



Mark Gordon
Governor

Wyoming Public Safety Communications Commission

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Mark Harshman, Chairman | Telephone: 307-777-4015



Darin J. Westby
Interim Director

Meeting Minutes

I. Call to Order

The Public Safety Communications Commission (PSCC) met via videoconference on Wednesday, February 8, 2023. Chairman Mark Harshman presided, calling the meeting to order at 1:30 p.m.

II. Roll Call

The following members were present constituting a quorum:

Paul Bertoglio, Commissioner	Dwane Pacheco, Commissioner
Matt Carr, Commissioner	Cindi Shank, Commissioner
Mike Choma, Commissioner	Owen St. Clair, Commissioner
Jonathan Downing, Commissioner	John Wetzel, Commissioner
Phillip Franklin, Commissioner	Forrest Williams, Commissioner
Monte McClain, Commissioner	Luke Reiner, Ex Officio

III. Introductions

The following attendees participated in the meeting:

Nathan Smolinski, Chief Technology Officer	Aimee Binning, 911 Planning Coordinator
Mark Kelly, Emergency Communications Manager	Bob DeRosa, Verizon, FrontLine
Neil Gardiner, WyoLink Support Manager	Kimberly Chapman, Commission Secretary

IV. Agenda Adjustments

No adjustments were made to the agenda.

V. Action Items

1. Draft Meeting Minutes

It was moved by Commissioner Bertoglio, seconded by Commissioner Franklin, and unanimously carried to approve the October 26, 2022, business meeting minutes.

2. WyoLink Applications

It was recommended by Mr. Gardiner, moved by Commissioner St. Clair, seconded by Commissioner Bertoglio, and unanimously carried to approve the applications from Carbon County Emergency Management, City of Cheyenne Public Works, Town of

Wright Emergency Management, South Lincoln Emergency Medical Services, and City of Gillette Utilities.

VI. Updates/Discussions

1. Director's Update

Director Reiner presented his update.

Recruitment and Retention Issues

Director Reiner reported a slight increase in agency staffing levels, which he believes is directly attributable to the Governor- and legislature-approved pay raises from July 2022. The Wyoming Department of Transportation (WYDOT) worked with the Human Resources Division (HRD) to make internal adjustments to salaries and wages for specific categories of employees. Those raises went into effect in December 2022.

Phase II of the Employee Compensation Plan, which provides a second round of pay raises to state employees, has been included in the Governor's supplemental budget. The supplemental budget has not been approved by the legislature, but Director Reiner feels confident that the raises will be included in the final budget.

WYDOT has adopted a number of innovative measures as part of its ongoing commitment to recruitment and retention. For example, the Wyoming Highway Patrol has shortened its academy for peace officers standards and training (POST) certified officers. Qualifying applicants will not have to repeat basic training—shortening training to four weeks.

WYDOT is collaborating with HRD to pilot retention initiatives. One of these new initiatives is the "immediate hire" program. This program allows the department to make an immediate employment offer, contingent upon the successful completion of a background check and reference checks. Expediting the hiring process ensures that the department loses fewer potential hires to other employers.

The Governor has instituted other measures to help state agencies recruit and retain employees, including increasing pay for workgroups with high vacancy rates and reducing the interval between a new hire's start date and first paycheck.

Legislative Updates

The Wyoming Legislature convened the 2023 General Session on Tuesday, January 10th. Director Reiner reported that 12 of the original 13 committee bills on transportation topics are still active. WYDOT will continue to provide support for these bills.

Director Reiner thanked all of the groups, agencies, and organizations that supported House Bill 0001, Amendment 10. The amendment allocates \$8.6 million from the General Fund to support and maintain the WyoLink system.

Response to Winter Storms

Despite the severe winter, WYDOT maintainers, troopers, and dispatchers have kept the roads open and the traveling public safe. The department's snow plan is still in effect. Equipment and personnel are moved around the state, as needed, to ensure

an adequate response to storms and minimize the duration of road closures. During a recent blizzard in Rawlins, eight extra snowplows and two extra rotaries were brought in from less-affected areas to clear the snow and reopen highways.

Director Reiner reported that traffic fatalities are at a record high year-to-date. Sixteen people have died in accidents on Wyoming roads since January 1st. If fatalities continue at the same rate, then 2023 will be the deadliest recorded year on Wyoming highways.

