliance for Leadership and Excellence) to promote innovative and collaborative solutions. Through this partnership, the cities of Savage and Elko New Market began to discuss the possibility of leveraging IT services in 2010.

At the time, Elko New Market was projected to see significant growth due to their strategic location in the south metro. The City is located in the south metro area just south of Lakeville on I-35. Many people were choosing to move to Elko New Market for their affordable housing and small town atmosphere. The City of Elko New Market leadership foresaw the need to build up infrastructure to support demands that comes with an increase in population and corresponding demands on services. Elko New Market knew their private IT support provider would not be a viable long term solution.

In 2010, Elko New Market did not have the staff available to provide these services. At the time, they contracted with a private firm that helped with their network and PC issues. However, with growth around the corner, they knew they needed to find a more sustainable solution. The City of Savage had two full time IT professionals with significant years in the public sector IT industry. Having experience in the public IT sector was important to Elko New Market, because the public sector is often held to specific standards. The Savage staff was also knowledgeable about IT hardware and software that were frequently used in the public IT sector with positive results.

In February of 2011, the two communities entered into an agreement for the City of Savage to provide IT services to Elko New Market. The agreement was not put into place simply to address issues as they occurred, but for Savage to assist Elko New Market in preparing for growth and modernizing their systems. Phase I of the agreement had Savage IT staff perform an audit of Elko New Market's hardware, software, phone systems, SCADA systems, Firewalls, etc. Through this, Savage developed recommendations for Elko New Market to consider in their budget process. Phase II established desk top support by installing remote assistance software. The Police Department and City Hall were connected via VPN to help provide better accessibility. Email filters and spam blockers where installed and an offsite back up was implemented.

Since the agreement has been in place, Savage has helped Elko New Market extend a local fiber network to City facilities, connecting lift stations, and other public buildings. Savage IT has also help Elko New Market upgrade its network and servers, as wells select and implement software. The Agreement was renewed in 2014 and looks to be in place for the foreseeable future.

Hennepin Waypoint, *Hennepin County IT/GIS*
Project Implementation: May 18, 2018

Hennepin County GIS Office working jointly with the Office to End Homelessness, and the Ending Street Homelessness sub-committee under the auspices of the Minneapolis Downtown Improvement District (Mpls DID) created the Hennepin Waypoint application. The web-based resource was created for those experiencing homelessness, those facing extreme financial hardships, and as a reference tool for those agencies that provide services to their clients. The application is web based, not requiring a program download, and is mobile compliant, working just as easy on a smart phone or tablet as it does on a computer. The layout is organized into a simple structure with nine main categories of services and numerous subcategories. Individual provider services are listed with important contact information, hours, hyperlinks, and eligibility requirements. The user can easily map the services, include other category sites, display transit information, and show open or nearest services.

In order to create a helpful and useable tool, the project team conducted requirements gathering directly with clients at YouthLink, the Dignity Center, and Central Lutheran Church. The team held a workshop, reviewed similar applications from other major cities, and met with numerous organizations including Downtown Congregations to End Homelessness (DCEH), St. Stephen's Human Services, and the Catholic Charities Opportunity Center. The collaboration continued as development progressed. Hennepin County Public Health Healthcare for the Homeless, the Hennepin Central Library, NorthPoint Health and Wellness, and other organizations worked with the project team, contributing input, feedback, and service information.

A core design team compiled the information and drafted project specifications for the development team. These specifications included an easy to use, light weight, web based application that is mobile compliant, contains interactive maps, and accessible provider service information. During the requirements gathering a number of issues were identified, including the need for up to date information and descriptive eligibility requirements. In order to address the need for timely data, the development team created a second application that allows providers to update service information online for instant posting, this includes the capture of eligibility and document requirements.

Hennepin County Human Services Communications staff is in the process of promoting the application to numerous organizations, county service centers, the Red Door clinic, Hennepin libraries and other agencies. The goal of the application is to better the lives of those in need by providing information on shelters, food sources, restrooms, legal services, social activities, training, mental health resources and much more. It is also the goal to supply service providers an easy tool to look up nearby supplemental resources during their interactions with clients.

