Wyoming Department of Transportation

Public Safety Communications Commission

Business Meeting Packet

IN-PERSON BUSINESS MEETING

Held Wednesday, May 11, 2022, at 1:30 p.m.

| WYDOT Headquarters | 5300 Bishop Blvd., Cheyenne, WY 82009 |

Wyoming Public Safety Communications Commission
COMPLETE PACKET INDEX

Mark Gordon
Governor

K. Luke Reiner
Director

Mark Harshman
Chairman

Telephone No.:
(307) 777-4015

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Wyoming Department of Transportation
Public Safety Communications Commission
Business Meeting Agenda

Mark Gordon
Governor

K. Luke Reiner
Director

Mark Harshman
Chairman

Telephone No.:
(307) 777-4015

May 11, 2022, at 1:30 P.M. | Auditorium, WYDOT Headquarters, Cheyenne, Wyoming | Zoom Webinar – Call Secretary for Information at 777-4015

I. CALL TO ORDER

II. ROLL CALL

III. INTRODUCTIONS

IV. CHANGES/ADDITIONS TO AGENDA *(Tab 1)*

V. ACTION ITEMS

1. _____ Consideration of February 9, 2022, Draft Meeting Minutes *(Tab 2)*
2. _____ Consideration of WyoLink Application – Mr. Gardiner *(Tab 3)*
    A. ___ Rocky Mountain Communications

VI. UPDATES/DISCUSSION

1. _____ Director's Report – Director Reiner
2. _____ Chief Technology Officer's Report – Mr. Babbitt
    A. ___ NG911 Updates – Mr. Babbitt and Ms. Binning
    B. ___ Federal Legislative Update
    C. ___ State Legislative Update *(Tab 4)*
        i. ___ Senate File 41 – Expanding Next Generation 911
        ii. ___ House Bill 12 – Public Safety Communications Funding
3. _____ Emergency Communications Program Manager's Report – Mr. Smolinski
    A. ___ 16-Tower Buildout Report *(Tab 5)* – Mr. Smolinski
        i. WyoLink Site Map *(Tab 6)*
    B. ___ WyoLink Operational Updates – Mr. Gardiner
        i. ___ WyoLink System Reports *(Tab 7)* – Mr. Smolinski and Mr. Gardiner
        ii. ___ WyoLink System Upgrades – Mr. Gardiner
        iii. ___ Smart and Critical Connect – Mr. Smolinski and Mr. Gardiner
    C. ___ Statewide Interoperability Coordination Updates – Mr. Smolinski
    D. ___ FirstNet Updates – Mr. Smolinski

The order of agenda is subject to change. The State of Wyoming supports the Americans with Disabilities Act. Anyone needing aid should contact the Aeronautics Commission at 307-777-4015. Every effort will be made for reasonable accommodations.

VII. RETIREMENTS

1. _____ Staff & Commissioners

VIII. PUBLIC COMMENT

IX. ADJOURNMENT

The order of agenda is subject to change. The State of Wyoming supports the Americans with Disabilities Act. Anyone needing aid should contact the Aeronautics Commission at 307-777-4015. Every effort will be made for reasonable accommodations.

Mark Gordon
Governor
K. Luke Reiner
Director

Wyoming Department Of Transportation
PUBLIC SAFETY COMMUNICATIONS COMMISSION
Draft Meeting Minutes

Mark Harshman
Chairman
Telephone No.:
(307) 777-4015

I. Call to Order

The Public Safety Communications Commission (PSCC) met in the I-80 Room at the Wyoming Department of Transportation (WYDOT) Training Building in Cheyenne on Wednesday, February 9, 2022. Chairman Mark Harshman presided, calling the meeting to order at 1:30 P.M.

II. Roll Call

The following members were present constituting a quorum:

Paul Bertoglio, Commissioner	Kebin Haller, Commissioner
Matt Carr, Commissioner	Dwane Pacheco, Commissioner
Mike Choma, Commissioner	Forrest Williams, Commissioner
Doug Frank, Commissioner	Luke Reiner, Ex Officio Member

Commissioner Jonathan Downing was absent. The tribal and Emergency Management Services seats remain vacant.

III. Introductions

The following attendees participated in the meeting:

Troy Babbitt, WYDOT Chief Technology Officer	Nathan Smolinski, WYDOT Emergency Communications Manager
Neil Gardiner, WyoLink Support Manager	Aimee Binning, 911 Planning Coordinator
Kimberly Chapman, Commission Secretary	Mike Kahler, Senior Assistant Attorney General

Susan Elliott assisted with virtual meeting management.