National Electric Vehicle Infrastructure (NEVI) Plan

Director Reiner reported that WYDOT will soon release the request for proposals (RFP) for Phase I of the NEVI project. WYDOT will solicit bids for the construction and installation of the first seven electric charging stations.

Employee Safety

Director Reiner announced that WYDOT's injury and accident rate decreased for the third consecutive year. The number of Occupational Health and Safety Administration (OSHA) recordables decreased by 13 percent from 2020. The number of OSHA "days away"—work time missed due to accidents and injuries—decreased by 50 percent during the same period. District safety representatives have been placed in all five WYDOT districts.

Director Reiner thanked Ms. Binning for leading an employee-led safety committee.

Following a question from Commissioner St. Clair, Director Reiner shared that WYDOT uses a sand and salt (90 percent sand and 10 percent salt) mixture to treat roadways. The department chose this mix because conditions in Wyoming—temperature, wind, and precipitation—affect salt's effectiveness. Ms. Chapman will send out more information on this topic to the commission.

2. Chief Technology Officer's Report

Mr. Smolinski presented his update, with additional information provided by Ms. Binning.

General Updates

Mr. Smolinski reported that Information Technology Services and Geographic Information System (ITS/GIS) program, which oversees the Transportation Management Center, reported 2.2 billion hits on the Wyoming Travel Information Service website (<https://wyoroad.info>) during 2022. That is a tremendous amount of activity given Wyoming's total population. Mr. Smolinski reminded the commission of the Wyoming 511 mobile application, which allows users to access the same data.

Legislative Updates

Mr. Smolinski updated the commission on two pieces of legislation regarding WyoLink. House Bill 46 (HB0046) would have established a trust fund for WyoLink, but it died in committee. Senate File 22 (SF0022) sought to appropriate \$8.6 million from the general fund, but it failed in two separate votes on the Senate floor. Following the failure of SF0022, sponsors and legislators created an amendment to the general government appropriations bill with the same provisions as SF0022 to be included in both the House's and Senate's bill. The amendment passed both legislative bodies

and is included in the final appropriations bill that will be sent to the Governor for his approval.

Mr. Smolinski thanked the Wyoming County Commissioners Association for sponsoring and championing the WyoLink funding bills.

Wyoming Association of Sheriffs and Chiefs of Police (WASCOP) Meeting

Mr. Smolinski, Ms. Binning, and Mr. Kelly attended the WASCOP Legislative Meeting on February 7th to discuss 911 funding and potential interim topics. The meeting generated good discussion, and follow-up meetings between stakeholders and WASCOP will be scheduled.

Next Generation 911 (NG911) Updates

Ms. Binning reported that most recent State NG911 plan identified several tasks that require completion. The GIS Workgroup is creating a data model and drafting best practices. The group hopes to release the draft models for review by the end of May or beginning of June 2023.

The Technology Workgroup has provided input on the NG911 2023 Survey for public safety answering points (PSAPs). The survey will be sent out on March 1, 2023, and will assess the technological capabilities of Wyoming PSAPs.

Data from previous surveys show that Wyoming has a \$3 million deficit in 911 fees collected and expended. For 2020-2021, surveys showed that a little over \$3 million in fees was collected. It is unknown how much of the shortfall is because of technological upgrades.

A previous survey revealed that 20 out of 33 Wyoming PSAPs are ready for the integration of NG911 equipment into computer-aided dispatch systems and phone systems.

Ms. Binning invited Commissioner McClain, the chairman of the Wyoming chapter of the Association of Public Safety Communications Officials and National Emergency Number Association, to report on Phase I and Phase II of the Federal Communications Commission's (FCC) Enhanced 911 (E911) requirements.

Phase 1: In this phase, landline calls generated a summary of the caller's information, which were visible to the 911 operator. It includes the caller's name, home address, and a list of agencies with jurisdiction over the call. Cellular calls generated a mobile number and the cell tower the call was routed through, but not the exact location of the caller.

Phase II: Advancements in technology allowed a cellular caller's location to be determined via triangulation or by the use of a GPS chip in the phone. The triangulation method did not work as well in Wyoming given the significant amount of rural areas without adequate cell coverage or towers to provide accurate triangulation. Triangulation was phased out in 2012 when the FCC required GPS chips in all devices capable of calling 911.

