

# ***Wyoming Public Safety Communications Commission Business Meeting Packet***



**Videoconference Business Meeting**  
**Held Wednesday, October 25, 2023**





Mark Gordon  
Governor

# Wyoming Public Safety Communications Commission

5300 Bishop Boulevard, Cheyenne, Wyoming 82009-3340  
Mark Harshman, Chairman | Telephone: 307-777-4015



Darin J. Westby, P.E.  
Director

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Director

## Tentative Itinerary

Tentative Schedule of Events		
Event Timeline:	Event Description:	Event Location:
Tuesday, October 24, 2023 <i>Attire: Business Casual</i>		
Various – 12:45 P.M.	Fly/travel to Cheyenne	
1:00 P.M. – 2:00 P.M.	Lunch	WYDOT HQ – Training Building 5300 Bishop Blvd. Cheyenne, WY 82009
2:00 P.M. – 5:00 P.M.	Education Session	
5:00 P.M. – 6:15 P.M.	Hotel Check-In & Time on Your Own <i>Group will meet in hotel lobby to head to dinner at 6:15 P.M.</i>	Little America 2800 W. Lincolnway Cheyenne, WY 82009
6:30 P.M. – 8:00 P.M.	Commission & WYDOT Staff Dinner	Wyoming Rib & Chop House 400 W. Lincolnway Cheyenne, WY 82001
Wednesday, October 25, 2023 <i>Attire: Business Dress</i>		
7:30 A.M. – 8:30 A.M.	Breakfast & Hotel Check-out <i>Depart hotel by 8:45 A.M. to drive to meeting location.</i>	Hathaway's Restaurant 400 W. Lincolnway Cheyenne, WY 82001 <i>Reservation Name: Wyoming PSCC</i>
9:00 A.M. – 11:00 A.M.	Business Meeting	WYDOT HQ – Training Building 5300 Bishop Blvd. Cheyenne, WY 82009
11:30 A.M. – 12:30 P.M.	Commission Lunch	
12:30 P.M.	Depart for Home or Back to Hotel	



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# Wyoming Public Safety Communications Commission

5300 Bishop Boulevard, Cheyenne, Wyoming 82009-3340  
Mark Harshman, Chairman | Telephone: 307-777-4015



Darin J. Westby  
Interim Director

## Agenda

Wednesday, October 25, 2023 at 9:00 a.m.

- I. CALL TO ORDER
- II. PLEDGE OF ALLEGIANCE
- III. ROLL CALL
- IV. INTRODUCTIONS
- V. CHANGES/ADDITIONS TO AGENDA (*Tab 1*)
- VI. ACTION ITEMS
  1. Consideration of August 9, 2023, Draft Meeting Minutes (*Tab 2*)
  2. Consideration of WyoLink Applications (*Tab 3*) – Mr. Gardiner
    - A. Wind River Transit Authority
    - B. Pennington County, South Dakota
    - C. Sheridan Area Search and Rescue
- VII. UPDATES/DISCUSSION
  1. Director’s Report – Director Westby
  2. Chief Technology Officer’s Report – Mr. Smolinski
    - A. NG911 Updates (*Tab 4*)
    - B. WyoLink Funding/ARPA
  3. Emergency Communications Program Report – Mr. Kelly
    - A. 16-Tower Buildout Report (*Tab 5*) – Mr. Smolinski
    - B. WyoLink Operational Updates – Mr. Gardiner
      - i. WyoLink System Reports (*Tab 6*) – Mr. Gardiner
      - ii. WyoLink System Upgrades – Mr. Gardiner
    - C. Statewide Interoperability Coordination Updates – Mr. Kelly and Mr. Smolinski
      - i. SCIP Update (*Tab 7*)
      - ii. PSCC Working Groups Update (*Tab 8*)

iii. Government Emergency Telecommunications Service (GETS)/Wireless Priority Service (WPS)/Telecommunications Service Priority (TSP) Update (*Tab 9*)

D. Commercial Emergency Communication Services Update – Mr. Kelly and Mr. Smolinski

i. FirstNet in Wyoming 5-year Program Update – Tracey Murdoch and Garrett Doyle

**VIII. ANNOUNCEMENTS**

1. 2024 Meeting Schedule (*Tab 10*)

**IX. PUBLIC COMMENT**

**X. ADJOURNMENT**



Mark Gordon  
Governor

# Wyoming Public Safety Communications Commission

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



Darin J. Westby  
Interim Director

## Draft Meeting Minutes

### I. Call to Order

The Public Safety Communications Commission (PSCC) met via videoconference on Wednesday, August 9, 2023. Chairman Mark Harshman presided, calling the meeting to order at 1:31 p.m.

### II. Roll Call

The following members were present constituting a quorum:

Paul Bertoglio, Commissioner	Dwane Pacheco, Secretary
Matt Carr, Commissioner	Cindi Shank, Commissioner
Karl Germain, Commissioner	Owen St. Clair, Commissioner
Phillip Franklin, Commissioner	Matt Waldock, Commissioner
Mark Harshman, Chairman	John Wetzel, Commissioner
Monte McClain, Vice Chairman	Darin Westby, Ex Officio

Commissioner Mike Choma was absent.

### III. Introductions

The following attendees participated in the meeting:

Nathan Smolinski, Chief Technology Officer	Aimee Binning, 911 Planning Coordinator
Mark Kelly, Emergency Communications Manager	Destry Dearden, Lincoln County, Director of Information Technology (IT) and Geographic Information System (GIS)
Neil Gardiner, WyoLink Support Manager	Kimberly Chapman, Commission Secretary

*Susan Elliott assisted with virtual meeting management.*

### IV. Agenda Adjustments

There were no adjustments to the agenda.

### V. Action Items

#### 1. Draft Meeting Minutes

It was moved by Vice Chairman McClain, seconded by Commissioner Franklin, and unanimously carried to approve the May 3, 2023, business meeting minutes; the May

2, 2023, education session minutes; the May 8, 2023, special meeting minutes; and the June 23, 2023, special meeting minutes.

2. WyoLink Application

It was recommended by Mr. Gardiner, moved by Commissioner Shank, seconded by Vice Chairman McClain, and unanimously carried to approve the application from the Federal Reserve.

Following a question from Chairman Harshman, Mr. Gardiner reported that the Federal Reserve will be allowed to access a talkgroup assigned to Teton County.

**VI. Updates/Discussions**

1. Director's Update

Interim Director Westby presented his update.

WYDOT Operating Budget

Interim Director Westby reported that the department is working to finalize its budget for the next fiscal year. He hopes that work will be complete next week. The budget will be reviewed and approved by the Transportation Commission in September.

Joint Transportation, Highways, and Military Affairs Committee (JTC) Meeting

WYDOT leadership is preparing for the upcoming JTC meeting on August 31 in Douglas. The department is preparing materials to submit for the committee packet. The department is also awaiting publication of the committee's draft bills. Once the bills are released, WYDOT leadership will review them and formulate a response.

Governor's Transportation Policy Advisor

Sara DiRienzo is Governor Gordon's new policy advisor on transportation, wildlife, and gaming, and she is the governor's liaison to WYDOT. Ms. DiRienzo has been in the role for two weeks but is quickly becoming acquainted with WYDOT operations.

WYDOT Director Search

Interim Director Westby updated the commission on the search for a permanent agency director. Interviews were held a few weeks ago, and the Transportation Commission submitted a short list of three candidates to Governor Gordon for consideration. The governor is expected to make an announcement soon.

2. Chief Technology Officer's Report

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

Meeting with Governor's WYDOT Liaison

Mr. Smolinski reported that he and Interim Director Westby will meet with Ms. DiRienzo on Friday, August 12, to provide a brief overview of WyoLink and updates on 911. He will discuss the commission and its operation with her, as well as share some of the main issues his programs are currently addressing.



Wyoming Next Generation 9-1-1 (NG9-1-1) PSCC Update Presentation

Mr. Smolinski, Ms. Binning, and Mr. Dearden updated the commission on the activities-to-date of the NG9-1-1 Technology and Geographic Information Systems GIS workgroups.

Mr. Smolinski reported that the team met with NG9-1-1 stakeholders on July 20, 2023, to provide an update on NG9-1-1 workgroup activities. He shared that various local and state agencies participated in these workgroups, and the collaboration has been vital to bringing NG9-1-1 to Wyoming.

The presentation to the stakeholders included information from the 911 Fees Report, which contained data from surveys conducted in 2019, 2021, and 2022. The information was provided by Wyoming public safety answering points (PSAP). Mr. Smolinski thanked the PSAPs for their participation and Ms. Binning for her dedication to collecting and compiling the information.

Mr. Smolinski highlighted a few pieces of data. Survey results from 2022 shows that 87 percent of all 9-1-1 calls were placed on cell phones, which is a fairly substantial change from previous years. He also emphasized that 9-1-1 services statewide are operating on a \$3 million deficit. The total expenditures reported for 9-1-1 service was \$10,657,850.59, while the total revenues collected to fund emergency call services was \$7,092,600.95.

Mr. Smolinski explained that 9-1-1 funding comes from two primary sources in Wyoming. 9-1-1 fees—up to \$0.75 per connection—are collected by the counties directly from the telephone or internet providers. The prepaid fees—1.5 percent on every retail sale of prepaid wireless access—are collected and sent to the Department of Revenue, which then remits the bulk of the fees to the counties.

Ms. Binning provided an update on the work of the NG9-1-1 Technology Workgroup on behalf of Rick Hawkins, director of the Sweetwater County Combined Communications Center and workgroup chair. The committee's five goals derived from the State of Wyoming NG9-1-1 Plan.

1. Identify emergency services IP network (ESI-Net) requirements;
2. Collect data from neighboring states;
3. Hold discussions with local vendors;
4. Develop a strategy for PSAP connectivity and domain-based message authentication, reporting, and compliance (DMARC); and
5. Complete an inventory of Wyoming PSAPs and request information on systems that play a critical role in implementing NG9-1-1—GIS, computer-aided dispatch (CAD), phone system, phone trunk, and recording system.

The PSAP inventory was completed using data from the annual 9-1-1 fee survey. The committee reviewed data primarily from 2022, but also preceding years' surveys. The data allowed the workgroup to build a concept of operations for NG9-1-1 and brainstorm potential funding and legislative solutions that will better serve Wyoming communities.



To better understand how the funding deficit impacts a PSAP's ability to implement NG9-1-1, the survey asked how many equipment positions exist in primary PSAPs and how many of those positions are funded with 9-1-1 fees. The results showed that only three of the PSAPs have use 100 percent of 9-1-1 monies to fund equipment positions. Most funds are spent on the equipment and resources that connect the PSAP to the selective router.

The survey asked PSAPs to specify how positions are funded. Of the 32 PSAPs that responded, there are a reported 238 telecommunicators employed fulltime and 54 with part-time employment. Of the 238 full-time employees, 190 of those positions were not funded by 9-1-1 fees.

Telecommunicators answer emergency and non-emergency calls through 9-1-1 technology or non-emergency lines. The data collected from the PSAPs shows that 314,105 of the calls received were 9-1-1 calls. Of that total, 185,325 were wireless calls, 114,263 were wireline calls, 13,560 were voice over internet protocol (VOIP), and 957 contacted the PSAP via text.

The workgroup reviewed survey results from 2021 and 2022 to determine growth in a community's capability to implement NG9-1-1. For GIS services, the workgroup noted a 10 percent increase (36 percent to 46) in reported capability for NG9-1-1. This is significant, because the survey asked for respondents' ability to comply with the National Emergency Number Association (NENA) *i3 Standard for Next Generation 9-1-1*. Ms. Binning shared that GIS is the hardest component in NG9-1-1 readiness because of the abundance of local partners providing data to the PSAPs.

The next category assessed was the CAD system, which helps telecommunicators prioritize and route 9-1-1 calls. According to the 2022 survey, 71.9 percent of the PSAPs are already capable or will be NG9-1-1 capable by the end of the year. Another critical component of NG9-1-1 readiness is the phone systems. A comparison of the 2021 and 2022 survey data showed that while over 70 percent of the PSAPS will have NG9-1-1 ready phone systems by the end of 2023, more PSAPs were unsure when they would be NG9-1-1 ready.

When asked about NG9-1-1 readiness in regards to recording services, there was a small decrease in the PSAPS that thought they were ready or would soon be ready to meet NG9-1-1 standards. There was a similar decrease in reported capability to bring phone trunks into compliance with NENA i3 standards. While more communities were self-reporting complete NG9-1-1 readiness in both categories, more were uncertain when they would achieve the necessary capabilities.

The survey obtained information on the call handling solutions used by Wyoming PSAPs and dispatch centers. This was included in the survey, because other states found it helpful to group PSAPs into regional hubs by call handling solution used when joining ESI-Net. The majority of Wyoming PSAPs are using Callworks, several are using Viper, and the rest are using Vesta, Meridian Phone, or WestTel International.

The 2022 survey found that the majority of PSAPs are using the Spillman CAD system, several are using the RIMS CAD, and a few are using EFORCE and Tyler systems.

Survey participants gave opinions on topics related to NG9-1-1 development. The responses helped the workgroup determine agency preference on how the system is funded and maintained. The majority of PSAPs would like to select their own vendors and services and keep call answering equipment, call logging, and call recording under local control. Most of the PSAPs preferred to have a local point of interconnection once an ESI-Net is developed, but there was not a definitive opinion on demarcation of the state contract of vendor responsibility.

When asked if the PSAPs would be willing to give up a percentage of their 9-1-1 fees to fund NG9-1-1, eight of the PSAPs said no. Sixteen said yes, but only if there was a corresponding increase in the surcharge. One PSAP was willing to give between 5 to 10 percent of the current 9-1-1 fees collected, and seven did not respond.

Mr. Dearden, chair of the GIS Workgroup, presented on the activities of the GIS Workgroup. He shared that GIS is the cornerstone of NG9-1-1 as GIS data is foundational to successful emergency call processing and routing. This was the guiding principle for the workgroup.