IV. Agenda Adjustments

No adjustments were made to the agenda.

V. Action Items

1. Draft Meeting Minutes
   It was moved by Commissioner Haller, seconded by Commissioner Williams, and unanimously carried to approve the October 13, 2021, business meeting minutes.

2. WyoLink Applications
   It was recommended by Mr. Gardiner, moved by Commissioner Frank, seconded by Commissioner Pacheco, and unanimously carried to approve the applications from Southwest Wyoming Regional Airport and the U.S. Postal Inspection Service.

VI. Updates/Discussions

1. Director's Update
   Director Reiner presented his update.

   COVID-19
   COVD-19 case numbers at WYDOT have leveled off, and the agency continues not to track vaccination status.

   Federal Updates
   The Infrastructure Investment and Jobs Act (IIJA), also referred to as the Bipartisan Infrastructure Law (BIL), will provide WYDOT with approximately $100 million annually in additional formula funding for the next five years. This funding will be used primarily for roads and bridges, electric vehicle (EV) infrastructure, and broadband.

   The director asked the commission to keep a few things in mind as WYDOT waits for the federal government to determine funding and administrative processes. One, the IIJA contains a large amount of discretionary funding for state and local governments and agencies, but it is not yet clear how the state will synchronize and streamline the application process for these funds and access appropriate matches. Governor Gordon has created a task force to discuss these issues and decide on processes.

   Two, EVs will be a reoccurring priority since the IIJA allots $27 million over the next five years to WYDOT. The director will brief the governor's chief of staff later today on WYDOT's initial strategic plan for those funds. As the funding recipient, WYDOT will lead a collaborative, multi-agency effort to ensure that EV infrastructure is in place along our main transportation corridors.

   Finally, the director reminded the commission that the federal government is still operating under a continuing resolution, which holds WYDOT at last year's funding levels. Congress has yet to fund fully the IIJA. Delays in funding will affect timelines for project spending.

   State Updates

   Budget
   No major changes have been made to WYDOT's proposed budget, including the accompanying 20 exception requests. None of the exception requests required additional funding; all were seeking permission to spend funds that had already been allotted to the agency. A few requests are for WyoLink. Director Reiner feels that there is growing support in the legislature for WyoLink because of demonstrated success and increased subscribers.

   In addition to the exception requests, two separate pieces of legislation have been proposed that could potentially provide funding for WyoLink.

The legislature is working on a budget for American Rescue Plan Act (ARPA) funds, which includes a line item for WyoLink. If approved, it will provide $35 million to expand the WyoLink system.

Compensation
The governor has put forward a compensation package to the legislature that would provide raises to state employees. The proposed package successfully cleared the Joint Appropriations Committee with no suggested changes. This package represents the first of several phases to increase employee recruitment and retention. Future phases could include additional salary/wage increases and the implementation of step increases.

Other Legislation
Director Reiner shared that the department is monitoring two additional revenue bills: fuel tax and reallocation of severance taxes. Updates will be provided as available. A must-pass bill for WYDOT is HB0007, Commercial vehicle driving disqualification. This bill mirrors federal law and stipulates that anyone convicted of using their commercial vehicle in the commission of felony human trafficking will be disqualified from driving a commercial vehicle in Wyoming for life. If the bill is not passed, it could lead to the decertification of Wyoming's commercial driver's license program and the loss of 4 percent of federal funding. Director Reiner requested that commissioners speak in favor of this bill.

Commissioner Choma addressed the issue of employee compensation; he felt that WYDOT leadership should discuss the classification of certain positions, such as dispatchers, as a way to address compensation. Director Reiner agreed and shared that WYDOT has worked with the Human Resources Division (HRD) to obtain a raise in pay for dispatchers—hourly wages will increase to about $17 an hour. Next they will work to adjust classifications for Transportation Management Center (TMC) operators to bring parity with dispatchers.

2. Chief Technology Officer's Report
Troy Babbitt presented his update. The update also included information presented by Ms. Binning on Next Generation 911 (NG911).

Commission Vacancies
The PSCC currently has two vacancies in its membership: tribal and emergency medical services. Mr. Babbitt shared that he and Ms. Chapman are working diligently to fill those positions. The Wyoming EMS Association will discuss their representative's vacancy at the association's annual meeting tomorrow and make a recommendation.