Interoperability for Newborn Screening in Minnesota, *Minnesota Department of Health*
Project Implementation: November 7, 2017

MNScreen is an electronic reporting system that allows hospitals to send pulse oximetry and hearing screening results to the NBS Program. This system involved collaboration among the NBS program, OZ Systems, midwives, and birth facility IT and nursery staff. As the success of the MNScreen initiative with birth hospitals became clear, additional projects were considered regarding interoperability as it relates to newborn screening.

Most recently, a project was undertaken which aims to improve timeliness through electronic demographic and order submission and result reporting. One of the goals is to decrease the amount of manual data entry, thereby reducing errors which result in delays.

The process for this involved a partnership between MNIT; OZ Systems; Natus Medical; and NBS subject matter experts from the short-term follow up, laboratory, and operations units. It was determined that demographic information already being electronically captured for MNScreen could also be utilized in the NBS program's laboratory information management system (LIMS) from Natus Medical. MNIT staff worked with OZ Systems to have the HL7 messages being received in MNScreen sent to the MDH internal exchange hub (IEH). MNIT staff then worked with Natus on the requirements to send the messages from the IEH to the LIMS. Test messages were created and sent to determine if the IEH was working and the messages were flowing correctly. Once the messages are received in the IEH, they wait in a holding table until the newborn's dried blood spot card arrives at the public health laboratory. A unique barcode identifier from the card is scanned and several key fields are matched with the message waiting in the holding table. Once a match is made, the demographic fields auto-populate in the LIMS.

This project develops and implements interoperability between OZ and Natus systems utilizing the Internal Exchange Hub (IEH). The IEH will facilitate the exchange of data between the two systems. The project will impact all 91 birth hospitals in Minnesota. It will reduce hospital staff time needed to complete the demographic information on the newborn screening card since that information is captured electronically. It will reduce errors in transcription from the electronic health record to the NBS card and then from the card to the NBS LIMS. This ensures more accurate information going back to hospitals and families in a timelier manner.

New Automated On-Call Judge Phone System, *Hennepin County*
Project Implementation: June 1, 2018

Previously, when a law enforcement officer needed a judge's signature to get an arrest or search warrant after regular business hours, the officer called the Hennepin County jail and the deputy provided the on-call judge's info. Routing contact information for judges in this manner opened the process to multiple points of failure:

- The list could be outdated or contain inaccurate information.
- Court personnel could mix up judge scheduling assignments.
- The deputy could give out incorrect information.
- The officer could make a mistake in recording the information.
- The information could be overseen or overheard by the arrested person.

District court staff identified the need for a streamlined, more direct method. A project team was assembled representing the various impacted groups: court administration and scheduling, law enforcement, court judges and IT. A 3-month horizontal scan was performed to consider various solutions.

Since district court had worked with county IT on similar projects in the past it was a natural fit to partner again on the selected solution, an automated on-call judge phone system. Court and county IT worked together to develop and connect the technical components for the system. Throughout development, representatives from every impacted area contributed input into the design criteria. Once the system was finalized, the State Highway Patrol did a 45-day pilot test. The reaction was so positive officers questioned how quickly it could be rolled out to other Minnesota counties.

Overall, the process spanned 10 months. The objectives were to create a system that:

- Eliminated calls to the county jail. Calling the jail would only happen as a last resort.
- Had a minimal learning curve for participating police officers and administrators.
- Enabled on-call calendar entries to be filled months in advance and to be broken down into hours or minutes if need be.

The developed system automatically transfers calls made after hours (4:30 pm – 9:00 am, weekends and holidays) using a dedicated phone number to the assigned on-call judge. It is based on two SQL tables: a phone book containing after-hours phone number for all judges; and a calendar that determines where the incoming on-call number will be directed. The automated on-call judge phone system has made the process much quicker and easier for all parties.

- Administrative support staff have less work to coordinate.
- Law enforcement have a single number to call for faster service.
- Judges have a recognizable call number, thereby eliminating the guessing of whether a particular call is work related or not.
- The system can be scheduled from any phone, anywhere.

The system is integrated with the digital warrant signing process that stores a judge's signature on file. Paired with the on-call judge phone system, judges can now approve and sign warrants on their smartphone anytime, anywhere. County residents also benefit, either directly or indirectly.

A product, program or service that disrupts the current status quo and meets these three criteria: Novelty: the degree of newness and uniqueness; Impact: the magnitude and scope of improvement to government efficiency and effectiveness; Replicability: the potential for replication in other government agencies or sectors.