The workgroup was comprised of a diverse array of individuals, representing the many agencies and entities that handle and produce GIS data. There was representation from the Wyoming Geospatial Organization (WYGEO), the Wyoming GIS Advisory Board, various county and city departments, consultants, telecommunicators, and the Wyoming Geographic Information Science Center. Several groups also helped review the proposed GIS Data Model including the WYGEO board, Datamark, local GIS professionals, the Wyoming Association of Public Safety Communications Officers, and others.

Mr. Dearden reported that Wyoming Enterprise Technology Services (ETS) is required to submit a geospatial maturity assessment (GMA) annually to the federal government. Reports from the last seven years show the progression of state-level action on NG9-1-1—from no involvement in 2017 to the creation of a Wyoming NG9-1-1 GIS Data Model in 2023. Mr. Dearden stated that it was the formation of new relationships, and the resulting collaborations, that allowed for the creation of statewide GIS standards.

The goal of the Wyoming NG9-1-1 GIS Data Model is to produce reliable, statewide GIS data that is harvested from standardized local datasets. The GIS Workgroup used the Kansas NG9-1-1 GIS Data Model v2.1 as a template for Wyoming's data model. The workgroup modified the Kansas model to make it more applicable to Wyoming. Dataset attributes were adjusted to align more closely to NENA standards. The workgroup also modified Kansas' geodatabase attribute domain document and included it in Wyoming's model.

Mr. Dearden stated that to be compliant with NENA standards, the workgroup had to include all potential attributes—which are unique identifiers—for geographic features. The workgroup incorporated images and examples into the data model to counteract the extreme technicality and complexity of the attributes.

The workgroup outlined the several datasets that may be necessary to use the GIS data model. The required datasets include roads, addresses, PSAP boundaries,

sheriff/police/emergency medical services/fire department boundaries, county boundaries, and so on. The datasets that are strongly recommended include the road alias table, city limit boundaries, and other emergency services boundaries. Supplemental databases can be added on to the data model to make it more accessible and useful to dispatchers and telecommunicators.

The workgroup has spent the past month revising and editing the GIS data model based on the comments provided by initial reviewers, but the model will need additional revisions and changes as the data is aggregated at the state level and uploaded to an online portal. Occasional updates from local partners will also be required.

Mr. Dearden outlined state-level benefits and challenges of adopting the data model. The benefits include statewide NG9-1-1 readiness; a portal to house statewide, fully aggregated datasets; increased continuity with emergency response across state lines; and an improved score for Wyoming's GMA. There are two significant state-level challenges: funding and buy-in from local partners.

He also detailed local-level benefits and challenges of using the model. The benefits include NG9-1-1 readiness, standardized datasets that can be more easily used across county lines, greater continuity with emergency response across PSAP and county lines, and access to statewide datasets in the online portal.

Mr. Dearden shared several local-level challenges. One of the most significant hurdles for local entities will be aligning local datasets with statewide standards. Mr. Dearden believes that it will take a great deal of creativity, coordination, and communication between towns and counties to standardize the datasets. Local entities use a variety of database and GIS platforms to store and organize data, and this could create challenges in achieving greater data uniformity. A final challenge is that some counties contract GIS services to a third party, and those contracts may not require adherence to NG9-1-1 standards.

#### Adoption of the NG9-1-1 GIS Data Model

Mr. Dearden requested that the commission move to adopt the Wyoming NG9-1-1 GIS Data Model.

Vice Chairman McClain, Commissioner Pacheco, and Chairman Harshman thanked the workgroups for their commitment and effort to ensure Wyoming's NG9-1-1 readiness.

Action: It was recommended by Ms. Binning and Mr. Dearden, moved by Vice Chairman McClain, seconded by Secretary Pacheco, and unanimously carried to adopt the Wyoming NG9-1-1 GIS Data Model.

#### WyoLink Funding/American Rescue Plan Act (ARPA)

Mr. Smolinski updated the commission on the ARPA funds allocated to WYDOT for WyoLink. To date, \$11 million of the \$35 million total award has been spent. The two projects recently approved by the commission—the two additional WyoLink towers and the microwave backhaul—will be fast-tracked to meet the December 31, 2026, fund expiration deadline.

A kickoff meeting will be held in late August for the two new WyoLink sites. The northern Sheridan County site will be a greenfield project. Mr. Smolinski and program staff will meet with the utility provider next week to discuss utility installation. The Saratoga-Needles Peak site will be a collocate with Union Wireless.

### 3. Emergency Communications Program Manager's Report

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

Mr. Kelly reported that the radio installations for Wyoming Highway Patrol (WHP) vehicles in Districts 3 and 5 are complete. WHP vehicles in the remaining districts will be upgraded once the department receives an order of vehicle repeaters.

Radio installations for the WYDOT maintenance fleet are underway: Districts 2 and 3 are 30 percent complete, District 4 is 25 percent complete, District 5 is 60 percent complete, and work has just begun in District 1.

As part of the ongoing effort to donate old WYDOT subscriber units to Wyoming county and municipal entities, the program is preparing to send 30 portable units to Park County. The code plug, which is a file containing all of the programming information for a radio, is being developed, and the radios should be sent soon. The program will send old, trunked Motorola Quantar units to Utah as no Wyoming entity wanted them.

#### Critical Connect

Mr. Kelly reported that one of the current users of the Critical Connect system is WHP Division O, which is assigned to capitol security and the Governor's protection detail. The WHP is using Verizon devices for this service. Sweetwater County is also on the system and uses FirstNet enabled devices.

WYDOT is developing a memorandum of understanding to allow interoperable communication with Montana. Their Critical Connect system will need to be upgraded before the agreement can be finalized, but Montana's talkgroup has been created in the patch panel. South Dakota has also expressed interest in establishing interoperable communications with Wyoming. The goal is to unify communications with all bordering states using Critical Connect.

#### 16 Tower Buildout Report

Mr. Smolinski reported that construction has resumed at several tower sites. He hopes that all projects will be complete by the end of the season.

The Northern Big Horn County-Little Sheep Mountain site went active in July and has a fiber and microwave backhaul.

The Ten Sleep-Meadowlark site was still inaccessible in July due to snowpack and poor road condition. The remaining work at the site includes the installation of the field network equipment and minor shelter modifications.

All of the agreements are in place for the Newcastle site, which is a collocate with Union Wireless. Construction crews need to finish a few remaining items on the tower.

Mr. Smolinski estimates that the tower will be online later this month or early in September.

Crews began civil construction on the Bondurant site the week of July 24, 2023. This site is a collocate with Sublette County. Work was halted by rain, but Mr. Smolinski received word that the crew was back on site this morning. Site conditions are not ideal and some clean-up work is necessary following the storms.

Mr. Smolinski thanked Sublette County, especially Sheriff K.C. Lehr, for assisting WYDOT with site accessibility. Sheriff Lehr has arranged for the Sublette County Road and Bridge department to grade the road leading to the site to make it accessible for the construction crews.

#### *WyoLink Site Map*

Mr. Smolinski reviewed the WyoLink Local Towers and Locations Site Map that was included in the commission packet. The Portable Coverage Enhancement Sites in Service are collaborations between WYDOT and the local community to improve coverage in that area. The Core Sites in Service are typically the legacy, mountaintop sites. The 800MHz Locally Owned Sites in Service are part of the WyoLink network, but are owned and operated by the city and/or county. A Microwave Only Site has no VHF or 800MHz radio frequencies at the site and solely serves to support the microwave backhaul.

Chairman Harshman commented on the vast amount of progress shown on the map. Mr. Smolinski praised his team for all their efforts in the project over the years. He reported that the map will become a standard item in the commission packet.

#### WyoLink Operational Updates

##### *WyoLink System Reports*

Mr. Gardiner shared WyoLink usage data from the third quarter (Q3) of 2023. There was an average of about 1.97 million push-to-talks (PTT) and 1,138,000 minutes of airtime for the quarter.

The top 20 talkgroups for Q3 were mainly law enforcement agencies from 10 different counties, plus the WHP dispatch and Natrona fire department dispatch.

##### *WyoLink System Upgrades*

Mr. Gardiner reported that the GTR fixed station/repeater upgrades are proceeding rapidly. In October 2022, 35 sites needed upgrades; in August 2023, only nine sites remain. All of the sites should be upgraded by the middle of September.

Mr. Gardiner thanked Motorola, CommTech, Emergency Communications Program staff, and the Afton WYDOT shop for their work on this project. Once all of the sites have upgraded equipment, the system software can then be upgraded from version 7.17.3 to one of the latest versions of the software. The system upgrade is currently scheduled to take place in May 2024. Mr. Gardiner reported that the department will try to conduct the upgrade sooner, if possible, but three months of planning is needed for a smooth, successful upgrade process.

The GTR upgrade process also included the creation of additional channels for five sites. The Lander site received two channels, and the upgrade will be completed by August 12. The Copper Mountain site will also receive two channels, but the upgrade will be completed last because of the complexity of the [radio] combiner design. The extra channels will help with capacity issues.

Mr. Gardiner reported that the team has installed new Nokia service aggregation routers in a few locations to provide a more resilient backhaul network. The routers installed in Zone 2 (northern Wyoming) have not been activated. Technicians recently visited those sites to upgrade the routers with the latest firmware and software versions. Mr. Gardiner received word today that the Copper Mountain and Waltman Hill sites were successfully converted to Ethernet today, so the team will visit sites in Zone 2 next week to convert those sites.

The first routers installed in this project created a loop between Cheyenne and Casper. The team will upgrade those routers as well and replace sim cards to make the routers uniform.

Mr. Gardiner reported that the department is also considering upgrading the management and monitoring service to better maintain the routers and backhaul network. This will allow the team to provide a more efficient and fault-tolerant traffic management system.

Field technicians and WyoLink office staff received training on the microwave system equipment, the GTR repeaters, and the Nokia service aggregation routers to better support the upgrade process.

Mr. Smolinski added that the original completion date for the GTR repeater upgrades was in 2026. He stated that, with the assistance of Motorola and using the ARPA funding, the team was able to complete these upgrades far more quickly than originally planned. Furthermore, the equipment and software was becoming so outdated that it was questionable whether equipment could be repaired if it failed. By moving the upgrade schedule forward, the team has ensured a reliable and functional network.

#### *Tower Inspections*

Mr. Gardiner reported that technicians have used drones to inspect around 30 tower sites, capturing over 19,000 images. The team recently used the scans to investigate a problem at one of the sites, and the information provided by the drones was crucial in identifying the issue.

#### Statewide Interoperability Coordination (SWIC) Updates

Mr. Smolinski and Mr. Kelly provided the SWIC updates.

Mr. Kelly reported that the Wyoming Statewide Communications Interoperability Plan (SCIP) Workshop was held on July 19, 2023, in Casper. A revised version of the plan should soon be available to stakeholders for review and comment. Stakeholder feedback will be incorporated into the final draft.



Mr. Smolinski reported that the SCIP update process was a multi-month project with engagement from many local agencies. One of the goals of the project was to ensure shared ownership of the plan with buy-in from the local partnering agencies.

The SCIP is a three-year plan, but the pandemic delayed the update process by two years. The updated plan focuses on challenges, emerging issues, risks, and threats, while also considering the current and desired states for interoperable communications. The plan includes goals and objectives and addresses a number of topics including land mobile radio (LMR) push-to-talk networks, 9-1-1, public safety broadband, emergency alerts and warnings, public safety cybersecurity, and funding. Mr. Smolinski will have the plan ready for commission review and approval at the October business meeting.

One of the topics that came up in discussions of current and desired states was governance. Mr. Smolinski shared that the workshop attendees' discussion on governance coincided with the PSCC's goals for the working groups. He reminded the commission that, based on previous discussions, two working groups will be formed on interoperable communications/WyoLink and 9-1-1. The goals and objectives in the SCIP will guide the working groups.

#### Commercial Emergency Communications Services Update

Mr. Kelly reported that he and Mr. Smolinski will meet with T-Mobile on August 23, 2023, to discuss T-Mobile test units. The units will be distributed to field technicians and staff to assess network coverage and service compared to AT&T, Verizon, and Union Wireless. He will report the findings at the October commission meeting.

Mr. Smolinski shared that T-Mobile's first responder network is very similar to AT&T's FirstNet and Verizon's FrontLine. T-Mobile's network is called Connecting Heroes. The testing will determine if this network is a viable option for Wyoming.

Mr. Smolinski shared that AT&T FirstNet is required to submit a report to the governor on the progress of their five-year buildout. The governor's office has requested that FirstNet deliver a presentation detailing their progress to the PSCC at the October business meeting. An official report will accompany this presentation and will be approved by the commission before it is submitted to the governor's office.

Following a question from Commissioner Pacheco, Mr. Smolinski said that WYDOT has not yet placed a compact rapid deployable (CRD) unit in western Wyoming. The commission will receive more information on the CRDs at the October meeting and unit deployment messaging will be discussed at that time.

### **VII. Public Comment**

There was no public comment.

### **VIII. Announcements**

Ms. Chapman announced that the next meeting will be October 24-25, 2023, in Cheyenne. The business meeting will be held on the morning of October 25, and the team is planning an education session for the afternoon of the October 24. The workshop will include demonstrations of the high frequency (HF) trailer and the CRD unit, as well as a



possible presentation from AT&T FirstNet. Chairman Harshman requested more information or a demonstration of Critical Connect. Commissioners are invited to provide input to Mr. Smolinski and Ms. Chapman on other topics of interest.

Ms. Chapman informed the commission that the 2024 PSCC meeting schedule will be set soon. If commissioners have any feedback on meeting dates or times, they are invited to share them with Ms. Chapman or Mr. Smolinski. The slate of meeting dates will be presented for commission consideration at the October meeting.