Mr. Babbitt thanked the commissioners for visiting the TMC and the dispatch center. He reminded the commissioners of the critical need to upgrade the microwave backhaul. WYDOT is currently using older, legacy T1-type technology. The long-term goal is to upgrade to Ethernet as it would provide more space to offload traffic, especially as the

state moves to NG911. Mr. Babbitt believes that upgrading microwave capability should be a high priority in funding discussions.

Next Generation 911 (NG911)

Ms. Binning updated the commissioners on the work of the NG911 workgroups. The Education and Outreach Workgroup made a presentation on NG911 funding at the Sheriffs Association's conference in November. The presentation addressed funding deficits, the importance of geographic information system (GIS) mapping technology, and upcoming legislation. Committee members Joey Williams, Campbell County Sheriff's Office; Amber Young, Laramie County Combined Communications Center; Monte McClain, Park County Sheriff's Office; and Sierra Borovatz, Washakie County Sheriff's Office assisted with the presentation.

Mr. Babbitt shared that the NG911 state plan is complete; however, current legislation could impact funding and require modifications to the plan. Therefore, the plan will be released after the legislative session.

Proposed Legislation

Federal

Mr. Babbitt reported that the Build Back Better plan, which would have allocated $10 billion in NG911 funding to the states, has stalled in Congress. The bill is not dead, but Mr. Babbitt is unsure of the outcome.

State

The 2022 Budget Session begins next week and there are a few bills pertaining to WyoLink and the PSCC. Senate File 41, Expanding NG911, would give the PSCC oversight of the development, implementation and operation of NG911 emergency communications systems in the state. It would also add two new members to the commission from the Association of Public Safety Communications Officials or the National Emergency Number Association and the Wyoming Office of Homeland Security. Federal NG911 grants requires a governing body to oversee funds disbursement to local entities, and SF0041 would create this structure and allow Wyoming to pursue federal grants.

House Bill 12, which resulted from the summer meetings of the Joint Transportation Committee, addresses public safety communications funding. Mr. Babbitt and Mr. Smolinski served on a working group with members of the Wyoming County Commissioners Association (WCCA) to explore funding streams for WyoLink, but the group could not find any satisfactory solutions. As an alternative solution, HB0012 would appropriate $89 million of unexpended, unobligated ARPA funds for the expansion and maintenance of the WyoLink system.

In anticipation of this bill's passage, Messrs. Babbitt, Smolinski, and Gardiner have identified and prioritized the next 17 sites for additional WyoLink towers. Other

potential uses for these funds include updating the microwave backhaul, updating Quantar radios, channel expansion, and other department priorities. WYDOT is ready to make recommendations upon the passage of the bill.

The governor has also proposed $35 million in ARPA funds for WyoLink. Additionally, the Mineral Royalty Grant, which would cover the local share for WyoLink, is still included in the budget bill. These funds could potentially cover maintenance costs through the biennium and would give WYDOT more time to search for long-term funding solutions.

Following a question on costs from Commissioner Choma, Mr. Babbitt shared that each WyoLink tower site costs about $1.9 million, with an additional $34,000 a year in maintenance costs. The team tries as much as possible to collaborate or colocate with internet service providers, Enterprise Technology Services, and the broadband buildout to increase capacity and decrease costs.

3. Emergency Communications Program Manager's Report
Mr. Smolinski provided his update. The update also included information presented by Mr. Gardiner regarding WyoLink operations.

16 Tower Build-Out Report
Mr. Smolinski reported that construction has slowed for the winter. The team has concentrated its efforts on finalizing right of way (ROW) and utility agreements. Two sites have seen significant progress in access agreements with the Bureau of Land Management (BLM): the Little Sheep Mountain site in Bighorn County and the site on Kismet Peak outside Bondurant. The Little Sheep site awaits final BLM approval following meetings with a power company to mitigate concerns over possible interference.

The Kismet Peak site is a colocate with Sublette County; WyoLink equipment will be installed on a county tower. WYDOT worked with the county to update site dimensions on their application with the BLM. Mr. Smolinski also had to survey private landowners to determine how much will be owed to landowners as part of the ROW agreements. The goal is to conclude all agreements before the start of the spring construction season.

The Buffalo, Orin Junction, Wright, Jackson, Greybull, Lusk, Alcova, Alva, and Rock Springs-Blairtown sites have all been operating successfully and have improved coverage in their respective areas. The team is working to get fiber connectivity at the Lusk site.

The team has attempted to use a cell modem for temporary backhaul while the microwave system is being built at the Rock Springs-14 Mile Hill site. Work at the Ten Sleep-Meadowlark site has been paused for winter. The ROW agreements have been completed for the Northern Goshen County site, and Mr. Smolinski reports that construction will begin in the spring.