Phase II required cellular calls to generate a caller's mobile number, the cellular tower that received the call, and the exact GPS coordinates of the

caller with a potential error radius of up to a few thousand meters. To reduce this radius, Wyoming uses a third-party application called Rapid SOS. The application aggregates 911 coordinates by comparing and verifying the GPS coordinate received at the PSAP against applications running on the phone that utilize GPS. Rapid SOS pinpoints a caller's precise location within a two meter error radius.

The FCC mandated location-based information be conveyed with 911 calls. In theory, calls should be routed to a PSAP based on the phone's GPS coordinates instead of the cell tower that received the call. Commissioner McClain reported that this does not always work in Wyoming, so calls are still being routed to neighboring states.

Another FCC mandate requires telecommunications companies to provide Z-axis information, which is the vertical location of a wireless caller, to 911 operators. While this feature has more value in big cities with high-rise buildings, it can be useful information for Wyoming calls since it provides the altitude of a caller. Most Wyoming PSAPs are receiving this information from Rapid SOS.

Ms. Binning shared that a recent survey of Wyoming PSAPs uncovered a need to expand Phase II capabilities. The survey sought to determine what Phase I and II capabilities wireless companies were able to provide to the PSAPs. A total of 6,133 calls were received by the seven reporting counties, and the largest wireless carrier was only able to provide Phase II capability for 67 percent of the calls. The best provider was able to exceed 90 percent, and a local provider was only able to provide 11 percent Phase II capability on calls received.

Following a question from Commissioner Pacheco, Ms. Binning explained that each county receives fees of 75 cents per wireless line and 1.5 percent for prepaid service to support 911 services. The fees are collected by the telecommunications companies and sent directly to the counties. A \$3.3 million deficit was reported in 2021 and 2022.

Following a question from Commissioner Choma, Commissioner McClain shared that the FCC is the only agency that can motivate the telecommunications companies to meet the E911 requirements and mandates. Wyoming's only recourse is passing legislation that obligates telecommunications companies to follow the FCC requirements. Commissioner McClain reported that FirstNet phones are consistently delivering Phase II capability on 911 calls.

3. Emergency Communications Program Manager's Report

Mr. Smolinski provided an update on the Emergency Communications Program. The update also included information presented by Mr. Gardiner regarding WyoLink operations.

Mr. Smolinski introduced the new Emergency Communications Program Manager, Mark Kelly. Mr. Kelly has been in the emergency communications industry for 30 years, with 16 of those years with WYDOT. He looks forward to working with the commission and the department staff.

Mr. Kelly reported that Mr. Gardiner was able to fill three key roles in the WyoLink and microwave programs. The timing of the hires is optimal as the new employees will train on the upgraded equipment the department will soon be deploying. Ms. Binning is going to make an offer to an applicant on the Laramie position, and, once it is filled, only two vacancies will remain.

The program has recently received a large quantity of subscriber radios, which are being installed in maintenance vehicles and Wyoming Highway Patrol vehicles. One of Mr. Kelly's goals is to ensure WyoLink has all of the necessary resources and equipment to fulfill its mission.

16 Tower Buildout Report

Mr. Smolinski reported that activity has slowed down or stopped completely at the WyoLink sites since winter began. Construction is mostly complete at the Northern Goshen County site, but the backhaul/fiber connection has not been installed, because the provider is behind schedule. In the meantime, a wireless connection has been established, so the site can be brought online and tested before going live. Mr. Smolinski is hopeful that fiber will be installed this summer and establish a hard connection for the site. A fiber connection was used because there is no line of sight for microwave at this location.

The shelter has been installed at the Newcastle site, but work has been paused while the team awaits delivery and installation of equipment. This a colocate with Union Wireless and WyoLink equipment will be positioned on Union's tower.

The Evanston site was taken offline because there was a problem with the backhaul connection, and it was site trunking, which means the site is no longer part of the network. The site was still operational, but subscribers in the area could only talk to each other. Mr. Gardiner and his team took the site offline and made necessary repairs. It is now in testing mode. The team is researching fiber as a potential hardline connection for this site. Mr. Gardiner has identified several other "difficult" locations around the state that would benefit from a fiber-optic connection, and he is discussing the feasibility of installing fiber connections with Enterprise Technology Services (ETS) and providers.

Construction is almost complete at the Northern Big Horn County/Little Sheep Mountain site, but some equipment still needs to be installed. TCT West will provide fiber to the site. Mr. Smolinski believes that the tower will be operational before the microwave backhaul is completely installed.

