

Montana Statewide Public Safety Radio System Expansion

Introduction

Law enforcement, fire, EMS, and other agencies need to communicate over a radio system to execute their daily operations in responding to 911 calls from citizens. Without a reliable radio communications system, the ability for Public Safety to respond to a 911 call is significantly reduced. Reliable communication becomes even more critical during emergencies and mutual aid situations. The need for interoperability increases with large scale events or less common situations. The U.S. Department of Homeland Security has published guidelines and requirements for achieving interoperability.

Montana's current Statewide Radio System delivers the highest level of interoperability as defined by the Department of Homeland Security.

To facilitate interoperability, statewide networks enable local agencies to leverage existing statewide assets. States across the country have taken a leadership role deploying and managing these systems to enable the highest level of interoperability with local public safety agencies and the citizens they protect. This shared model improves State and Federal interoperability with local agencies and can reduce costs for all participating agencies. A lack of system coverage, cost or other reasons sometimes prohibit local agencies from the interoperability of a shared, statewide system.

Like many other states, Montana currently has a radio system that provides statewide interoperability for Federal, State and Local users.

Unlike other states, Montana's statewide system has grown out of initiatives led by local jurisdictions and the Montana Highway Patrol. As a result, there was no formal statewide coordination of this critical public safety asset. House Bill 604 (2017) provided the formal coordination for the statewide public safety radio system through the Department of Justice.

System Overview

Montana's Statewide Public Safety Radio system processes over 16M calls per year, a 60% increase from 2017 to 2020. The system consists of 5 main elements:

1. "Core" computer equipment that operates the network
2. Tower sites – 59+

Now 70 sites with one additional this month and two in planning.

3. Consoles for dispatchers – 11 sites across the state, with over 50 total console positions

Pondera County and Yellowstone County are in implementation, will bring the total to 13.

4. Radios for users – over 8000 State, Local & Federal.

Now over 10,000 radio users Tribal, Local, State and Federal.

5. Microwave backhaul network that connects all sites and dispatch consoles to the Core

Over the last 18 years, State and local agencies have invested over \$45M in the five elements of the system defined above. Beyond those items, investments in the steel towers, concrete equipment shelters, and other construction elements bring the total investment to over \$90M.

Funding from 2019 Legislative Session

The 2019 Legislature provided a funding stream of \$3.75M per year for 10 years (total of \$37.5M) to update and maintain the existing footprint of the Montana Statewide Public Safety Radio system. The expenditures to date are provided below:

2019 Phase 1 Total \$17.5M:

- LMR System Upgrade (Complete)
- LMR Lifecycle Plan Services 8-Year Term (\$7,697,165 Underway)

2020 Phase 1a \$7.9M:

- MPLS Backhaul Network (\$2.9M, Deployment Underway)
- Microwave backhaul (\$5M, Deployment Underway)

Ongoing Support Costs Per Year (\$860k)

Statewide Build Out

After completing a successful upgrade of the existing footprint of the Montana Statewide Public Safety Radio system, the next step is funding the necessary expansion of the Statewide System to provide coverage to the rest of the State of Montana. This will enable interoperability among local law enforcement, fire, EMS, hospitals and schools in areas where there is no statewide coverage today. The initial thought was to work with the Legislature to provide the necessary funding, but the ARPA monies received by the State provide a new funding opportunity.

(62) Site Expansion, MPLS SVCS & Critical Connect \$ 53M Adding sites to provide portable level coverage in strategic areas to enable local agencies to join the system.

- (62) Site Expansion to Montana Statewide Public Safety Radio System: **\$50.35M**
- MPLS Support Services (8 years): **\$2.2M**
- Additional (5) years of Critical Connect Subscription Services: **\$450k**

Justification for ARPA as a Funding Source

The COVID-19 pandemic presents unprecedented challenges in the State of Montana. As the virus continues to have impacts, first responders continue to assist residents in difficult and even life-threatening situations—while putting themselves at greater risk on a daily basis.