The Newcastle site is currently delayed by lease agreements. Mr. Smolinski is trying to set up a meeting with the city and a private landowner to discuss the lease. All agreements have been completed for the Evanston site, and construction will begin in the spring. Mr. Smolinski is also working with Motorola to renew the site contract for another year.

Commissioner Frank asked how WYDOT quantifies the benefit that these 16 sites have provided—access, additional capacity, and improved quality—to the WyoLink system. He enquired how the commission and department could best demonstrate the value of the WyoLink system to the legislature as we pursue funds for additional sites. Mr. Smolinski felt that while the statistics in the user reports help demonstrate WyoLink's value, stories and testimonies from local subscribers would be more impactful. Commissioner Frank expressed his hope that the commission and staff keep thinking about and discussing ways to promote WyoLink.

Commissioner Choma also suggested including usage data on the WyoLink website and enquired how the national supply chain crisis could impact the buildout. Mr. Smolinski shared WYDOT is seeing shortages/backorders in construction steel, HVAC units, and backup generators. Commissioner Pacheco felt that public education on WyoLink would be another key component in obtaining additional funding for the system.

<u>WyoLink Operational Updates</u>

WyoLink Paging
Mr. Gardiner reported that his team demoed Unication pagers in Converse County, but they were not utilized. The team will now provide pagers to Teton County for testing and possible adoption. Each pager costs between $700 and $800.

WyoLink System Reports
Mr. Gardiner shared slides on WyoLink usage data. The slides contained information on the top 20 talkgroups, first quarter of Fiscal Year (FY) 2022 system statistics, and agencies that have currently received radios purchased under the contract with Motorola. The Wyoming Highway Patrol (WHP) has received 75 portable and 60 mobile radios, but accessories and 15 more mobiles are expected before installation can occur. Five hundred mobile radios and 50 portable radios have been ordered for WYDOT.

Mr. Gardiner updated the commission on infrastructure upgrades. New GTR radios and DC power plants have been installed at two out of 18 sites. Another site is scheduled to be upgraded in late February or early March, and other sites will be upgraded based on accessibility and scheduling. Additionally, the department has ordered Nokia service aggregation routers (SARs), which will allow radio sites to be converted to Ethernet. Several WYDOT technicians completed training last fall on the new equipment, so they will have the skills and knowledge to operate the technology.

WyoLink Training

Mr. Smolinski demoed the new WyoLink training slides for the commission. The PowerPoint presentation has been designed for use by local agencies to train their own users. The training provides trainees with a consistent foundation on WyoLink operations while allowing local instructors to customize slides to include location- and equipment-specific information. The commissioners thanked and complemented Mr. Smolinski and the entire WyoLink team on their efforts to create the training.

Statewide Interoperability Coordination Updates

Mr. Smolinski is working with CISA on technical assistance programs, and the largest program to be updated—in every county in the state—is the tactical interoperable communications plan (TICP). TICP was overdue for an update as its last update was in 2015. WYDOT will work with each county and CISA to update each line item on Homeland Security's existing plan, from which a master plan will be created. The project should take about a year. The master plan will give WYDOT a clearer picture of how WyoLink fits into each county's communications operations.

FirstNet Updates

Mr. Smolinski reported that the critical connect contract has been set up with Motorola. Critical connect is a platform that will allow the department to connect to the FirstNet and Verizon cores and take WyoLink land mobile radios (LMR) and merge it with AT&T LTE technology. A similar set-up will be created with Verizon in the near future.

WYDOT is collaborating with the Casper Police Department to develop protocols for using FirstNet. Mr. Smolinski and his staff are working to create an AT&T "push to talk talkgroup," comprised of essential and existing talkgroups. It will then be mapped to other, select WyoLink talkgroups. Mr. Smolinski showed the commission a FirstNet capable phone that he is currently testing, which will tie into a few WyoLink talkgroups. He felt that phones, like the one he is currently using, might be a good fit for smaller agencies who cannot afford to purchase WyoLink radios.

Mr. Smolinski admitted that more planning is still needed and policies will need to be created for FirstNet, but he is communicating with other states that are already using the platform to collect best practices and lessons learned. He shared that the policies developed for FirstNet will mirror the WyoLink model for adding new subscribers and users. The PSCC, with recommendations from the department, will ultimately decide which devices are allowed to access WyoLink. Mr. Smolinski hopes to be able to offer the commission a partial demonstration at the May commission meeting.