All leases and agreements have been executed for the Bondurant site, but construction will not begin until May or June, when the weather permits.

WyoLink Operational Updates

WyoLink System Reports

Mr. Gardiner shared WyoLink usage data from the fourth quarter (Q4) of 2022. There was an average of about 1.5 million push-to-talks and 130,000 minutes of airtime for the quarter.

The top 20 talkgroups for Q4 were mainly law enforcement agencies.

WyoLink System Upgrades

Mr. Gardiner reported the GTR upgrade process has been stalled by the severe winter. No sites have been upgraded since September 2022.

The Genesis system, which is the program used to generate the usage history and numbers on the radio sites, was upgraded. The upgrade will allow the team to access more user-friendly information.

The WyoLink office is busy training district technicians to tune and program the new WYDOT and Wyoming Highway Patrol radios. Mr. Gardiner and his team are working to distribute the hundreds of radios received to troopers and maintenance crews as soon as possible. Around 200 radios were sent to and successfully installed in WYDOT Districts 4 and 5. The WHP will field test three new radios with vehicular repeaters. Upon successful completion of the tests, radios will be installed in WHP vehicles in Districts 3 and 5.

Mr. Gardiner reported that the program was able to address some of the staffing issues with recent hires. A few vacancies were filled internally with employee promotions and two new people were hired to fill those vacancies. One of the new hires will start the week of February 12th and the other will begin March 1st.

Statewide Interoperability Coordination Updates

Update on American Rescue Plan Act (ARPA) Local Funding Initiative

Mr. Smolinski updated the commission on the \$35 million in ARPA funds WYDOT received for system upgrades. Some of the funds were used by Mr. Gardiner and his team to upgrade WyoLink radios and equipment and the microwave network. Another portion of the funds will be used to build two additional WyoLink sites: one in northern Sheridan County and another in southern Carbon County. WYDOT is working to establish contracts on the two sites.

The remaining \$4.5 million is to be granted to local agencies to purchase new or upgraded equipment. Beginning in summer 2022, Mr. Smolinski established a granting process similar to the Wyoming Office of Homeland Security's (WOHS) State Homeland Security Grant Program. With the assistance of the WOHS's Senior Advisory Committee, WYDOT reviewed 119 requests—totaling about \$19 million—and made final funding decisions in January 2023. Notification letters will be sent next week.

Approved recipients will work with WYDOT to get new quotes based on their total award and place orders for WyoLink compatible equipment. Delivery will be made directly to the receiving agency, and, once the agency has confirmed receipt, WYDOT will pay the invoice.

Commissioner Shank acknowledged the huge amount of time and effort staff put into this program, and thanked WYDOT and the committee members for their hard work. Chairman Harshman also offered his thanks and appreciation.

PSCC Work Groups

Mr. Smolinski proposed that the commission institute two work groups to discuss public safety communications topics and make recommendations for commission

consideration/adoption. The work groups would be comprised of stakeholders from across Wyoming with subject matter expertise who could offer advice on best practices, potential rules and regulations, and next steps for WyoLink and NG911. A few WyoLink subscribers specifically requested work groups as a way to involve more people in the conversations around Critical Connect and merging WyoLink with LTE technology. Mr. Smolinski believes that these work groups would allow WYDOT to educate and motivate users to advocate for WyoLink.

The NG911 work group would expand upon Ms. Binning's existing efforts and provide the 911 community a conduit to the PSCC. An NG911 work group would be able to assist the commission with legislatively-mandated action items (federal or state).

Mr. Smolinski requested the commission's approval to create draft work group charters for WyoLink and NG911. He will present the drafts to the commission at the May meeting for review and approval. Commissioner Pacheco believes that this request for more stakeholder involvement, particularly in WyoLink, represents a great improvement in public perception of the system and the commission. Commissioner McClain shared that because of his previous service on a number of 911 work groups, he believes that the benefits of these groups is incalculable and can lead to greater buy-in from stakeholders, even those not involved in the work group.

It was moved by Commissioner Downing, seconded by Commissioner Pacheco, and unanimously carried to form stakeholder-driven work groups for WyoLink and NG911.