Chairman Harshman welcomed Matt Waldock to the commission. Commissioner Waldock is the Commander of Regional Enforcement and OIS Teams for the Wyoming Division of Criminal Investigation and is located in Casper. He is the division's representative on the PSCC.

#### **IX. Adjournment**

It was moved by Commissioner Bertoglio, seconded by Vice Chairman McClain, and unanimously carried to adjourn the August 9, 2023, business meeting at 3:00 p.m.

**WYOLINK and WYOMING MUTUAL AID  
APPLICATION FOR SYSTEM ACCESS OR NEW TALKGROUP**

Date: 9/11/23

Requesting Agency: Wind River Transportation Authority

Type of Request       New Talkgroup Request  
                              New Member  
                              Other \_\_\_\_\_

Type of Agency      **First Responder**  
                              Law Enforcement  
                              Fire Department  
                              Emergency Medical Service  
                              Homeland Security  
                              Communications Center  
                              Other \_\_\_\_\_

**Emergency Response Support**  
 Transportation  
 Support – Red Cross, Salvation Army, etc.  
 Weather Service  
 Public Works  
 Court Services  
 Regulatory  
 Other \_\_\_\_\_

Radio System       WyoLink  
                              Mutual Aid  
                              SALECS

Reason for Request: A non-governmental entity shall apply for WyoLink Membership with the sponsorship of a public safety agency, attach letter from sponsoring public safety agency.

WRTA is governed by the Fremont County Association of Govts. FCAG is a joint powers board (govt) between Fremont County and all municipalities. WRTA provides transit and public safety transportation in Fremont County, including for public emergencies and we need a WYOLINK coverage access for safety  
(Attach Supporting Documentation)

Name of individual completing application: Gary M Michaud

Title: Administrator

Address: 2554 Airport Drive, Riverton, WY 82501

Phone: 307-856-7118

E-Mail Address: gary@wortabuslines.com

Signature: 

Send Completed Application to:

WyoLink  
Wyoming Department of Transportation  
5300 Bishop Boulevard  
Cheyenne, WY 82009  
E-Mail Address: [wyoink@wyo.gov](mailto:wyoink@wyo.gov)

Mutual Aid Channel Approval: \_\_\_\_\_  
(If Requested) Wyoming Highway Patrol

Please complete the following for Mutual Aid Request:

Number of Mobile Radios:

Number of Portable Radios:

Number of Dispatch Centers:  
(Control Stations)

**WYOLINK and WYOMING MUTUAL AID  
APPLICATION FOR SYSTEM ACCESS OR NEW TALKGROUP**

Date: 230906

Requesting Agency: Pennington County Search and Rescue

Type of Request       New Talkgroup Request  
                              New Member  
                              Other \_\_\_\_\_

Type of Agency      **First Responder**  
                              Law Enforcement  
                              Fire Department  
                              Emergency Medical Service  
                              Homeland Security  
                              Communications Center  
                              Other County level search and rescue group

**Emergency Response Support**  
 Transportation  
 Support – Red Cross, Salvation Army, etc.  
 Weather Service  
 Public Works  
 Court Services  
 Regulatory  
 Other \_\_\_\_\_

Radio System       WyoLink  
                              Mutual Aid  
                              SALECS

Reason for Request: A non-governmental entity shall apply for WyoLink Membership with the sponsorship of a public safety agency, attach letter from sponsoring public safety agency.

Requesting access to WYOLINK as Pennington County Search and Rescue borders Crook County and Weston County

working directly with both of those counties and other associated agencies. Crook County Sheriff is the sponsoring agency

(Under Sheriff Alex Jesson).

\_\_\_\_\_  
\_\_\_\_\_

*(Attach Supporting Documentation)*


Name of individual completing application: James Dietz

Title: Operations

Address: 140 E Main St North

Phone: 6055216849

E-Mail Address: jdietz@pc-sar.com

Signature: 

Send Completed Application to:

WyoLink  
Wyoming Department of Transportation  
5300 Bishop Boulevard  
Cheyenne, WY 82009  
E-Mail Address: [wyoink@wyo.gov](mailto:wyoink@wyo.gov)

Mutual Aid Channel Approval: \_\_\_\_\_  
(If Requested) Wyoming Highway Patrol

Please complete the following for Mutual Aid Request:

Number of Mobile Radios:

Number of Portable Radios:

Number of Dispatch Centers:  
(Control Stations)

# Crook County Sheriff's Office

Sheriff Jeff Hodge | Undersheriff Alex Jessen

309 E. Cleveland Street | PO Box 339 | Sundance, WY 82729

Phone: 307-283-1225 | Fax: 307-283-2990

sheriffoffice@crookcounty.wy.gov



09/21/2023

Attn: WyoLink

To whom it may concern,

I am writing this sponsorship letter to inform you of our approval of the request from James Dietz, of the Pennington County Sheriff's Office in South Dakota, to add our 18SO, 18CAT1, and 18CAT2 channels to their radios. It will benefit both agencies should we ever have any incidents along the state line where our counties border.

Thank you,

Undersheriff Alex Jessen

A handwritten signature in blue ink, appearing to read "Alex Jessen".

**WYOLINK and WYOMING MUTUAL AID  
APPLICATION FOR SYSTEM ACCESS OR NEW TALKGROUP**

Date: 10/23/2023

Requesting Agency: Sheridan Area SAR

Type of Request       New Talkgroup Request  
                              New Member  
                              Other \_\_\_\_\_

Type of Agency      **First Responder**  
                              Law Enforcement  
                              Fire Department  
                              Emergency Medical Service  
                              Homeland Security  
                              Communications Center  
                              Other \_\_\_\_\_

**Emergency Response Support**  
 Transportation  
 Support – Red Cross, Salvation Army, etc.  
 Weather Service  
 Public Works  
 Court Services  
 Regulatory  
 Other \_\_\_\_\_

Radio System       WyoLink  
                              Mutual Aid  
                              SALECS

Reason for Request: A non-governmental entity shall apply for WyoLink Membership with the sponsorship of a public safety agency, attach letter from sponsoring public safety agency.  
Request membership for County SAR team. This will greatly improve our communications with Sheriff Office, EMS, EMA and other mutual aid during SAR operations.

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*(Attach Supporting Documentation)*




Name of individual completing application: \_\_\_\_\_

Title: Board Member/Team Leader

Address: 916 Airport Rd, Sheridan WY, 82801

Phone: 229 834 1349

E-Mail Address: Pvs9k@yahoo.com

Signature: \_\_\_\_\_  


Send Completed Application to:

WyoLink  
Wyoming Department of Transportation  
5300 Bishop Boulevard  
Cheyenne, WY 82009  
E-Mail Address: [wyoink@wyo.gov](mailto:wyoink@wyo.gov)

Mutual Aid Channel Approval: \_\_\_\_\_  
(If Requested) Wyoming Highway Patrol

Please complete the following for Mutual Aid Request:

Number of Mobile Radios:

Number of Portable Radios:

Number of Dispatch Centers:  
(Control Stations)



Mark Gordon  
Governor

# Wyoming Public Safety Communications Commission

5300 Bishop Boulevard, Cheyenne, Wyoming 82009-3340  
Mark Harshman, Chairman | Telephone: 307-777-4015



Darin J. Westby, P.E.  
Director

October 3, 2023

Dear [STAKEHOLDER?]

The Public Safety Communications Commission's Next Generation 911 Geographic Information Systems Workgroup would like to share with you the Wyoming NG911 GIS Data Model in the hope that you will incorporate the new standards as you update and develop GIS data for your jurisdiction.

The PSCC met on August 15, 2023, and approved the Wyoming NG911 GIS Data Model, presented by workgroup chair Destry Dearden, as a standard. This action helped provide formal guidance on the development of critical GIS attributes in support of NG911 implementation in Wyoming.

Although there is not currently a statewide portal for submission of data or aggregation, and the timeline for implementation of such is unknown, we request that your agency assess your systems and determine what it would take to be compliant with the NG911 Data Model Standards.

GIS is considered the cornerstone of a NG911 system and forms the foundation for successfully executing emergency call processing and routing. GIS data is created at the local level within a county, tribe or municipality for addressing and mapping. Development of the Wyoming NG911 GIS Data Model is intended to give guidance to GIS professionals across the state on the attributes that should be included when developing an address point, road centerlines, and other applicable data.

The standards used in the Wyoming NG911 GIS Data Model come from standards created by the National Emergency Number Association as a way to coordinate GIS information across jurisdictional lines, both within Wyoming and with neighboring states.

We recognize that it will be a challenge to develop some – if not all – of these required datasets, but they are key to have and maintain for general GIS use. The vision for the GIS Data Model is to aggregate locally created GIS data at the state level and make it available for the use of each Public Safety Access Point in the state.

The NG911 GIS Workgroup is aware that not all local entities have the required datasets. We may be able to help you find them.

While it's easy to highlight the various benefits, we understand there may be challenges in updating GIS data to fit the standards. We are certainly willing to assist in explaining the benefits of adopting these standards should your local leaders request it.

"Each PSAP/County will have to make unique changes for their situation to achieve the goal," Dearden said.

The NG911 GIS Workgroup and its leadership would invite you to share this letter with others. We have attempted to reach out to all relevant professional groups and want to ensure that no one was missed.

If you have any questions please contact Destry Dearden, NG911 GIS Workgroup Chairman at [destry.dearden@lincolncountywy.gov](mailto:destry.dearden@lincolncountywy.gov) or (307) 877-2102.

Respectfully,

Nathan Smolinski, Chief Technology Officer, State 911 Coordinator  
Mark Harshman, Public Safety Communications Commission, Chairman  
Destry Dearden, Wyoming State NG911 GIS Workgroup Chairman

*The purpose of the PSCC is to develop recommendations for policy and guidelines, identify technology and standards and coordinate intergovernmental resources to facilitate statewide wireless communications interoperability with an emphasis on public safety.*

## WYOLINK 16 Site Expansion Project Status

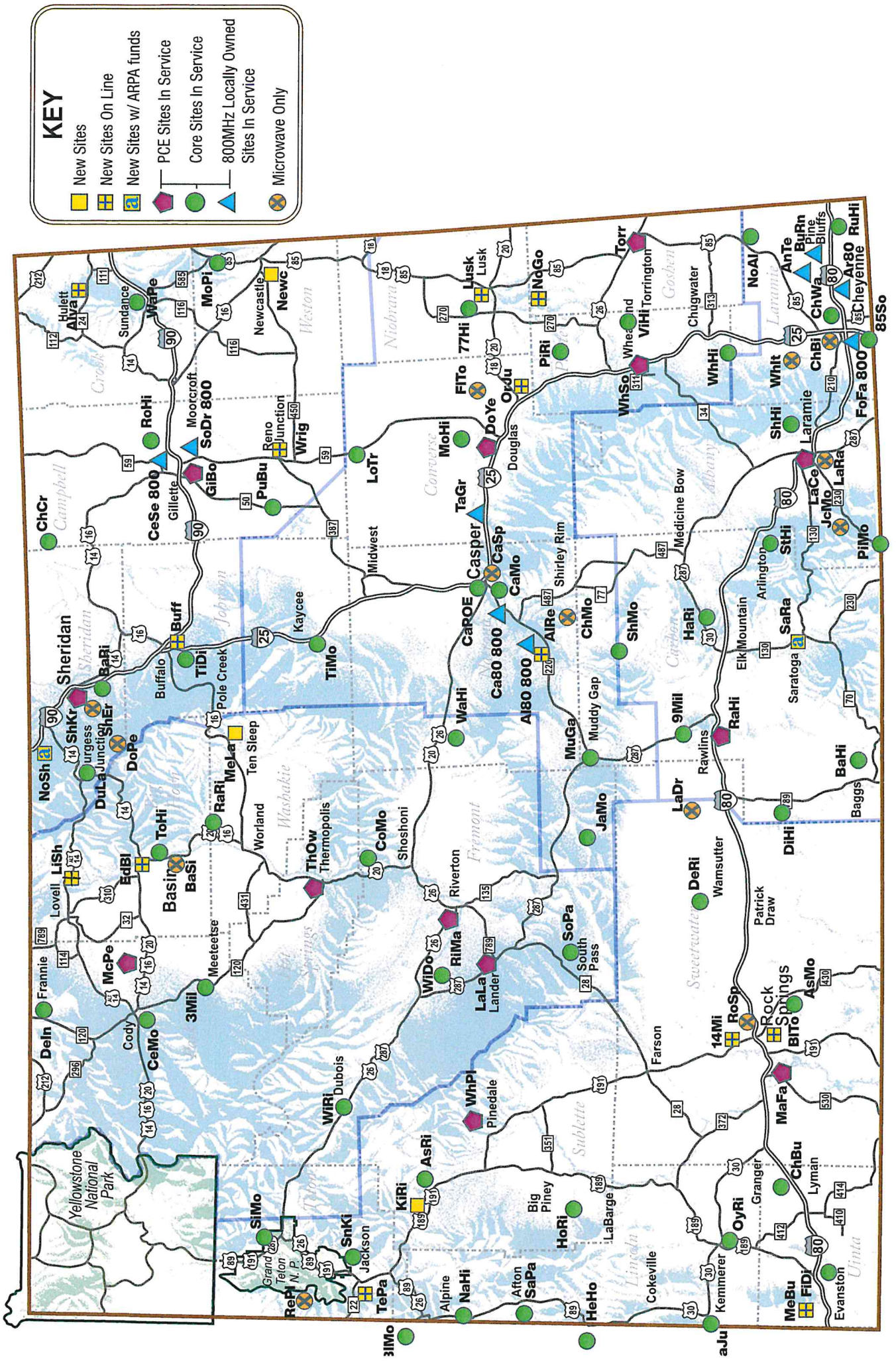
The following represents a brief update on the status and noteworthy accomplishments for each site location into the month of October 2023.