Following a question from Commissioner Frank, Mr. Smolinski shared that while these phones have to route through cell and WyoLink towers, users will experience very little delay. He also shared that if one of these devices is on the WyoLink network, it will be treated like a WyoLink radio. Phones allowed on the system will be assigned a WyoLink identification number, and the WyoLink office will have control over the device. The FirstNet app can be installed on both Apple and Android devices, and the range is based on cellular network availability. Director Reiner inquired if the use of these devices will

lead to an increase in the number of WyoLink channels, and Mr. Smolinski explained that it will not as signals between FirstNet capable devices and WyoLink radios will not be synchronized at WyoLink sites.

Following a question from Commissioner Pacheco, Mr. Smolinski explained that any agency wishing to bring these devices onto WyoLink will need to submit one application that covers all devices. He also shared that the commission will need to decide if they would like to see and vote on all of these applications from existing subscribers, or if the department can handle these requests on the commission's behalf. Commissioner Haller felt that these devices would be covered under agreements already in place and that the WyoLink office could use their discretion with these agreements. Mr. Smolinski concurred with this suggestion, and there was consensus from the rest of the commission to support it.

VII. Public Comment/Announcements

There was no public comment.

VIII. ADJOURNMENT

It was moved by Commissioner Frank, seconded by Commissioner Haller, and unanimously carried to adjourn the February 9, 2022, business meeting at 3:11 p.m.

Mark Gordon
Governor
K. Luke Reiner
Director

Wyoming Department of Transportation
PUBLIC SAFETY COMMUNICATIONS COMMISSION
Draft Education Session Minutes

Mark Harshman
Chairman
Telephone No.:
(307) 777-4015

An education session for the Wyoming Department of Transportation (WYDOT) Public Safety Communications Commission was held at the Transportation Management Center (TMC) and the WyoLink Offices, Cheyenne, on February 9, 2022. The session began at 9:30 a.m.

The following commission members were present, constituting a quorum.

Mark Harshman, Chairman
Doug Frank, Vice Chairman
Dwane Pacheco, Secretary
Frosty Williams, Commissioner
Mike Choma, Commissioner
Matt Carr, Commissioner
Paul, Bertoglio, Commissioner
Kebin Haller, Commissioner
Luke Reiner, Ex Officio, WYDOT Director

Commissioner Jonathan Downing was absent.

The following WYDOT staff were present and participated in the business meeting.

Troy Babbitt, Chief Technology Officer
Vince Garcia, ITS/GIS Program Manager
Patty Bauer, Dispatch Manager
Neil Gardiner, WyoLink Support Manager
Kimberly Chapman, Commission Secretary
Nathan Smolinski, Emergency Communications Manager
Gabriel Gutierrez, TMC Quality Control
Heather Heiduck, Assistant Dispatch Manager
David Shepard, WyoLink Support Principal Technician

Other attendees included the team from the WyoLink Support Office: Jason Gilmor, Mark Coler, and Callie Strode.

Overview and Tour of TMC and Dispatch Center

Before touring the TMC and Dispatch Center, the commissioners heard a presentation on the history and function of the TMC from Mr. Gutierrez and Mr. Garcia. Mses. Bauer and Heiduck shared information on the Dispatch Center. The TMC and Dispatch Center are collocated in adjacent rooms in the basement of the Century Link Building in Cheyenne.

While the TMC and Dispatch Center do coordinate efforts when major events occur, their primary functions differ. The TMC has several functions, including: dispatching the WYDOT maintenance fleet; supplying information on road conditions and weather, crash events, construction, variable speed limits and closures, and AMBER alerts; providing catastrophic event coordination; updating dynamic messaging signs; and so on. Since the centralization of operations at the TMC in 2008, better coordination has insured greater consistency of information and service to the public.

The Dispatch Center principally handles communication and coordination for all Wyoming Highway Patrol (WHP) efforts, statewide. The center provides the communications link between the public, WHP, and other emergency services. Dispatchers ensure that troopers receive the necessary information to aid in emergencies and incidents safely and effectively.

Commissioners were then given a tour of both the TMC and the Dispatch Center. Mr. Gutierrez explained the control systems to the commissioners and demonstrated some of the systems that TMC operators use on a daily basis. Mses. Bauer and Heiduck conducted a similar tour of the Dispatch Center and shared their biggest operational challenges (dispatcher vacancies and job classification/compensation).