CareerBot, *State of Minnesota – Deed*
Project Implementation: April 30, 2018

CareerBot, available on every [CareerOneStop webpage](#), enables conversational interactions enabling users to quickly connect with employment resources through text. Users type their queries about jobs, education, salaries, and so on and receive information and links to relevant COS pages. For example, they can search for jobs by entering their occupation and a zip code to see local job postings. Or they can search for educational programs in a similar manner. CareerBot can also use the COS site search to find relevant results.

CareerBot builds on our first venture into Artificial Intelligence: an Alexa skill. Integrating this technology into an interactive experience in which the bot "understands" the user's goals provides a more personalized experience. The COS site features 61 interactive tools, several special purpose portals, and hundreds of content pages. Using a chatbot means users don't need to figure out our navigational structure. Since its release at the end of April, users have engaged CareerBot in more than a quarter million interactions, producing relevant results more than 97% of the time. As we better understand what our customers are looking for, we can improve and evolve the bot's ability to respond to requests, which a standard website really can't do effectively. Since its first release, we have modified CareerBot's responses to better serve users' needs and in the process learned more about them. Given that chatbot technology is still in its infancy, it was a substantial risk to release this solution. We had to figure out what kind of personality CareerBot should have. Should it be friendly or matter of fact? We worried if users would be able to find the bot and figure out how to interact with it and whether it would turn users away from visiting our site. We wondered if the level of usage would justify the project's cost. Given the initial results we have gotten, the reward so far has been worth the risk.

It is too early to evaluate the overall effect of this solution, but to date, we have received no complaints about the service. We expect to see a reduction in our customer service emails and calls and increased usage as we further fine tune CareerBot and add to its repertory of answers.

We plan on continually enhancing CareerBot to add Natural Language Understanding to improve the successful query rate and broaden the topics it can support, introduce spoken language recognition, and add guided pathways that will take users step by step along, for example, a reemployment process that involves resume writing, evaluating educational opportunities, preparing for interviews and finding jobs. It will evolve over many years and we fully expect at some point it will become the main way users interact with CareerOneStop. There are those who say that voice-driven interactive experiences will someday replace websites. We plan to follow this innovation where it leads.

Culvert Inventory Application Suite,
State of Minnesota MNIT at Department of Natural Resources
Project Implementation: August 30, 2018

This Culvert Inventory Application Suite (CIAS) is the first and only one of its kind in the world. The suite includes a mobile app, a central database, a quality review application, and online maps and data layers. The mobile app works on any device and allows citizens to add culvert locations and details and even pictures for review by professionals. The single secure spatial database allows simultaneous editing by multiple users. The quality review application allows qualified knowledgeable professionals to view and validate and augment the culvert data supplied by anyone. This is a remarkable example of crowdsourcing that can leverage work done by any state agency, local government unit, commercial company, or even private citizen volunteers.

The resulting secure database will improve government's efficiency and effectiveness in protecting the safety of our citizens and enhancing the quality of our water and our land and stream habitat. Analysis of the data will impact the safety of all our Minnesota citizens by allowing government agencies to proactively determine where our roads, buildings, and bridges are most at risk from more frequent high rainfall flooding events.   Analysis of the data will enhance the government's ability to improve the quality of our water and improve river and stream habitat by determining where sediment transport can be reduced, where spread of invasive species can be slowed, and where fish passage can be restored.

The online maps and data layers are published in Minnesota GeoSpatial Commons for everyone to use. This information on culverts has historically been scattered in many different agencies and organizations. Having this culvert data available in a single public place provides an extremely unique opportunity for analysis by data scientists from any sector. This will afford opportunities for currently unforeseen future innovations that will benefit our world. Other government agencies or sectors and private organizations can use this suite of applications as a pattern and replicate it for other collections of data that is critical to protecting our safety and improving our world.

The nominees for this project are a Streams Habitat Consultant from Minnesota Department of Natural Resources (DNR) and a group of dedicated Geographical Information System professionals from Minnesota IT Services (MNIT). Though they work in separate state agencies and divisions, they were able to work together and create this one-of-a-kind application suite.

Minnesota Housing Multifamily Customer Portal,
Minnesota Housing

Project Implementation: April 1, 2017

Minnesota Housing awards funding to multifamily housing developers through an annual RFP. This process is highly complex. Not only are there different types of applications, but we also offer many funding sources with different requirements and have partners that also use our application. To eliminate duplication of work, improve tracking, clarify roles and responsibilities, and increase efficiency, we developed a Multifamily Customer Portal using Salesforce.