The dangers of this infectious disease are often invisible and complex. Unlike the emergencies caused by natural disasters such as floods, tornadoes and earthquakes, COVID-19 poses unique problems that are more difficult to understand and combat. As a result, public safety technology is a vital tool for protecting the health and safety of both residents and first responder personnel in this rapidly-changing environment.

To further assist in responding to these threats, the American Rescue Plan Act (Coronavirus Fiscal Recovery Fund) builds on the CARES Act and provides additional funding to States and local governments to use to **respond to the public health emergency and for the provision of government services**, among other eligible uses.

Section 602(c)(1)(C) of the Act provides states with broad latitude to use the Coronavirus Fiscal Recovery Funds for the provision of government services. The [Treasury Department Interim Final Rule](#) (p. 60) states that the category of government services includes, but is not limited to:

- Maintenance or pay-go funded building of infrastructure, including roads; modernization of cybersecurity, including hardware, software, and protection of critical infrastructure;
- Health services;
- Environmental remediation;
- School or educational services; and
- **The provision of police, fire, and other public safety services.**

As of June 24, 2021 Treasury updated their [ARP Act FAQ](#) adding a new FAQ 4.8 (page 19) **How can I use CSFRF/CLFRF funds to prevent and respond to crime, and support public safety in my community?** The answer states in part: “In communities where an increase in violence or increased difficulty in accessing or providing services to respond to or mitigate the effects of violence, is a result of the pandemic they may use funds to address that harm. This spending may include:

- **Investing in technology and equipment to allow law enforcement to more efficiently and effectively respond to the rise in gun violence resulting from the pandemic.”**

Further supporting the notion of public safety technology as “reasonably necessary to the functioning of government” is the fact that the [U.S. Department of Homeland Security previously issued CARES Act guidance](#) noting that “a critical component in delivering government services during any emergency, communications centers include public safety facilities at which 911 or other emergency communications lines are answered, calls are processed, and first responders are dispatched and managed.” It also recommends that communication centers be identified as essential functions.

Similarly, in a previously issued [letter to governors](#), DHS’s Cybersecurity and Infrastructure Security Agency and the Federal Communications Commission noted that “reliable communications service is an essential lifeline during emergencies” and asked them to declare “public safety communications infrastructure as essential to COVID-19 response efforts.”

For these reasons we urge Governor Gianforte and the Communications Advisory Commission to include the upgrade and continued build out of the statewide public safety communication system as a project to be funded utilizing the \$275,000,000 ARPA Coronavirus Fiscal Recovery Funds that have been allocated for communication projects.

Broadband

Investment in broadband infrastructure is also an eligible use for ARPA State Coronavirus Relief Fund money. Eligible investments in broadband are those that are designed to provide services meeting adequate speeds and are provided to unserved and underserved households and businesses.

State, local and tribal governments are encouraged to prioritize investments in fiber optic infrastructure “where feasible.” In Montana, because of the geography, topography, or excessive costs, it may not be feasible to deploy fiber optic or wired broadband service to communities statewide. In those instances, the Governor and Communications Advisory Commission should consider alternative wireless broadband networks that may be easier and more cost effective to deploy.

Other things to consider:

- Wireless broadband networks can provide affordable connectivity in areas where incumbent cable and cellular do not have last/mid mile connectivity.
- Wireless broadband networks allow for complete scale-out deployments in a phased approach. The network can expand from hundreds of devices/connections to tens of thousands of devices/connections.
- Wireless broadband networks will allow cities, counties and school districts to quickly deploy last mile connectivity to residential homes and businesses securely.
- Wireless broadband networks can be upgraded as technology evolves.
- Wireless broadband networks provide very strong security across all aspects of the network (Wireless & LAN).
- Wireless broadband networks offer flexibility in deployment to match available funding.

Like Statewide Public Safety Communications, Broadband should expand its services into these unserved and underserved communities. Although completely separate systems, the services could be collocated saving expense, while providing both public safety communications and broadband to the unserved and underserved communities.