Overview and Tour of WyoLink Office and Facility

Upon adjourning to the WYDOT campus, Messrs. Smolinski and Gardiner gave the commissioners a tour of the WyoLink and Emergency Communications offices in the basement of the Planning Building. Commissioners were shown the control and equipment rooms for WyoLink, Telecomm offices and equipment, and various Emergency Communications offices.

Mr. Shepard demoed the WyoLink control systems for the group. The live map of statewide tower sites was of particular interest as it allowed commissioners to see real-time WyoLink radio traffic and call volume.

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

Date: _04/27/2022

Requesting Agency: Rocky Mountain Communication Systems

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 WyoLink Radio Provider_____

Emergency Response Support
- ☐ Transportation
- ☐ Support – Red Cross, Salvation Army, etc.
- ☐ Weather Service
- ☐ Public Works
- ☐ Court Services
- ☐ Regulatory
- ☒ Other Public Safety Radio Support_____

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.

RMCS is a authorized dealer, service center and repair shop for L3Harris, Tait, and BK Technologies radios. We sell, maintain, and troubleshoot multiple agencies using the WyoLink system such as Evansville PD, Johnson County SO, Jackson Hole Fire and EMS, Sublette County Unified Fire, Sublette County EMS, Sublette County SO, Sublette County School District #1 & #9. RMCS also maintains the entire SIRS or (Sublette County Interoperable Radio System) including the ISSI connection to the WyoLink system. It would be of great benefit for RMCS to have access to the WyoLink system for troubleshooting and helping maintain a good connection to the SIRS system. Ideally RMCS would like to receive 2 UID's per tech one for portable and one for mobile that would total 12 UID's. Attached is our sponsorship letters from 2 of our respective customers. RMCS can also provide a cache of radios in the event they would need deployed using MAT's, CAT's, and/or respective customer Talk groups.

(Attach Supporting Documentation)

Name of individual completing application: _Trevor Winjum

Title: Senior Radio Technician

Address: 414 S. Elm St. Casper Wyoming 82601

Phone: 307-266-2260

E-Mail Address: Markw@rkycom.com ; Trevorw@rkycom.com

Signature: Mark Warner; Trevor Winjum

Send Completed Application to:

WyoLink
Wyoming Department of Transportation
5300 Bishop Boulevard
Cheyenne, WY 82009
E-Mail Address: wyolink@wyo.gov

Mutual Aid Channel Approval: _*Not Requested*_____
(*If Requested)*** Wyoming Highway Patrol

Please complete the following for Mutual Aid Request:

Number of Mobile Radios: 6 Tech; 5 cache

Number of Portable Radios: 6 Tech; 22 cache

Number of Dispatch Centers:
(Control Stations)

SUBLETTE COUNTY SHERIFF'S OFFICE

Sheriff K.C. Lehr
P.O. Box 701
35 ½ S. Tyler Ave.
Pinedale, WY 82941

Thursday, April 21st, 2022

Wyoming Department of Transportation – WYOLINK
5300 Bishop Boulevard
Cheyenne, WY 82009

RE: Sponsorship Letter

To Whom it May Concern:

Please accept this letter as proof of sponsorship from the Sublette County Sheriff's Office (SCSO), a public safety agency, for Rocky Mountain Communication System's (RMCS), a non-governmental entity. SCSO has worked closely with RMCS on our County wide Sublette Interoperable Radio System (SIRS) from inception, to final acceptance, to monitoring and maintenance. I have been very pleased with their work ethic, knowledge, and commitment to Sublette County.

If you have any questions, please feel free to contact me at (307) 367-4378 Ext. 5170 or my e-mail address provided below.

Respectfully,

KC Lehr
Sheriff
Sublette County Sheriff's Office
kclehr@subso.com

SUBLETTE COUNTY UNIFIED FIRE

PO Box 2410 Pinedale WY 82941 Tel: 307-367-4550 Email: unifiedfire@sublettewyo.com

April 19, 2022

Wyoming Department of Transportation - WYOLINK
5300 Bishop Boulevard
Cheyenne, WY 82009

RE: SPONSORSHIP LETTER

To Whom It May Concern:

Please accept this letter from Sublette County Unified Fire (SCUF) as proof of sponsorship from a public safety agency for Rocky Mountain Communication System's (RMCS) application for WyoLink membership as a non-governmental entity. SCUF relies on RMCS to program and maintain our entire fleet of Land Mobile Radio (LMR) subscriber units; including all WyoLink codeplug programming.

If you need further information or have any questions, please feel free to contact me.

Sincerely,

Shad Cooper
Fire Chief/Warden
Sublette County Unified Fire

HOUSE BILL NO. HB0012

Public safety communications funding.