- Buffalo
  - Site active (3/24/20) with reported coverage improvements in previous known trouble spots
  
- Orin Junction
  - Site active (4/20/20) with reported coverage improvements in previous known trouble spots
  
- Wright
  - Site active (6/26/20) with reported coverage improvements in previous known trouble spots
  
- Jackson
  - Site active (announced 1/11/21) with reported coverage improvements in previous known trouble spots
  
- Greybull
  - Site active (announced 1/11/21) with reported coverage improvements in previous known trouble spots
  
- Lusk
  - Site active (announced 4/21/21) with reported coverage improvements in previous known trouble spots
  
- Alcova
  - Site active (announced 4/21/21) with reported coverage improvements in previous known trouble spots
  
- Alva
  - Site active (announced 6/3/21) with reported coverage improvements in previous known trouble spots
  
- Rock Springs (Blairtown-Tank Hill)
  - Site active (announced 10/8/21) with reported coverage improvements in previous known trouble spots

- Rock Springs (14 Mile Hill)
  - Site active (announced 6/28/22) with reported coverage improvements in previous known trouble spots
  
- Northern Goshen County
  - Site active (announced 3/16/23) with reported coverage improvements in previous known trouble spots
  
- Evanston
  - Site active (announced 1/30/23) with reported coverage improvements in previous known trouble spots
  
- North Big Horn County (Little Sheep Mnt)
  - Site active (announced 7/11/23) with reported coverage improvements in previous known trouble spots
  
- Ten Sleep (Meadowlark)
  - FNE completed, working on Microwave installation
  
- Newcastle
  - Towers crews on-site 10/13-10/24, site optimization upon antenna completion
  
- Bondurant/Kismet
  - FNE installation & optimization should be completed w/o 10/16
  - Coordinating fiber installation with Union



# Wyolink Local Towers and Locations Site Map



PSCC - Oct 25th 2023

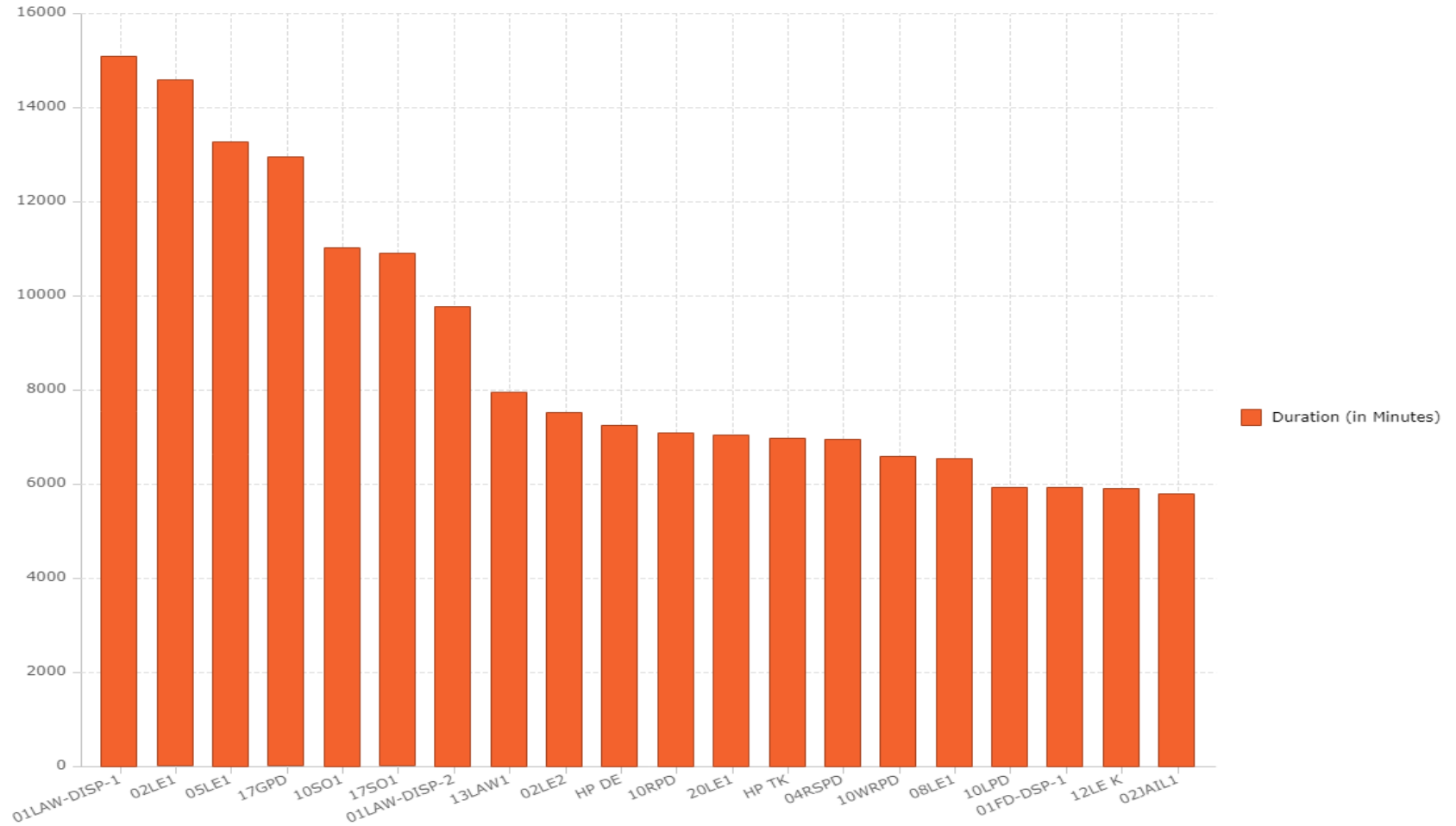




# SYSTEM STATISTICS

MONTH	PTTs	AIRTIME (minutes)
July '23	2,141,228	152,948.15
August '23	2,012,511	144,718.75
September '23	1,868,985	135,607.66

# TOP 20 TALKGROUPS





# WYOMING STATEWIDE COMMUNICATION INTEROPERABILITY PLAN



September 2023

Developed with support from the Cybersecurity and Infrastructure Security Agency

**DRAFT – INTERNAL WORKING DOCUMENT**

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## LETTER FROM THE STATEWIDE INTEROPERABILITY COORDINATOR

Greetings,

As the Statewide Interoperability Coordinator (SWIC) for Wyoming, I am pleased to present to you the 2023 Wyoming Statewide Communication Interoperability Plan (SCIP). The SCIP represents the state's continued commitment to improving emergency communications interoperability and supporting the public safety practitioners throughout the state. In addition, this update meets the requirement of the current U.S. Department of Homeland Security grant guidelines.

Representatives from across the state collaborated to update the SCIP with actionable and measurable goals and objectives that have champions identified to ensure completion. These goals and objectives focus on governance, technology and cybersecurity, and funding. They are designed to support our state in planning for emerging technologies and navigating the ever-changing emergency communications landscape. They also incorporate the SAFECOM/National Council of SWICs (NCSWIC) State Interoperability Markers which describe Wyoming's level of interoperability maturity by measuring progress against 25 markers.

As we continue to enhance interoperability, we must remain dedicated to improving our ability to communicate among disciplines and across jurisdictional boundaries. With help from public safety practitioners statewide, we will work to achieve the goals set forth in the SCIP and become a nationwide model for statewide interoperability.

Sincerely,

---

Nate Smolinski  
Wyoming Statewide Interoperability Coordinator  
Wyoming Department of Transportation

## INTRODUCTION



The SCIP is a one-to-three-year strategic planning document that contains the following components:

- **Introduction** – Provides the context necessary to understand what the SCIP is and how it was developed. It also provides an overview of the current emergency communications landscape.
- **Vision and Mission** – Articulates Wyoming’s vision and mission for improving emergency and public safety communications interoperability over the next one-to-three-years.
- **Governance** – Describes the current governance mechanisms for communications interoperability within Wyoming as well as successes, challenges, and priorities for improving it. The SCIP is a guiding document and does not create any authority or direction over any state or local systems or agencies.
- **Technology and Cybersecurity** – Outlines public safety technology and operations needed to maintain and enhance interoperability across the emergency communications ecosystem.
- **Funding** – Describes the funding sources and allocations that support interoperable communications capabilities within Wyoming along with methods and strategies for funding sustainment and enhancement to meet long-term goals.
- **Implementation Plan** – Describes Wyoming’s plan to implement, maintain, and update the SCIP to enable continued evolution of and progress toward the state’s interoperability goals.

The Emergency Communications Ecosystem consists of many inter-related components and functions, including communications for incident response operations, notifications and alerts and



warnings, requests for assistance and reporting, and public information exchange. The primary functions are depicted in the 2019 National Emergency Communications Plan.<sup>1</sup>

The Interoperability Continuum, developed by the Department of Homeland Security’s SAFECOM program and shown in Figure 1, serves as a framework to address challenges and continue improving operable/interoperable and public safety communications.<sup>2</sup> It is designed to assist public safety agencies and policy makers with planning and implementing interoperability solutions for communications across technologies.

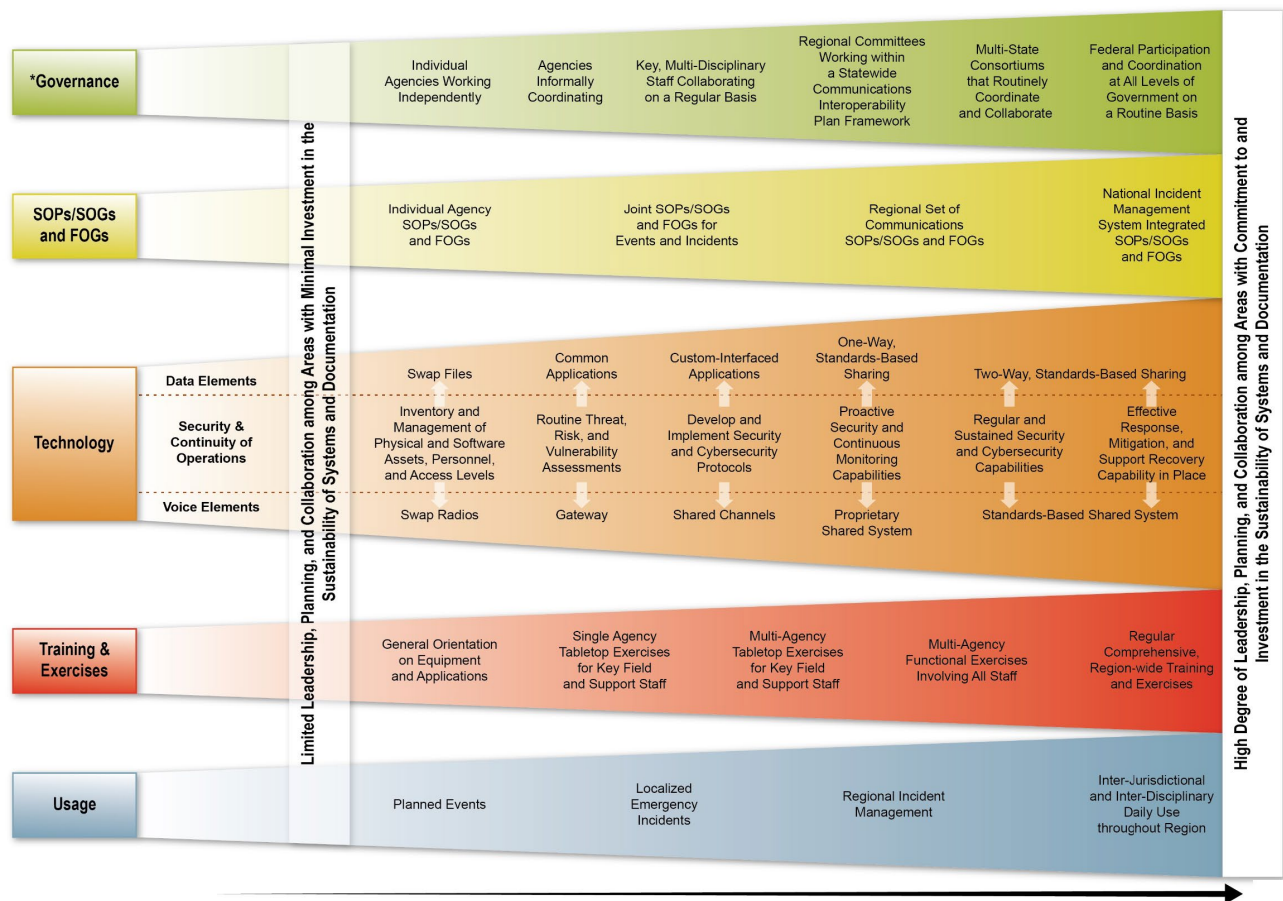


Figure 1: Interoperability Continuum

## Interoperability and Emergency Communications Overview

Interoperability is the ability of emergency response providers and relevant government officials to communicate across jurisdictions, disciplines, and levels of government as needed and as authorized. Reliable, timely communications among public safety responders and between public safety agencies and citizens is critical to effectively carry out public safety missions, and in many cases, saving lives.

Traditional voice capabilities, such as land mobile radio (LMR) and landline 911 services have long been and continue to be critical tools for communications. However, the advancement of internet

<sup>1</sup> [2019 National Emergency Communications Plan](#)

<sup>2</sup> [Interoperability Continuum Brochure](#)

protocol-based technologies in public safety has increased the type and amount of information responders receive, the tools they communicate with, and complexity of new and interdependent systems. Emerging technologies increase the need for coordination across public safety disciplines, communications functions, and levels of government to ensure emergency communications capabilities are interoperable, reliable, and secure.

An example of this evolution is the transition of public-safety answering points (PSAPs) to Next Generation 911 (NG911) technology that will enhance sharing of critical information in real-time using multimedia—such as pictures, video, and text — among citizens, PSAP operators, dispatch, and first responders. While potential benefits of NG911 are tremendous, implementation challenges remain. Necessary tasks to fully realize these benefits include interfacing disparate systems, developing training and standard operating procedures (SOPs) and ensuring information security.