Before the Portal, the application was cumbersome. Customers had to navigate and download numerous materials from our website. They had to submit hard copies – often 1,000+ pages – in addition to providing materials electronically. We greatly improved the internal user and external customer experience by creating secure, online and paperless application; automating the submission, approval and storage of documents; customizing required application materials so users don't have to review 100+ documents; and focusing on communication and transparency.

We started by collecting feedback on pain points and how to improve the user experience. We brought in customers to test before it was finished so we could update layout and language. We also looked at our internal process for receiving and processing applications. Staff wanted to reduce time to import application data (45 minutes/application, 80-100 applications/round), share visibility of an application among staff, and have flexibility pulling data into reports.

The Portal initially launched in April 2017, allowing developers to create an account and custom-build a checklist based on the type of proposal and funding sources. This automated checklist shows their required documents, provides help text and links to templates, and lets them upload materials in an easy-to-use interface. Customers can view the status of submitted materials, filter documents and track approvals and timelines. Did we mention it's now 100% paperless?

Internal staff, external partners, and customers can now use the same system to review applications; use standardized workflow processes and automatic notifications; gain access to key performance indicators; collaborate and communicate; get information and answers more quickly; and reduce processing time from 24 to 18 months!

In our first Portal RFP, we accepted 55 applications and had 188 customer accounts. Frequent comments included the time savings, easy progress tracking, and the benefit of being paperless. Keys to our success included getting input from staff and customers early and often, having a dedicated and creative business team and technology team working together, and the support of leadership and access to sufficient resources. Since launch, we have solicited valuable feedback and continue to improve processes, reporting, and user experience. Increasing efficiencies with the Portal lets us devote more resources to our mission: providing a foundation for success for Minnesotans through affordable housing.

NexGen Mesonet Project, *Hennepin County IT Department*
Project Implementation: August 31, 2018

Hennepin County Emergency Management (HCEM) works before, during and after trouble strikes, to protect Hennepin County residents. Some of the dangerous conditions monitored include dam breakage, extreme heat, fires, flooding, hazardous materials spills, infectious disease outbreaks, thunderstorms, tornadoes and winter storms, acts of terrorism or other man-made disasters.

HCEM coordinates and maintains public and private disaster resources in the county and works with other emergency officials and volunteers to prepare for and respond to emergencies. The Hennepin West Mesonet is a regional effort made up of multiple partners from cities, neighboring counties, state and federal agencies and tribal government who contribute land, equipment, technical expertise and funding.

Designed by meteorologists on staff at HCEM, the purpose of the Hennepin West Mesonet is to provide emergency managers and incident commanders in east-central Minnesota with environmental information in near real-time to support their critical response decisions. The county's responsibility is to monitor for hazards and threats that could trigger a disaster and provide accurate warning for emergency responders and the public to take appropriate life-safety actions. HCEM uses a range of tools to monitor, detect, identify and asses hazards and threats to the county. The Mesonet is among the most important because of its speed, wide sensor spectrum and station density. It fills existing geographic and sensor data gaps while producing important new information in intuitive ways to aid rapid and accurate emergency decision-making.

The NexGen Mesonet project assembled a multi-disciplinary team to replace the original, aging Mesonet site. Some of the innovative technology improvements utilized include:
- 148 user-configurable GIS maps replacing static maps
- Data transmitted from the 76 sensor towers via serial radio, replacing cellular connections
- Azure cloud-based components
- Creating reusable patterns that can be leveraged in applications in the future
- Open data strategy providing multiple avenues of access allowing web sites to host data as well as third party entities to retrieve data relevant to their needs for research and analytics
- Provide tools allowing emergency management users to define rules for automated and manual alerts when conditions demand it
- Responsive design for use on mobile devices
- A secure administration module that allows named individuals to execute functions related to manually entered data, notification and map configurations
- Support for storage and retrieval of historical environmental data that can be used for analyzing past emergency events

The Hennepin West Mesonet can save lives, reduce injuries, help secure critical assets, protect property and limit environmental damage by delivering near real-time environmental data to those who prepare for and respond to hazards emergencies and events affecting our region.