Sponsored by: Joint Transportation, Highways & Military Affairs Interim Committee

A BILL

for

AN ACT relating to public safety communications; providing an appropriation; and providing for an effective date.

Be It Enacted by the Legislature of the State of Wyoming:

Section 1.

(a) There is appropriated to the department of transportation eighty-nine million three hundred ninety thousand dollars ($89,390,000.00) from any unexpended, unobligated American Rescue Plan Act funds that were appropriated in 2021 Wyoming Session Laws, Chapter 166, Section 5(b). This appropriation is for purposes of infrastructure, development, expansion, operations and maintenance for the statewide interoperable public safety

communications system, commonly referred to as WyoLink, and that are consistent with the terms of the American Rescue Plan Act, excluding the provision of government services related to a reduction in revenue. Any unobligated, unexpended funds remaining from this appropriation on October 1, 2024, may be transferred and expended upon approval by the governor for any other purposes authorized by the legislature and consistent with the terms of the American Rescue Plan Act. Transfers and expenditures under this section shall be reported to the legislature through the B-11 process as authorized by W.S. 9-2-1005(b)(ii) and reported pursuant to W.S. 9-2-1013(b).

(b) As used in this section, "American Rescue Plan Act funds" means funds appropriated or disbursed to the state of Wyoming through the Coronavirus State Fiscal Recovery Fund established under section 602 of title VI of the federal Social Security Act and the Coronavirus Capital Projects Fund established under section 604 of title VI of the federal Social Security Act, as created by section 9901 of the American Rescue Plan Act of 2021, P.L. 117-2.

Section 2. This act is effective immediately upon completion of all acts necessary for a bill to become law as provided by Article 4, Section 8 of the Wyoming Constitution.

(END)

FISCAL NOTE

This bill contains an appropriation of $89,390,000 from the AMERICAN RESCUE PLAN ACT FUNDS to the Department of Transportation.

DETAIL OF APPROPRIATION
Agency #: 045 Agency Name: Department of Transportation
Unit: 7101

EXPENDITURE BY SERIES AND YEAR	FY 2022	FY 2023	FY 2024
0200 Supportive Services Costs	$0	$8,750,000	$8,750,000
0900 Contractual Services Costs	$0	$10,000,000	$61,890,000
Total Expenditure Per Year:	$0	$18,750,000	$70,640,000
Grand Total Expenditure:	$89,390,000		
Total Appropriated to Agency:	$89,390,000		
Total Appropriated by Fund:			
AMERICAN RESCUE PLAN ACT FUNDS	$89,390,000		

Description of Appropriation:

This appropriation is for infrastructure, development, expansion, operations, and maintenance for the statewide interoperable public safety communication system, commonly referred to as WyoLink. The Department of Transportation states that approximately two-thirds of the WyoLink network will be upgraded with new equipment and technology to drive the network. The upgrades will also provide redundancy solutions across the network. The proposed upgrades will provide approximately 10 years of sustainable operations of the WyoLink system.

Assumptions:

Funds will be obligated by December 31, 2024 and expended by December 31, 2026.

Prepared by: Leanne Hoag, LSO Phone: 777-7881
(Information provided by Rory L. Horsley, Governor's Office, 777-5010; Rodney Freier, Jr. , Department of Transportation, 777-4174)

HB0012 Public safety communications funding.

Sponsored By: Joint Transportation, Highways & Military Affairs Interim Committee

AN ACT relating to public safety communications; providing an appropriation; and providing for an effective date.

12/20/2021	Bill Number Assigned
2/11/2022	H Received for Introduction
2/15/2022	
2/15/2022	H Withdrawn by Sponsor

ORIGINAL SENATE ENGROSSED
FILE NO. SF0041

ENROLLED ACT NO. 38, SENATE

SIXTY-SIXTH LEGISLATURE OF THE STATE OF WYOMING
2022 BUDGET SESSION

AN ACT relating to the administration of government; amending the membership of the public safety communications commission; amending the duties of the public safety communications commission to include duties related to next generation 911 emergency communications systems; authorizing the use of funds collected under the Emergency Telephone Service Act for next generation 911 emergency communications systems; and providing for an effective date.

Be It Enacted by the Legislature of the State of Wyoming:

Section 1. W.S. 9-2-1102(a)(intro) and by creating new paragraphs (xviii) and (xix), 9-2-1104(a) by creating new paragraphs (viii) and (ix) and 16-9-105(b) are amended to read:

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

(a) The commission shall consist of ~~eleven (11)~~ 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 director of the Wyoming department of transportation, or his designee, shall serve as an ex officio nonvoting member of the commission.~~ The ~~eleven (11)~~ voting members shall be appointed from each of the following associations and agencies from their membership:

(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.