## VISION AND MISSION

This section describes Wyoming’s vision and mission for improving emergency and public safety communications interoperability:

### **Vision:**

*Resilient and reliable operable and interoperable public safety communications for Wyoming.*

### **Mission:**

*Public safety organizations from all levels of government will work collaboratively to effectively achieve Wyoming’s interoperability vision.*

## GOVERNANCE

The Wyoming Public Safety Communications Commission (PSCC) is the state’s emergency communications governance body and meets quarterly. Currently, the PSCC does not have any working groups, and formalizing working groups for the PSCC is a desired state. Recently, the PSCC added a new commissioner on Tribal Outreach. Wyoming has two federally-recognized tribes, the Northern Arapaho Tribe of the Wind River Reservation, Wyoming, and the Eastern Shoshone Tribe of the Wind River Reservation, Wyoming.

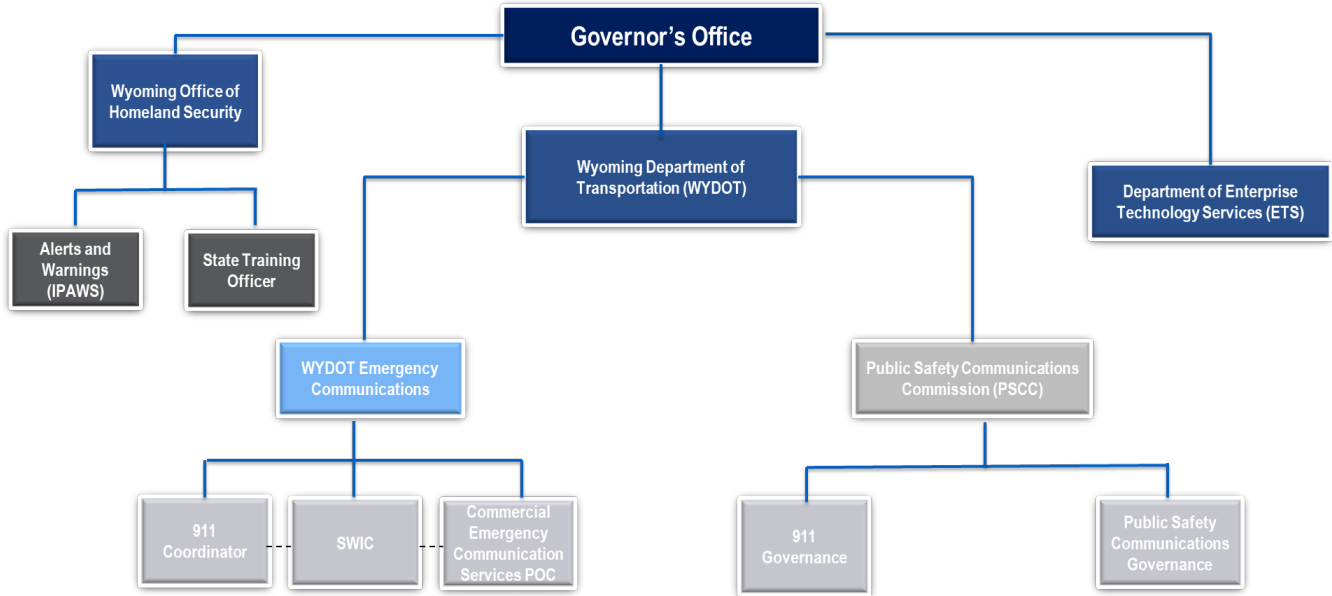
In addition to the PSCC, there are other governance entities across Wyoming involved in emergency communications. The Wyoming Department of Transportation (WYDOT) Emergency Communications is responsible for maintaining the WyoLink system infrastructure, which encompasses all the equipment at the radio sites and the control system. The Wyoming Office of Homeland Security (WOHS) houses a Communications Unit and issues alerts and warnings for the state. WOHS is currently working on a portal to share After-Action Reports (AARs) across the state.

The Wyoming Department of Enterprise Technology Services (ETS) manages the state systems against the cyber threat environment.

At the moment, Wyoming does not have a full-time SWIC, deputy SWIC, and State 911 Coordinator, and SCIP workshop participants expressed interested in changing this. Currently, the SWIC also serves as the State 911 Coordinator.

Wyoming’s emergency communications governance map is depicted in Figure 2.

Figure 2: Wyoming’s Emergency Communications Governance Map



Governance goals and objectives include the following:

Governance	
Goals	Objectives
<b>1. Enhance statewide emergency communications governance with input from end users</b>	1.1 Create a Public Safety Communications Commission (PSCC) end users working group to formalize working groups for the PSCC
	1.2 Complete the statewide Tactical Interoperable Communications Plan (TICP) and the Wyoming Field Operations Guide (WYFOG) with input from the local level
	1.3 Create policies and procedures on information sharing on outages from communications providers
	1.4 Establish full-time Statewide Interoperability Coordinator (SWIC) and deputy SWIC positions
	1.5 Create a full-time 911 Coordinator position and a statewide 911 office

Goals	Objectives
2. Conduct outreach and education to state and locals about the Statewide Communications Interoperability Plan (SCIP)	2.1 Determine marketing and messaging strategy to conduct roadshows and presentations to Wyoming public safety stakeholders
	2.2 Engage state legislators to promote the SCIP
3. Develop a Communications Unit Plan and Program	3.1 Request a Cybersecurity and Infrastructure Security Agency (CISA) Technical Assistance (TA) to develop a Communications Unit Plan
	3.2 Set up a training budget for Auxiliary Communicator (AUXCOMM) training, as well as an avenue to get Communications Unit Technician (COMT) and Communications Unit Leader (COML) trained and certified
	3.3 Conduct COML, COMT, and AUXCOMM trainings
	3.4 Develop Communications Unit credentialing guidelines

## TECHNOLOGY AND CYBERSECURITY

### Land Mobile Radio

The state operates a Project 25 (P25) very high frequency (VHF) digital trunked radio system called WyoLink. WyoLink consists of 105 sites providing approximately 95 percent mobile radio coverage statewide except for Yellowstone National Park. Of the 75 sites, 13 provide local portable radio coverage and eight provide coverage on 800 megahertz (MHz) in three counties - Campbell County/Gillette, Natrona County/Casper, and Laramie County/Cheyenne. The newest site is in the Blair Town, which is the first WYDOT-owned 800 MHz site. In the future, the state looks to expand WyoLink coverage and capacity, especially in mountainous regions, as well as to map general LMR coverage and dead zones across the state.

Recent LMR challenges include a lack of sustainable funding source for LMR equipment upgrades. A large amount of the LMR equipment across Wyoming's local first responder agencies is supported by WOHS grant funding. Other LMR challenges include buildings causing coverage issues in denser areas and system interference and inventory issues with Bi-Directional Amplifiers (BDAs). A new state code requires all new buildings and any remodels over a certain size have BDAs.

### 911

In Wyoming, 911 is managed differently from county-to-county and city-to-city. In 2022, the state published its NG911 plan. The state has 32 PSAPs across its 23 counties. PSAPs in Wyoming still use legacy copper lines. Participants at the SCIP workshop noted that advancing technology for 911 is outpacing the state's ability to hire and train staff, as well as update policies and procedures, especially at the local level.

SCIP workshop participants expressed desire to increase redundancy for the 911 system for the state, increase cybersecurity training for PSAPs, recommend best practices for 911 at the state level, increase staffing for PSAPs, and create state portal for Geographic Information System (GIS) data.

## Broadband

Wyoming's public safety broadband capabilities have greatly improved since the 2018 SCIP. The state is currently testing LMR to Long-Term Evolution (LTE) integration on the WyoLink System. However, the state aims to address the lack of redundancy for critical infrastructure that supports broadband systems. In addition, the state looks to ensure broadband vendors understand the mission criticality of connecting with the WyoLink system and PSAPs.

## Alerts and Warnings

The Federal Emergency Management Agency (FEMA) Integrated Public Alert and Warning System (IPAWS) is used throughout Wyoming. The state pays for each of its counties to have IPAWS access. Monthly IPAWS testing is done for every county in the state, and WOHS keeps track of completion. Besides IPAWS, many counties use subscription-based alerting systems. SCIP workshop participants noted the difficulties of getting the state population to subscribe to opt-in alerting systems.

In addition to completing a new State Emergency Alert System (EAS) plan, Wyoming looks to recommend best practices from the state level on alerts and warnings, but still balance local control, increase alerts and warnings in other languages, increasing training and exercises on IPAWS and Wireless Emergency Alert (WEA) tools, and establish redundancy for IPAWS and alerting tools.

## Cybersecurity

For the state of Wyoming, ETS serves as the centralized Information Technology (IT) organization that manages executive branch IT infrastructure, telecommunications, IT services, architecture, and IT procurement.

The Wyoming Governor recently signed an executive order to create the Cyber Assistance Response Effort (CARE) Team to respond to cyber threats for state and local agencies. The CARE Team falls under WOHS and includes ETS. The team meets once a month.

In the future, Wyoming looks to increase cybersecurity awareness, education, and training, especially at the local level. Wyoming also wants to bring more awareness to the CARE Team and engage CISA cybersecurity resources.

Technology and cybersecurity goals and objectives include the following:

Technology and Cybersecurity	
Goals	Objectives
4. Continue maintenance, expansion, and development of a comprehensive statewide interoperable	4.1 Coordinate lifecycle planning for multiple emergency communications systems (land mobile radio [LMR], broadband, cybersecurity, etc.)
	4.2 Increase training for LMR technologies

Goals	Objectives
<b>emergency communications system</b>	4.3 Map dead zones and monitor system usage to expand WyoLink coverage and capacity, especially in mountainous regions
	4.4 Increase the capabilities of LMR over Long-Term Evolution (LTE)
	4.5 Fix system interference and inventory issues with Bi-Directional Amplifiers (BDAs)
	4.6 Identify funding for WyoLink radios at the local level
	4.7 Develop redundancy for critical infrastructure that requires broadband systems
<b>5. Enhance 911 capabilities across the state</b>	5.1 Create a state portal for Geographic Information System (GIS) data
	5.2 Increase cybersecurity and technology training for Public Safety Answering Points (PSAPs)
	5.3 Establish an Emergency Services Internet Protocol Network (ESInet)
	5.4 Share best practices for 911 across the state
	5.5 Increase staffing for PSAPs
	5.6 Ensure vendors and the Wyoming Department of Enterprise Technology Services (ETS) understand mission criticality for connecting with the WyoLink system and PSAPs
	5.7 Identify funding for Next Generation 911 (NG911) implementation and training
<b>6. Enhance alerts and warnings capabilities across the state</b>	6.1 Recommend best practices from the state level on alerts and warnings, but still balance local control (ex. state templates)
	6.2 Complete the statewide Emergency Alert System (EAS) plan
	6.3 Increase alerts and warnings in other languages
	6.4 Increase training and exercises on the Integrated Public Alert and Warning System (IPAWS) and Wireless Emergency Alert (WEA) tools
	6.5 Establish redundancy for IPAWS and alerting tools
	6.6 Identify more information on data casting for Wyoming
<b>7. Promote the integration of cybersecurity into the emergency communications ecosystem</b>	7.1 Increase cybersecurity awareness and training at the local level
	7.2 Engage CISA resources (ex. Cybersecurity Advisors and Protective Security Advisors, cybersecurity TAs)
	7.3 Bring more awareness to the Cyber Assistance Response Effort (CARE) Team

---

## FUNDING

The issue of funding touches every part of the emergency communications ecosystem. Specifically in Wyoming, increased funding is needed for WyoLink radios at the local level, a training budget for AUXCOMM training as well as an avenue to get COMT and COML trained and certified, radio system infrastructure, and NG911 implementation. In the future, Wyoming wants to coordinate lifecycle planning for all its communications systems, including LMR, broadband, 911, and IT.

## IMPLEMENTATION PLAN

Each goal and its associated objectives have a timeline with a target completion date, and one or multiple owners that will be responsible for overseeing and coordinating its completion. Accomplishing goals and objectives will require the support and cooperation from numerous individuals, groups, or agencies, and will be added as formal agenda items for review during regular governance body meetings. The Cybersecurity and Infrastructure Security Agency's (CISA) Interoperable Communications Technical Assistance Program (ICTAP) has a catalog<sup>3</sup> of technical assistance (TA) available to assist with the implementation of the SCIP. TA requests are to be coordinated through the SWIC.

Wyoming's implementation plan is shown in the table below.