FirstNet/Front Line Updates

Mr. Smolinski reported that FirstNet subscriptions continue to rise. When Wyoming initially joined FirstNet, it was understood that AT&T would build additional towers to support the network and the new towers would be completed and operational by March 2023. AT&T was unable to make the deadline as a few of the selected sites were unsuitable due to the terrain and weather conditions. Instead, AT&T will provide two compact rapid deployables (CRD) in the areas where the company was unable to complete tower builds. Each CRD has a cellular range up to two miles and can be deployed in remote areas to expand coverage. The units can also be used to extend capacity during major events like governor inaugurations, festivals, emergency situations, and more. Mr. Smolinski reiterated that the CRDs will be provided at no charge to the state and should be delivered soon, perhaps as early as this week.

Following a question from Chairman Harshman, Mr. Smolinski confirmed that one CRD will be positioned in Cheyenne, and that WYDOT will work with WOHS to identify a suitable location for the second unit. It will be positioned in another area of the state, but it will have to be an area where there is appropriate personnel in place to maintain and operate the CRD.

Verizon Frontline Presentation

Mr. Smolinski introduced Bob DeRosa, a solutions executive with Verizon's Public Safety Group, to present on Verizon Frontline. Mr. DeRosa shared that Verizon's program is not intended to replace existing systems. Rather, it can be integrated into successful systems and used as an administrative tool. He shared that he can serve

as a resource to Wyoming and he is interested in being involved in ongoing conversations on public safety communications issues.

Mr. DeRosa began by providing an update on the Wyoming network. Verizon has turned up 48 sites throughout Wyoming since 2019. Verizon's key focus is on improving coverage along US and state highways and in towns with higher populations.

Mr. DeRosa updated the commission on network enhancements made for Frontline 4G LTE. Verizon started by establishing a dedicated public safety core in the mid-2010s. Priority preemption ("always on") for voice and data was set up between 2017 and 2018. Verizon recently released a web portal tool that will provide greater transparency on wireless network performance by providing key statistics, including site locations, network parameters, site operational status, and network performance on connected devices.

Verizon is currently focused on network "hardening"—identifying and mitigating network vulnerabilities—to improve reliability. Mr. DeRosa reported that the company has spent the last few years developing and creating key resiliency measures and assets that can assist customers during emergency situations.

Another major initiative that Mr. DeRosa is working on is mission-critical push-to-talk (MCPTT), which is a standard that requires push to talk (PTT) over LTE networks to mirror the voice communications services provided by land mobile radios (LMR). Verizon ensures network integration and improved interoperability through the use of radio over internet protocols (ROIP), console subsystem interface (CSSI), inter-RF subsystem interface (ISSI), and Motorola's Critical Connect application. Verizon offers the Enterprise Contact Management tool to give administrators control over an end user's PTT device.

Mr. DeRosa reported that MCPTT was explicitly designed to meet the public safety community's mission-critical voice communication requirements. It offers low latency, high-quality audio, security and encryption, support for one-on-one and group calling, broadcast calling, emergency alerts, and caller identification.

The PTT features allow for greater augmentation of interoperable communication within organizations and systems. Affordable plans can be added to existing mobile devices and save organizations from purchasing additional P25 radios. Mr. DeRosa highlighted a few of the PTT features including area-based talkgroups, urgent calling (preemption for PTT calls), and streaming video. MCPTT plans can be added to 25-30 different mobile devices.

Mr. DeRosa spoke about some of Verizon's recent enhancements to MCPTT and PTT. Group sharing will allow talkgroups to be created and shared between multiple PTT accounts. Verizon also offers end-to-end encryption for PTT calls. Mr. DeRosa reported that Verizon is also beta testing new, in-vehicle MCPTT devices.

Mr. DeRosa concluded his presentation by reviewing some of the key benefits of Verizon Frontline's LTE/LMR augmentation, including low cost of ownership, leadership adoption and administration options, LMR channel redundancy, and

extended statewide and nationwide coverage. He also offered to provide demonstration kits, which include four MCPTT devices enabled with video streaming and a limited number of shared groups and contacts, to any Verizon account holder in Wyoming's public safety communications community.

Chairman Harshman thanked Mr. DeRosa for his presentation and invited him to present again at a future PSCC education session.

VII. Public Comment/Announcements

The commission was consulted on locations for the two in-person meetings in 2023. Upon recommendation from staff, the October meeting will be held in Cheyenne. The commission decided to hold the next meeting in Rock Springs on May 2-3, 2023.

There was no public comment.

VIII. Adjournment

It was moved by Commissioner Downing, seconded by Commissioner Pacheco, and unanimously carried to adjourn the February 8, 2023, business meeting at 3:14 p.m.