The state of Montana offers the best of simple living: sprawling landscapes, natural wildlife and travel-worthy views. Yet behind the scenes, state administrators are driving continuous innovation for improved quality of life and citizen safety. For example, telemedicine was recently implemented for healthcare professionals to interact with patients in real-time across hard-to-reach areas.

Yet the state’s quality of emergency communications—the core of public safety—was severely out-of-date. “We had a bunch of legacy phone systems that needed to be replaced ASAP,” explained Voice Architect at the Montana State Information Technology Services Division (SITSD), Jeff Unger. The state was still relying on multi-line telephone systems (MLTS) to support over 10,000 phone lines and 20 PBXs. “Montana is known for simplicity, but that doesn’t mean our critical infrastructure should be lacking.”

This meant replacing the state’s legacy equipment—dating back to the 1980s—with a modernized, centralized communications system that could support the next-gen needs of end-users and citizens. At the same time, the state needed a more cost-efficient solution that could lower taxpayer funds.

Here’s how Avaya (partnered with 911 Secure) helped the state support E911, enhance customer service and save taxpayer money...
Any-choice Communications

Emergency responders need to keep up with today’s rapid pace of innovation to better serve the public. For the state of Montana, this meant smarter communications for improved team coordination and faster response time to emergency events. “Around 75 percent of 911 calls now come from cell phone networks,” Unger explained, “It’s about time responders had the same level of technology for protecting those callers and saving lives.”

The state needed what we call “any-choice” communications: anytime, anywhere over any device, application, browser or communication channel. “This is why we love Avaya IX™ Workplace,” said Unger.

Avaya IX Workplace—our next-gen collaboration solution as part of the Avaya Aura® platform—offers a true digital experience that allows for seamless, personalized communication and collaboration regardless of location, device, circumstance or user preference. This includes a full scope of UC support (phone, chat, SMS, video, screen-sharing) to drive the best business and citizen outcomes.

“The application goes on your mobile device and mirrors the environment of your desk phone. This way, when you get called out to go to a meeting, you can take that phone call with you. If you’re out in the field, you can take that phone call back to your desk and keep working. It saves a lot of time and money, and above all helps us better serve and protect.”

In addition to this was the ability to keep pace with evolving end-user preferences. “We knew we needed to move in this direction to engage younger generations, where things like mobile apps, texting and email are big,” said Unger. “This flexibility is also important for remote working. Instead of having a building full of people, you can have employees working out of their house or anywhere else answering calls all day long with the same reliability and security they would have on-site.”

Challenges

- Shift environment to modern, fully digital UC platform
- Protect UC infrastructure at primary and backup data centers
- Lack of remote access
- High ongoing costs of outdated 911 emergency infrastructure
- Establish seven-digit dialing
“Our existing products were a liability. It’s up to us to do what we know is best for our citizens, to protect and serve them the best way we know how. Avaya’s technology humanizes emergency response for us. At the end of the day, there’s a real person calling whose life could be on the line. It’s so much more than just providing ‘good service.’ Avaya’s solutions got us to that next level we needed for our citizens and end users.”

– Jeff Unger, Voice Architect, State of Montana

**Value Created**

- Significantly improved response time for emergency first responders
- Eliminated $168,000 in recurring annual costs for 911 infrastructure
- Savings of $50,000 per month in network costs
- Eliminated PSTN costs for dialing between State campus locations
- Time and cost savings from ability to remotely diagnose and repair issues

Most importantly is the ability to leverage Avaya’s location-based discovery mechanisms to pinpoint the exact location of a caller or device. The team witnessed this first-hand shortly after deploying Avaya Aura, coupled with 911 Secure’s Sentry E911 solution. One of Unger’s coworkers began having chest pains and dialed 911. “The emergency services showed up as they were supposed to, rapidly and to the correct building,” he explained. “Seeing the EMTs come through the right door was amazing—it worked.”

The Avaya Aura platform also provides support for our open application development tool, Avaya Breeze. This allows users to create custom communication workflows like automatic notifications to further enhance service. “We can now receive real-time omni-channel alerts to notify us of where a problem is or to keep personnel updated on the status of a situation,” said Unger. “It allows us to act faster and more intelligently.”

In the future, Unger says the state will prioritize video conferencing and screen-sharing for end users to further improve service, as well as more advanced data capabilities. “The ability to share and view data across users and applications is incredible. Someone in the field could look at real-time information shared from any person, device or location to make more informed decisions faster,” he explained. This data visibility would allow the state’s 10,000 employees across numerous emergency service locations to act as one with the right information delivered to the right person at the right time.

**The “Why” Behind Avaya**

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Solutions

- Avaya IX™ Workplace
- Avaya Diagnostic Server
- Avaya Session Border Controller
- 911 Secure Sentry e911 Emergency Location Management

“Besides the technology, we were able to improve uptime and remote trouble-shooting and successfully unify 13 separate dial plans into one with SIP trunking. We’re now saving over $50,000 a month on voice services, which will certainly mean taxpayer benefits. We also increased resiliency and reliability by centralizing the solution in a data center with backups at separate locations. You can’t ask for much more.”

In the case of emergency services, “experiences that matter” can mean the difference between life and death. Now, the state of Montana can rest assured it’s doing everything possible to serve and protect in today’s smart, digital world.

About the State of Montana State Information Technology Service Division (SITSD)

The mission of the State Information Technology Services Division is to provide shared IT services to support the needs of the state and citizens of Montana. SITSD has a vision of being an organization that focuses on customer service, innovation, technology that supports Montana citizens and businesses, technology that makes government more effective and efficient, security and data protection, and enterprise platforms that provide advanced and affordable technology for State and local government.

About Avaya

Businesses are built on the experiences they provide and every day millions of those experiences are built by Avaya (NYSE:AVYA). For over one hundred years, we’ve enabled organizations around the globe to win—by creating intelligent communications experiences for customers and employees. Avaya builds open, converged and innovative solutions to enhance and simplify communications and collaboration—in the cloud, on premise, or a hybrid of both. To grow your business, we’re committed to innovation, partnership, and a relentless focus on what’s next. We’re the technology company you trust to help you deliver Experiences that Matter. Visit us at www.avaya.com.