Goals	Objectives	Owners	Completion Dates
<b>1. Enhance statewide emergency communications governance with input from end users</b>	1.1 Create a Public Safety Communications Commission (PSCC) end users working group to formalize working groups for the PSCC	SWIC	July 2024
	1.2 Complete the statewide Tactical Interoperable Communications Plan (TICP) and the Wyoming Field Operations Guide (WYFOG) with input from the local level	SWIC	July 2024
	1.3 Create policies and procedures on information sharing on outages from communications providers	PSCC	July 2024
	1.4 Establish full-time Statewide Interoperability Coordinator (SWIC) and deputy SWIC positions	SWIC	July 2025
	1.5 Create a full-time 911 Coordinator position and a statewide 911 office	911 Coordinator	July 2025
<b>2. Conduct outreach and education to state and locals about the Statewide Communications Interoperability Plan (SCIP)</b>	2.1 Determine marketing and messaging strategy to conduct roadshows and presentations to Wyoming public safety stakeholders	SWIC, PSCC	July 2024
	2.2 Engage state legislators to promote the SCIP		
<b>3. Develop a Communications Unit Plan and Program</b>	3.1 Request a Cybersecurity and Infrastructure Security Agency (CISA) Technical Assistance (TA) to develop a Communications Unit Plan	CISA, SWIC	August 2023

<sup>3</sup> [Emergency Communications Technical Assistance Planning Guide](#)



Goals	Objectives	Owners	Completion Dates
	3.2 Set up a training budget for Auxiliary Communicator (AUXCOMM) training, as well as an avenue to get Communications Unit Technician (COMT) and Communications Unit Leader (COML) trained and certified	Wyoming Office of Homeland Security (WOHS)	TBD
	3.3 Conduct COML, COMT, and AUXCOMM trainings	WOHS, state training officer	TBD
	3.4 Develop Communications Unit credentialing guidelines	WOHS	TBD
<b>4. Continue maintenance, expansion, and development of a comprehensive statewide interoperable emergency communications system</b>	4.1 Coordinate lifecycle planning for multiple emergency communications systems (land mobile radio [LMR], broadband, cybersecurity, etc.)	WyoLink manager, local agencies	July 2025
	4.2 Increase training for LMR technologies	PSCC working groups	Ongoing
	4.3 Map dead zones and monitor system usage to expand WyoLink coverage and capacity, especially in mountainous regions	WYDOT, WyoLink manager	Ongoing
	4.4 Increase the capabilities of LMR over Long-Term Evolution (LTE)	WyoLink manager	Ongoing
	4.5 Fix system interference and inventory issues with Bi-Directional Amplifiers (BDAs)	WYDOT, local agencies	Ongoing
	4.6 Identify funding for WyoLink radios at the local level	WOHS, PSCC	Ongoing
	4.7 Develop redundancy for critical infrastructure that requires broadband systems	TBD	TBD
<b>5. Enhance 911 capabilities across the state</b>	5.1 Create a state portal for Geographic Information System (GIS) data	911 coordinator, PSCC	July 2025
	5.2 Increase cybersecurity and technology training for Public Safety Answering Points (PSAPs)	CISA, 911 coordinator	July 2026
	5.3 Establish an Emergency Services Internet Protocol Network (ESInet)	911 coordinator, WYDOT	July 2026
	5.4 Share best practices for 911 across the state	911 coordinator	Ongoing
	5.5 Increase staffing for PSAPs	Local agencies	Ongoing

Goals	Objectives	Owners	Completion Dates
	5.6 Ensure vendors and the Wyoming Department of Enterprise Technology Services (ETS) understand mission criticality for connecting with the WyoLink system and PSAPs	911 coordinator, PSCC	Ongoing
	5.7 Identify funding for Next Generation 911 (NG911) implementation and training	911 coordinator, PSCC	Ongoing
<b>6. Enhance alerts and warnings capabilities across the state</b>	6.1 Recommend best practices from the state level on alerts and warnings, but still balance local control (ex. state templates)	WOHS	TBD
	6.2 Complete the statewide Emergency Alert System (EAS) plan		
	6.3 Increase alerts and warnings in other languages		
	6.4 Increase training and exercises on the Integrated Public Alert and Warning System (IPAWS) and Wireless Emergency Alert (WEA) tools		
	6.5 Establish redundancy for IPAWS and alerting tools		
	6.6 Identify more information on data casting for Wyoming		
<b>7. Promote the integration of cybersecurity into the emergency communications ecosystem</b>	7.1 Increase cybersecurity awareness and training at the local level	CISA, SWIC, WOHS, emergency management	Ongoing
	7.2 Engage CISA resources (ex. Cybersecurity Advisors and Protective Security Advisors, cybersecurity TAs)	CISA, SWIC	Ongoing
	7.3 Bring more awareness to the Cyber Assistance Response Effort (CARE) Team	WOHS	TBD

## APPENDIX A: STATE MARKERS

In 2019, CISA supported states and territories in establishing an initial picture of interoperability nationwide by measuring progress against 25 markers. These markers describe a state or territory's level of interoperability maturity. Below is Wyoming's assessment of their progress against the markers as of 7/27/23.

Marker	Best Practices / Performance Markers	Initial	Defined	Optimized
1	<b>State-level governing body established (e.g., SIEC, SIGB).</b> Governance framework is in place to sustain all emergency communications	Governing body does not exist, or exists and role has not been formalized by legislative or executive actions	Governing body role established through an executive order	Governing body role established through a state law
2	<b>SIGB/SIEC participation.</b> Statewide governance body is comprised of members who represent all components of the emergency communications ecosystem.	Initial (1-2) Governance body participation includes: <input type="checkbox"/> Communications Champion/SWIC <input type="checkbox"/> LMR <input type="checkbox"/> Broadband/LTE <input type="checkbox"/> 911 <input type="checkbox"/> Alerts, Warnings and Notifications	Defined (3-4) Governance body participation includes: <input checked="" type="checkbox"/> Communications Champion/SWIC <input checked="" type="checkbox"/> LMR <input type="checkbox"/> Broadband/LTE <input checked="" type="checkbox"/> 911 <input checked="" type="checkbox"/> Alerts, Warnings and Notifications	Optimized (5) Governance body participation includes: <input type="checkbox"/> Communications Champion/SWIC <input type="checkbox"/> LMR <input type="checkbox"/> Broadband/LTE <input type="checkbox"/> 911 <input type="checkbox"/> Alerts, Warnings and Notifications
3	<b>SWIC established.</b> Full-time SWIC is in place to promote broad and sustained participation in emergency communications.	SWIC does not exist	Full-time SWIC with collateral duties	Full-time SWIC established through executive order or state law
4	<b>SWIC Duty Percentage.</b> SWIC spends 100% of time on SWIC-focused job duties	SWIC spends >1, <50% of time on SWIC-focused job duties	SWIC spends >50, <90% of time on SWIC-focused job duties	SWIC spends >90% of time on SWIC-focused job duties
5	<b>SCIP refresh.</b> SCIP is a living document that continues to be executed in a timely manner. Updated SCIPs are reviewed and approved by SIGB/SIEC.	No SCIP OR SCIP older than 3 years	SCIP updated within last 2 years	SCIP updated in last 2 years and progress made on >50% of goals
6	<b>SCIP strategic goal percentage.</b> SCIP goals are primarily strategic to improve long term emergency communications ecosystem (LMR, LTE, 911, A&W) and future technology transitions (5G, IoT, UAS, etc.). (Strategic and non-strategic goals are completely different; strategy -- path from here to the destination; it is unlike tactics which you can "touch"; cannot "touch" strategy)	<50% are strategic goals in SCIP	>50%<90% are strategic goals in SCIP	>90% are strategic goals in SCIP
7	<b>Integrated emergency communication grant coordination.</b> Designed to ensure state / territory is tracking and optimizing grant proposals, and there is strategic visibility how grant money is being spent.	No explicit approach or only informal emergency communications grant coordination between localities, agencies, SAA and/or the SWIC within a state / territory	SWIC and/or SIGB provides guidance to agencies and localities for emergency communications grant funding but does not review proposals or make recommendations	SWIC and/or SIGB provides guidance to agencies and localities for emergency communications grant funding and reviews grant proposals for alignment with the SCIP. SWIC

				and/or SIGB provides recommendations to the SAA
8	<p><b>Communications Unit process.</b> Communications Unit process present in state / territory to facilitate emergency communications capabilities. Check the boxes of which Communications positions are currently covered within your process:</p> <p><input checked="" type="checkbox"/> COML  <input checked="" type="checkbox"/> COMT  <input type="checkbox"/> ITSL  <input checked="" type="checkbox"/> RADO  <input type="checkbox"/> INCM  <input type="checkbox"/> INTD  <input checked="" type="checkbox"/> AUXCOM  <input type="checkbox"/> TERT</p>	No Communications Unit process at present	Communications Unit process planned or designed (but not implemented)	Communications Unit process implemented and active
9	<p><b>Interagency communication.</b> Established and applied interagency communications policies, procedures and guidelines.</p>	Some interoperable communications SOPs/SOGs exist within the area and steps have been taken to institute these interoperability procedures among some agencies	Interoperable communications SOPs/SOGs are formalized and in use by agencies within the area. Despite minor issues, SOPs/SOGs are successfully used during responses and/or exercises	Interoperable communications SOPs/SOGs within the area are formalized and regularly reviewed. Additionally, NIMS procedures are well established among agencies and disciplines. All needed procedures are effectively utilized during responses and/or exercises.
10	<p><b>TICP (or equivalent) developed.</b> Tactical Interoperable Communications Plans (TICPs) established and periodically updated to include all public safety communications systems available</p>	Regional or statewide TICP in place	Statewide or Regional TICP(s) updated within past 2-5 years	Statewide or Regional TICP(s) updated within past 2 years
11	<p><b>Field Operations Guides (FOGs) developed.</b> FOGs established for a state or territory and periodically updated to include all public safety communications systems available</p>	Regional or statewide FOG in place	Statewide or Regional FOG(s) updated within past 2-5 years	Statewide or Regional FOG(s) updated within past 2 years
12	<p><b>Alerts &amp; Warnings.</b> State or Territory has Implemented an effective A&amp;W program to include Policy, Procedures and Protocol measured through the following characteristics:</p> <p>(1) Effective documentation process to inform and control message origination and distribution  (2) Coordination of alerting plans and procedures with neighboring jurisdictions  (3) Operators and alert originators receive periodic training  (4) Message origination, distribution, and correction procedures in place</p>	<49% of originating authorities have all of the four A&W characteristics	>50%<74% of originating authorities have all of the four A&W characteristics	>75%<100% of originating authorities have all of the four A&W characteristics

13	<b>Radio programming.</b> Radios programmed for National/Federal, SLTT interoperability channels and channel nomenclature consistency across a state / territory.	<49% of radios are programed for interoperability and consistency	>50%<74% of radios are programed for interoperability and consistency	>75%<100% of radios are programed for interoperability and consistency
14	<b>Cybersecurity Assessment Awareness.</b> Cybersecurity assessment awareness. (Public safety communications networks are defined as covering: LMR, LTE, 911, and A&W)	Public safety communications network owners are aware of cybersecurity assessment availability and value (check yes or no for each option) <input type="checkbox"/> LMR <input type="checkbox"/> LTE <input checked="" type="checkbox"/> 911/CAD <input type="checkbox"/> A&W	Initial plus, conducted assessment, conducted risk assessment. (Check yes or no for each option) <input type="checkbox"/> LMR <input type="checkbox"/> LTE <input type="checkbox"/> 911/CAD <input type="checkbox"/> A&W	Defined plus, Availability of Cyber Incident Response Plan (check yes or no for each option) <input type="checkbox"/> LMR <input type="checkbox"/> LTE <input type="checkbox"/> 911/CAD <input type="checkbox"/> A&W
15	<b>NG911 implementation.</b> NG911 implementation underway to serve state / territory population.	Working to establish NG911 governance through state/territorial plan. <ul style="list-style-type: none"><li>Developing GIS to be able to support NG911 call routing.</li><li>Planning or implementing ESInet and Next Generation Core Services (NGCS).</li><li>Planning to or have updated PSAP equipment to handle basic NG911 service offerings.</li></ul>	More than 75% of PSAPs and Population Served have: <ul style="list-style-type: none"><li>NG911 governance established through state/territorial plan.</li><li>GIS developed and able to support NG911 call routing.</li><li>Planning or implementing ESInet and Next Generation Core Services (NGCS).</li><li>PSAP equipment updated to handle basic NG911 service offerings.</li></ul>	More than 90% of PSAPs and Population Served have: <ul style="list-style-type: none"><li>NG911 governance established through state/territorial plan.</li><li>GIS developed and supporting NG911 call routing.</li><li>Operational Emergency Services IP Network (ESInet)/Next Generation Core Services (NGCS).</li><li>PSAP equipment updated and handling basic NG911 service offerings.</li></ul>
16	<b>Data operability / interoperability.</b> Ability of agencies within a region to exchange data on demand, and needed, and as authorized. Examples of systems would be CAD to CAD, Chat, GIS, Critical Incident Management Tool, Web EOC	Agencies are able to share data only by email. Systems are not touching or talking.	Systems are able to touch but with limited capabilities. One-way information sharing.	Full system to system integration. Able to fully consume and manipulate data.
17	<b>Future Technology/Organizational Learning.</b> SIEC/SIGB is tracking, evaluating, implementing future technology (checklist)	<input checked="" type="checkbox"/> 5G <input checked="" type="checkbox"/> Acoustic Signaling <input checked="" type="checkbox"/> Autonomous Vehicles <input checked="" type="checkbox"/> Body Cameras <input checked="" type="checkbox"/> ESInets <input checked="" type="checkbox"/> GIS <input checked="" type="checkbox"/> Geolocation	<input checked="" type="checkbox"/> HetNets/Mesh Networks <input checked="" type="checkbox"/> LMR to LTE Integration <input checked="" type="checkbox"/> MCPTT Apps <input checked="" type="checkbox"/> Machine Learning/AI <input checked="" type="checkbox"/> Public Alerting Software <input checked="" type="checkbox"/> Sensors <input checked="" type="checkbox"/> Situational Awareness Apps	<input checked="" type="checkbox"/> Smart Cities <input checked="" type="checkbox"/> The Next Narrowbanding <input checked="" type="checkbox"/> UAS (Drones) <input checked="" type="checkbox"/> UAV (Smart Vehicle) <input checked="" type="checkbox"/> Wearables <input checked="" type="checkbox"/> IoT (Cameras)
18	<b>Communications Exercise objectives.</b> Specific emergency communications objectives are incorporated into applicable exercises Federal / state / territory-wide	Regular engagement with State Training and Exercise coordinators	Promote addition of emergency communications objectives in state/county/regional level exercises (target Emergency Management community). Including providing tools, templates, etc.	Initial and Defined plus mechanism in place to incorporate and measure communications objectives into state/county/regional level exercises

19	<b>Trained Communications Unit responders.</b> Communications Unit personnel are listed in a tracking database (e.g., NQS One Responder, CASM, etc.) and available for assignment/response.	<49% of public safety agencies within a state / territory have access to Communications Unit personnel who are listed in a tracking database and available for assignment/response	>50%<74% of public safety agencies within a state / territory have access to Communications Unit personnel who are listed in a tracking database and available for assignment/response	>75%<100% of public safety agencies within a state / territory have access to Communications Unit personnel who are listed in a tracking database and available for assignment/response
20	<b>Communications Usage Best Practices/Lessons Learned.</b> Capability exists within jurisdiction to share best practices/lessons learned (positive and/or negative) across all lanes of the Interoperability Continuum related to all components of the emergency communications ecosystem	Best practices/lessons learned intake mechanism established. Create Communications AAR template to collect best practices	Initial plus review mechanism established	Defined plus distribution mechanism established
21	<b>Wireless Priority Service (WPS) subscription.</b> WPS penetration across state / territory compared to maximum potential	<9% subscription rate of potentially eligible participants who signed up WPS across a state / territory	>10%<49% subscription rate of potentially eligible participants who signed up for WPS a state / territory	>50%<100% subscription rate of potentially eligible participants who signed up for WPS across a state / territory
22	<b>Outreach.</b> Outreach mechanisms in place to share information across state	SWIC electronic communication (e.g., SWIC email, newsletter, social media, etc.) distributed to relevant stakeholders on regular basis	Initial plus web presence containing information about emergency communications interoperability, SCIP, trainings, etc.	Defined plus in-person/webinar conference/meeting attendance strategy and resources to execute
23	<b>Sustainment assessment.</b> Identify interoperable component system sustainment needs;(e.g., communications infrastructure, equipment, programs, management) that need sustainment funding. (Component systems are emergency communications elements that are necessary to enable communications, whether owned or leased - state systems only)	< 49% of component systems assessed to identify sustainment needs	>50%<74% of component systems assessed to identify sustainment needs	>75%<100% of component systems assessed to identify sustainment needs
24	<b>Risk identification.</b> Identify risks for emergency communications components. (Component systems are emergency communications elements that are necessary to enable communications, whether owned or leased. Risk Identification and planning is in line with having a communications COOP Plan)	< 49% of component systems have risks assessed through a standard template for all technology components	>50%<74% of component systems have risks assessed through a standard template for all technology components	>75%<100% of component systems have risks assessed through a standard template for all technology components
25	<b>Cross Border / Interstate (State to State) Emergency Communications.</b> Established capabilities to enable emergency communications across all components of the ecosystem.	Initial: Little to no established: <input type="checkbox"/> Governance <input type="checkbox"/> SOPs/MOUs <input type="checkbox"/> Technology <input type="checkbox"/> Training/Exercises <input type="checkbox"/> Usage	Defined: Documented/established across some lanes of the Continuum: <input checked="" type="checkbox"/> Governance <input checked="" type="checkbox"/> SOPs/MOUs <input checked="" type="checkbox"/> Technology <input checked="" type="checkbox"/> Training/Exercises <input checked="" type="checkbox"/> Usage	Optimized: Documented/established across all lanes of the Continuum: <input type="checkbox"/> Governance <input type="checkbox"/> SOPs/MOUs <input type="checkbox"/> Technology <input type="checkbox"/> Training/Exercises <input type="checkbox"/> Usage

## APPENDIX B: ACRONYMS

Acronym	Definition
AAR	After-Action Report
AUXCOMM/AUXC	Auxiliary Emergency Communications
A&W	Alerts and Warnings
BDA	Bi-Directional Amplifier
CARE	Cyber Assistance Response Effort
CASM	Communication Assets Survey and Mapping
CISA	Cybersecurity and Infrastructure Security Agency
COML	Communications Unit Leader
COMT	Communications Unit Technician
COMU	Communications Unit Program
COOP	Continuity of Operations Plan
DHS	Department of Homeland Security
EAS	Emergency Alert System
ESInet	Emergency Services Internal Protocol Network
ETS	Wyoming Department of Enterprise Technology Services
FEMA	Federal Emergency Management Agency
FOG	Field Operations Guide
GIS	Geospatial Information System
ICTAP	Interoperable Communications Technical Assistance Program
INCM	Incident Communications Center Manager
INTD	Incident Tactical Dispatcher
IP	Internet Protocol
IPAWS	Integrated Public Alert and Warning System
IT	Information Technology
ITSL	Information Technology Service Unit Leader
LMR	Land Mobile Radio
LTE	Long-Term Evolution
MHz	Megahertz
MOU	Memorandum of Understanding
NCSWIC	National Council of Statewide Interoperability Coordinators
NECP	National Emergency Communications Plan
NG911	Next Generation 911
PSAP	Public Safety Answering Point
PSCC	Public Safety Communications Commission
P25	Project 25
RADO	Radio Operator



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Acronym	Definition
SCIP	Statewide Communication Interoperability Plan
SOP	Standard Operating Procedure
SWIC	Statewide Interoperability Coordinator
TA	Technical Assistance
TERT	Telecommunications Emergency Response Team
TICP	Tactical Interoperable Communications Plan
VHF	Very High Frequency
WEA	Wireless Emergency Alert
WOHS	Wyoming Office of Homeland Security
WPS	Wireless Priority Service
WYDOT	Wyoming Department of Transportation
WYFOG	Wyoming Field Operations Guide

## IMPLEMENTATION PLAN

Each goal and its associated objectives have a timeline with a target completion date, and one or multiple owners that will be responsible for overseeing and coordinating its completion. Accomplishing goals and objectives will require the support and cooperation from numerous individuals, groups, or agencies, and will be added as formal agenda items for review during regular governance body meetings. The Cybersecurity and Infrastructure Security Agency's (CISA) Interoperable Communications Technical Assistance Program (ICTAP) has a catalog<sup>1</sup> of technical assistance (TA) available to assist with the implementation of the SCIP. TA requests are to be coordinated through the SWIC.

Wyoming's implementation plan is shown in the table below.

Goals	Objectives	Owners	Completion Dates
<b>1. Enhance statewide emergency communications governance with input from end users</b>	1.1 Create a Public Safety Communications Commission (PSCC) end users working group to formalize working groups for the PSCC	SWIC	July 2024
	1.2 Complete the statewide Tactical Interoperable Communications Plan (TICP) and the Wyoming Field Operations Guide (WYFOG) with input from the local level	SWIC	July 2024
	1.3 Create policies and procedures on information sharing on outages from communications providers	PSCC	July 2024
	1.4 Establish full-time Statewide Interoperability Coordinator (SWIC) and deputy SWIC positions	SWIC	July 2025
	1.5 Create a full-time 911 Coordinator position and a statewide 911 office	911 Coordinator	July 2025
<b>2. Conduct outreach and education to state and locals about the Statewide Communications Interoperability Plan (SCIP)</b>	2.1 Determine marketing and messaging strategy to conduct roadshows and presentations to Wyoming public safety stakeholders	SWIC, PSCC	July 2024
	2.2 Engage state legislators to promote the SCIP		
<b>3. Develop a Communications Unit Plan and Program</b>	3.1 Request a Cybersecurity and Infrastructure Security Agency (CISA) Technical Assistance (TA) to develop a Communications Unit Plan	CISA, SWIC	August 2023
	3.2 Set up a training budget for Auxiliary Communicator (AUXCOMM) training, as well as an avenue to get Communications Unit Technician (COMT) and Communications Unit Leader (COML) trained and certified	Wyoming Office of Homeland Security (WOHS)	TBD

<sup>1</sup> [Emergency Communications Technical Assistance Planning Guide](#)

Goals	Objectives	Owners	Completion Dates
	3.3 Conduct COML, COMT, and AUXCOMM trainings	WOHS, state training officer	TBD
	3.4 Develop Communications Unit credentialing guidelines	WOHS	TBD
<b>4. Continue maintenance, expansion, and development of a comprehensive statewide interoperable emergency communications system</b>	4.1 Coordinate lifecycle planning for multiple emergency communications systems (land mobile radio [LMR], broadband, cybersecurity, etc.)	WyoLink manager, local agencies	July 2025
	4.2 Increase training for LMR technologies	PSCC working groups	Ongoing
	4.3 Map dead zones and monitor system usage to expand WyoLink coverage and capacity, especially in mountainous regions	WYDOT, WyoLink manager	Ongoing
	4.4 Increase the capabilities of LMR over Long-Term Evolution (LTE)	WyoLink manager	Ongoing
	4.5 Fix system interference and inventory issues with Bi-Directional Amplifiers (BDAs)	WYDOT, local agencies	Ongoing
	4.6 Identify funding for WyoLink radios at the local level	WOHS, PSCC	Ongoing
	4.7 Develop redundancy for critical infrastructure that requires broadband systems	TBD	TBD
<b>5. Enhance 911 capabilities across the state</b>	5.1 Create a state portal for Geographic Information System (GIS) data	911 coordinator, PSCC	July 2025
	5.2 Increase cybersecurity and technology training for Public Safety Answering Points (PSAPs)	CISA, 911 coordinator	July 2026
	5.3 Establish an Emergency Services Internet Protocol Network (ESInet)	911 coordinator, WYDOT	July 2026
	5.4 Share best practices for 911 across the state	911 coordinator	Ongoing
	5.5 Increase staffing for PSAPs	Local agencies	Ongoing
	5.6 Ensure vendors and the Wyoming Department of Enterprise Technology Services (ETS) understand mission criticality for connecting with the WyoLink system and PSAPs	911 coordinator, PSCC	Ongoing
	5.7 Identify funding for Next Generation 911 (NG911) implementation and training	911 coordinator, PSCC	Ongoing
<b>6. Enhance alerts and warnings capabilities across the state</b>	6.1 Recommend best practices from the state level on alerts and warnings, but still balance local control (ex. state templates)	WOHS	TBD
	6.2 Complete the statewide Emergency Alert System (EAS) plan		

Goals	Objectives	Owners	Completion Dates
	6.3 Increase alerts and warnings in other languages		
	6.4 Increase training and exercises on the Integrated Public Alert and Warning System (IPAWS) and Wireless Emergency Alert (WEA) tools		
	6.5 Establish redundancy for IPAWS and alerting tools		
	6.6 Identify more information on data casting for Wyoming		
<b>7. Promote the integration of cybersecurity into the emergency communications ecosystem</b>	7.1 Increase cybersecurity awareness and training at the local level	CISA, SWIC, WOHS, emergency management	Ongoing
	7.2 Engage CISA resources (ex. Cybersecurity Advisors and Protective Security Advisors, cybersecurity TAs)	CISA, SWIC	Ongoing
	7.3 Bring more awareness to the Cyber Assistance Response Effort (CARE) Team	WOHS	TBD



DEFEND TODAY,  
SECURE TOMORROW

# Government Emergency Telecommunications Service

## Overview



Everyday incidents, such as weather-related events, cyber attacks, and human errors, can suddenly cause network congestion or degradation, hindering response times and critical information sharing among essential personnel and organizations. As the Nation’s risk advisor, the Cybersecurity and Infrastructure Security Agency (CISA) offers the Government Emergency Telecommunications Service (GETS), which provides subscribers with priority access and processing on landline telephone networks during emergency incidents.



Improves call completion across carrier networks



Provides resiliency at no cost



Leverages existing technology & equipment

## Key Features of GETS

- Priority over wireline commercial networks and some priority over Wireless Priority Service-enabled cellular networks
- PIN card allows users to utilize the service from any landline phone
- A companion app, PTS Dialer, simplifies the dialing process and improves the likelihood of successfully completing a call

## Who Should Have GETS?

From executive leaders to field personnel, GETS is a valuable service for individuals with national security and emergency preparedness responsibilities within:

- All levels of government (Federal, State, Local, Tribal, Territorial)
- Non-government organizations
- Organizations in the 16 U.S. critical infrastructure sectors (e.g., communications, emergency services, healthcare, energy, food and agriculture, transportation, etc.)

## More Information

Learn more about how GETS is an integral part of an organization’s risk management and communications planning at [cisa.gov/priority-telecommunications-services](https://cisa.gov/priority-telecommunications-services).

Contact the CISA Priority Telecommunications Service Center at 866-627-2255 or at [ecd@cisa.dhs.gov](mailto:ecd@cisa.dhs.gov) to begin enrollment.



# Telecommunications Service Priority



DEFEND TODAY,  
SECURE TOMORROW

## Overview



Everyday incidents, such as weather-related events, cyber attacks, and human errors, can suddenly cause network congestion or degradation, hindering response times and critical information sharing among essential personnel and organizations.

As the Nation’s risk advisor, the Cybersecurity and Infrastructure Security Agency (CISA) offers the Telecommunications Service Priority (TSP) program. TSP assignments allow organizations to request priority installation and restoration of approved voice and data circuits that are critical to its operations.



Vendors give TSP subscribers  
**PRIORITY** treatment



## Key Features of TSP

- Faster installation of critical data and voice communication circuits
- Expedited repair of circuits before non-TSP services following an incident that impacts telecommunications
- Priority granted for both non-emergency (e.g., backhoe damages fiber) and emergency situations (e.g., impacts from natural disasters)

## Who Needs TSP?

Organizations with national security and emergency preparedness responsibilities need TSP, including:

- All levels of government (Federal, State, Local, Tribal, Territorial)
- Non-government organizations
- Organizations in the 16 U.S. critical infrastructure sectors (e.g., communications, emergency services, healthcare, energy, and transportation)

## More Information

Learn more about how TSP is an integral part of an organization’s risk management and communications planning at [cisa.gov/priority-telecommunications-services](https://cisa.gov/priority-telecommunications-services). Contact the CISA Priority Telecommunications Service Center at 866-627-2255 or at [ecd@cisa.dhs.gov](mailto:ecd@cisa.dhs.gov) to begin enrollment.

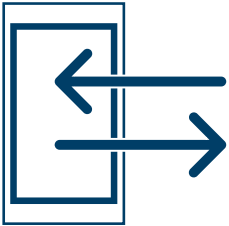




# WIRELESS PRIORITY SERVICE



## OVERVIEW



Everyday incidents, such as weather-related events, cyber attacks, and human errors, can suddenly cause network congestion or degradation, hindering response times and critical information sharing among essential personnel and organizations. As the Nation’s risk advisor, the Cybersecurity and Infrastructure Security Agency (CISA) offers the Wireless Priority Service (WPS).

WPS provides its subscribers with priority access over cellular networks during emergency incidents and in times of congestion and is available nationwide and in some regional cellular networks.



Improves call completion across carrier networks



Provides resiliency at no cost



Leverages existing technologies & equipment

## KEY FEATURES OF WPS

- Priority over wireless networks within U.S. states and territories
- Greatly increases the probability of call completion
- A companion app, PTS Dialer, streamlines the WPS dialing process

## WHO SHOULD HAVE WPS?

From executive leaders to field personnel, WPS is a valuable service for individuals with national security and emergency preparedness responsibilities within:

- All levels of government(Federal, State, Local, Tribal, Territorial)
- Non-government organizations
- Organizations in the 16 U.S. critical infrastructure sectors(e.g., communications, emergency services, healthcare, energy, transportation, food and agriculture, etc.)

## MORE INFORMATION

Learn more about how WPS is an integral part of an organization’s risk management and communications planning at [www.cisa.gov/resources-tools/programs/priority-telecommunications-services](http://www.cisa.gov/resources-tools/programs/priority-telecommunications-services)

Contact the CISA Priority Telecommunications Service Center at 866-627-2255 or at [ecd@cisa.dhs.gov](mailto:ecd@cisa.dhs.gov) to begin enrollment.



[cisa.gov](http://cisa.gov)



[central@cisa.dhs.gov](mailto:central@cisa.dhs.gov)



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**Mark Gordon**  
Governor

# Wyoming Public Safety Communications Commission

5300 Bishop Boulevard, Cheyenne, Wyoming 82009-3340  
Mark Harshman, Chairman | Telephone: 307-777-5065 | Fax: 307-635-6017



**K. Luke Reiner**  
Director

## 2024 Meeting Schedule

Date	Format	Location	Special Notes
February 7, 2024 or February 28, 2024	Zoom		
May 1, 2024 or May 8, 2024	In-person?		
August 7, 2024	Zoom		
October 30, 2024 or November 13, 2024	In-person?		

*Meetings will occur on Wednesdays.*



Mark Gordon  
Governor

# Wyoming Public Safety Communications Commission

5300 Bishop Boulevard, Cheyenne, Wyoming 82009-3340  
Mark Harshman, Chairman | Telephone: 307-777-4015



Darin J. Westby, P.E.  
Director

## Terms & Acronyms Reference

<b>AAR/IP</b>	After Action Report/Improvement Plan
<b>AASHTO</b>	American Association of State Highway & Transportation Officials
<b>ANSI/TIA</b>	American National Standards Institute
<b>APCO</b>	Association of Public Safety Communication Officials
<b>APIC</b>	Association Project 25 Interface Committee
<b>APWA</b>	American Public Works Association
<b>ARRL</b>	American Radio Relay League
<b>ASK</b>	Advance System Key
<b>BIDP</b>	Border Interoperability Demonstration Project
<b>CDP</b>	Center for Domestic Preparedness
<b>CIO</b>	Chief Information Officer
<b>COML</b>	Communications Unit Leader
<b>COMU</b>	Communications Unit
<b>CTO</b>	Chief Technical Officer
<b>DHS</b>	Department of Homeland Security
<b>DUNS</b>	Data Universal Numbering System
<b>E911</b>	Enhanced 911
<b>EHP</b>	Environmental & Historic Preservation
<b>EMI</b>	Emergency Management Institute
<b>FCC</b>	Federal Communications Commission
<b>FCCA</b>	Forestry Conservation Communications Association
<b>FEMA</b>	Federal Emergency Management Agency

<b>FHWA</b>	Federal Highway Administration
<b>FIRSTNET</b>	The National Public Safety Broadband Network
<b>FPIC</b>	Federal Partnership for Interoperable Communications
<b>FRG</b>	First Responders Group
<b>GAA</b>	Grant Award Agreement
<b>GETS</b>	Government Emergency Telecommunications Service
<b>GHSAC</b>	Governors Homeland Security Advisors Council
<b>GPD</b>	Grant Programs Directorate
<b>HSGP</b>	Homeland Security Grant Program
<b>HSIN</b>	Homeland Security Information Network
<b>IAB</b>	Interagency Board
<b>IACP</b>	International Association of Chiefs of Police
<b>IAEM</b>	International Association of Emergency Managers
<b>IAFC</b>	International Association of Fire Chiefs
<b>ICMA</b>	International City/County Management Association
<b>KMF</b>	Key Management Facility
<b>LETPA</b>	Law Enforcement Terrorism Prevention Activities
<b>LMR</b>	Land Mobile Radio
<b>LTE</b>	Long Term Evolution
<b>MCC</b>	Major Cities Chiefs Association (Police)
<b>MCSA</b>	Major County Sheriffs' Association
<b>NACO</b>	National Association of Counties
<b>NASF</b>	National Association of State Foresters
<b>NASCIO</b>	National Association of State Chief Information Officers
<b>NASEMSO</b>	National Association of State EMS Officials
<b>NASNA</b>	National Association of State 911 Administrators

<b>NASPO</b>	National Association of State Procurement Officers (replaced WISCA)
<b>NASTD</b>	National Association of State Technology Directors
<b>NATOA</b>	National Association of Telecommunications Officers & Advisors
<b>NCAI</b>	National Congress of American Indians
<b>NCHRP</b>	National Cooperative Highway Research Program
<b>NCJA</b>	National Criminal Justice Association
<b>NCSL</b>	National Conference of State Legislatures
<b>NCSWIC</b>	National Council of Statewide Interoperability Coordinators
<b>NDPC</b>	National Domestic Preparedness Consortium
<b>NECP</b>	National Emergency Communications Plan
<b>NEMA</b>	National Emergency Management Association
<b>NEMSMA</b>	National EMS Management Association
<b>NENA</b>	National Emergency Number Association
<b>NEPA</b>	National Environmental Policy Act
<b>NG911</b>	Next Generation 911
<b>NGA</b>	National Governors Association
<b>NIMS</b>	National Incident Management System
<b>NLC</b>	National League of Cities
<b>NOFO</b>	Notice of Funding Opportunity
<b>NPSTC</b>	National Public Safety Telecommunication Council
<b>NSA</b>	National Sheriffs' Association
<b>NTED</b>	National Training & Education Division's
<b>OCTO</b>	Office of the Chief Tech Officer
<b>OEC</b>	Office of Emergency Communications (Dept. of Homeland Security)
<b>OPM</b>	Office of Personnel Management
<b>OTAR</b>	Over The Air Rekeying

<b>P25</b>	Project 25 Radio network
<b>P25 SOR</b>	Project 25 Statement of Requirements
<b>PEIS</b>	Programmatic Environmental Impact Statement
<b>POC</b>	Point of Contact
<b>PSAP</b>	Public Safety Answering Point
<b>PSCC</b>	Public Safety Communications Commission
<b>RDPC</b>	Rural Domestic Preparedness Consortium
<b>RECCWG</b>	Regional Emergency Communications Coordination Work Group
<b>RIC</b>	Regional Interoperability Committees (subcomponent of NCSWIC)
<b>S&amp;T</b>	Science & Technology
<b>SAA</b>	State Administrative Agency
<b>SAC</b>	Senior Advisory Committee
<b>SAFECOM</b>	Safety Communiqué (works in conjunction with NCSWIC)
<b>SAT Phones</b>	Satellite Phones
<b>SCIP</b>	Statewide Communication Interoperability Plan
<b>SEARCH</b>	National Consortium of Justice Information Statistics
<b>SHSP</b>	State Homeland Security Program
<b>SIGB</b>	Statewide Interoperability Governing Body
<b>SLIGP</b>	State & Local Implementation Grant Program
<b>SOR</b>	Statement of Requirements
<b>SPOC</b>	State Point of Contact
<b>SPR</b>	State Preparedness Report
<b>STA</b>	Science & Technology Agency
<b>STO</b>	State Training Officer
<b>SWIC</b>	Statewide Interoperability Coordinator
<b>TA</b>	Technical Assistance

<b>TIA</b>	Telecommunications Industry Association
<b>THIRA</b>	Threat & Hazard Identification & Risk Assessment
<b>TSBs</b>	Telecommunications Systems Bulletins
<b>TSP</b>	Telecommunications Service Priority
<b>UCM</b>	U.S. Conference of Mayors
<b>UNS</b>	User needs Subcommittee
<b>WOHS</b>	Wyoming Office of Homeland Security
<b>WPS</b>	Wireless Priority Service



Mark Gordon  
Governor

# Wyoming Public Safety Communications Commission

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Director

## Wyoming State Statute, Title 09 Article 11 Public Safety Communications Commission

### 9-2-1101 – Commission; created; definitions.

- (a) The public safety communications commission is created.
- (b) As used in W.S. 9-2-1101 through 9-2-1104:
  - (i) "Public safety agency" means any federal, state or political subdivision entity that provides emergency and public safety services, including state agencies employing peace officers enumerated in W.S. 6-1-104(a)(vi)(C) through (F) and approved for participation by the communications commission, fire management services, correctional services, emergency management, emergency and disaster relief services and if desired, county, municipal and federal law enforcement agencies;
  - (ii) "System" means the wireless communications network providing regional and statewide radio communications capabilities to public safety agencies.

### 9-2-1102 – Commission; composition; appointment of members; removal; terms; officers; vacancies; meetings.

- (a) The commission shall consist of thirteen (13) voting members to be appointed by the governor and who may be removed by the governor as provided in W.S. 9-1-202. The voting members shall be appointed from each of the following associations and agencies from their membership:
  - (i) Wyoming police chiefs association;
  - (ii) Wyoming sheriffs association;
  - (iii) Division of criminal investigation, office of the attorney general;
  - (iv) Wyoming game and fish department;
  - (v) Wyoming department of transportation;
  - (vi) Repealed by Laws 2017, ch. 17, § 2.
  - (vii) Repealed by Laws 2017, ch. 17, § 2.
  - (viii) Wyoming fire chiefs' association;
  - (ix) Repealed by Laws 2017, ch. 17, § 2.
  - (x) Repealed by Laws 2017, ch. 17, § 2.



- (xi) The public at large;
  - (xii) An ambulance and emergency medical services organization;
  - (xiii) The Wyoming association of municipalities or another municipal government association;
  - (xiv) The Wyoming county commissioners association or another county government association;
  - (xv) Repealed by Laws 2017, ch. 17, § 2.
  - (xvi) Tribal government or a tribal government association;
  - (xvii) Repealed by Laws 2017, ch. 17, § 2.
  - (xviii) A member of the Wyoming chapter of the association of public safety communications officials or the national emergency number association;
  - (xix) The Wyoming office of homeland security.
- (b) Repealed by Laws 1991, ch. 121, § 2.
- (c) The commission shall elect from its members a chairman, a vice-chairman and a secretary. Vacancies in these offices shall be filled by the commission from its membership. The commission shall meet at least once every three (3) months. Appointments by the governor shall be made within thirty (30) days of expiration of membership terms. Nominee lists shall be furnished within ten (10) days upon expiration of any membership term. Each member shall serve a three (3) year term. A vacancy on the commission shall be filled for the unexpired term by the governor.
- (d) The person appointed to the commission pursuant to paragraph (a)(v) of this section shall be the chief technology officer of the Wyoming department of transportation or another employee of the Wyoming department of transportation who oversees information technology or telecommunications systems.

### **9-2-1103 – Commission; compensation of members.**

Members of the commission shall receive mileage and per diem provided state employees.

### **9-2-1104 – Commission; powers and duties; advisory capacity to promote system development; public meetings; clerical and administrative support.**

- (a) The commission shall:
- (i) Work with the state budget department, the department of enterprise technology services, the department of homeland security and the department of transportation in an advisory capacity to promote the development, improvement and efficiency of public safety communications systems in the state;

- (ii) Report in writing each year to the governor and the joint transportation, highways and military affairs interim committee concerning any problems related to the installation, operation and maintenance of the system and shall make any recommendations it deems appropriate as a part of the report;
  - (iii) Submit a plan for statewide system networking to the department of enterprise technology services for inclusion in the statewide telecommunications plan developed pursuant to W.S. 9-2-2906(g);
  - (iv) In cooperation with participating federal agencies, establish and assess user fees upon any federal law enforcement agency electing to use and participate in the system;
  - (v) Promulgate necessary rules and regulations governing system operation and participation and upon failure to comply with adopted rules and regulations, may suspend system use and participation by any participating and noncomplying public safety agency or private entity;
  - (vi) Determine the participation of public safety agencies and private entities in the wireless communications network;
  - (vii) On or before May 31 of each odd numbered year, submit to the governor and the joint transportation, highways and military affairs interim committee a report covering the period beginning July 1 of the following year and ending June 30 in the fourth succeeding year detailing the expected costs of implementing the statewide system networking plan. The report shall include projections of one-time and recurring costs;
  - (viii) Recommend guidelines and standards for the development, implementation and operation of next generation 911 emergency communications systems and interoperable public safety communications and data systems in the state, including strategies for improving Wyoming's current 911 system. As part of the recommendations developed under this paragraph, the commission may identify short-term and long-term technological and policy solutions that integrate existing legacy communications infrastructure into an interoperable system and may develop and submit recommendations for legislation or other state action to further develop and support next generation 911 operations in Wyoming;
  - (ix) Promulgate necessary rules and regulations governing next generation 911 system operation and participation.
- (b) The commission may hold public meetings throughout the state and may take other appropriate measures to maintain close liaison with regional, county and municipal organizations and agencies involved in the system.
- (c) Necessary clerical and administrative support for the commission shall be furnished by the Wyoming department of transportation.

**9-2-1105 – Repealed By Laws 2004, Chapter 41, § 2.**

**9-2-1106 – Repealed By Laws 2004, Chapter 41, § 2.**