ORIGINAL SENATE ENGROSSED
FILE NO. SF0041

ENROLLED ACT NO. 38, SENATE

SIXTY-SIXTH LEGISLATURE OF THE STATE OF WYOMING
2022 BUDGET SESSION

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

(a) The commission shall:

(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.

16-9-105. Agreements or contract for 911 emergency reporting systems; use of funds collected.

(b) Funds collected from the 911 emergency tax imposed pursuant to this act shall be spent solely to pay for public safety answering point and service suppliers' equipment and service costs, installation costs, maintenance costs, monthly recurring charges and other costs directly related to the continued operation of a 911 system including enhanced wireless 911 service and next generation 911 emergency communications systems. Funds may

ENROLLED ACT NO. 38, SENATE

SIXTY-SIXTH LEGISLATURE OF THE STATE OF WYOMING
2022 BUDGET SESSION

also be expended for personnel expenses necessarily incurred by a public safety answering point. "Personnel expenses necessarily incurred" means expenses incurred for persons employed to:

(i) Take emergency telephone calls and dispatch them appropriately; ~~or~~

(ii) Maintain the computer ~~data base~~ database of the public safety answering point; ~~.~~ or

(iii) Integrate legacy communications infrastructure for 911 systems into interoperable next generation 911 emergency communications systems.

ENROLLED ACT NO. 38, SENATE

SIXTY-SIXTH LEGISLATURE OF THE STATE OF WYOMING
2022 BUDGET SESSION

Section 2. This act is effective immediately upon completion of all acts necessary for a bill to become law as provided by Article 4, Section 8 of the Wyoming Constitution.

(END)

Speaker of the House

President of the Senate

Governor

TIME APPROVED: _____

DATE APPROVED: _____

I hereby certify that this act originated in the Senate.

Chief Clerk

SF0041 Expanding next generation 911.

Sponsored By: Senator(s) Kost, Baldwin and Schuler and Representative(s) Newsome and Washut

AN ACT relating to the administration of government; amending the membership of the public safety communications commission; amending the duties of the public safety communications commission to include duties related to next generation 911 emergency communications systems; authorizing the use of funds collected under the Emergency Telephone Service Act for next generation 911 emergency communications systems; and providing for an effective date.

1/24/2022 Bill Number Assigned
2/7/2022 S Received for Introduction
2/18/2022 S Introduced and Referred to S01 - Judiciary 26-3-1-0-0

ROLL CALL
Ayes: Senator(s) Anderson, Baldwin, Biteman, Boner, Bouchard, Cooper, Dockstader, Driskill, Ellis, French, Furphy, Gierau, Hicks, James, Kinskey, Kolb, Kost, Mckeown, Nethercott, Pappas, Rothfuss, Salazar, Schuler, Scott, Steinmetz, Wasserburger
Nays: Senator(s) Case, Landen, Perkins
Excused: Senator Hutchings
Ayes 26 **Nays** 3 **Excused** 1 **Absent** 0 **Conflicts** 0

2/23/2022 S01 - Judiciary:Recommend Do Pass 5-0-0-0-0

ROLL CALL
Ayes: Senator(s) Cooper, French, Kolb, Kost, Nethercott
Ayes 5 **Nays** 0 **Excused** 0 **Absent** 0 **Conflicts** 0

2/23/2022 S Placed on General File
2/24/2022 S COW:Passed
2/25/2022 S 2nd Reading:Passed
2/28/2022 S 3rd Reading:Passed 29-1-0-0-0

ROLL CALL
Ayes: Senator(s) Anderson, Baldwin, Biteman, Boner, Bouchard, Cooper, Dockstader, Driskill, Ellis, French, Furphy, Gierau, Hicks, Hutchings, James, Kinskey, Kolb, Kost, Landen, Mckeown, Nethercott, Pappas, Perkins, Rothfuss, Salazar, Schuler, Scott, Steinmetz, Wasserburger
Nays: Senator Case
Ayes 29 **Nays** 1 **Excused** 0 **Absent** 0 **Conflicts** 0

2/28/2022 H Received for Introduction
3/1/2022 H Introduced and Referred to H08 - Transportation
3/3/2022 H08 - Transportation:Recommend Amend and Do Pass 9-0-0-0-0

ROLL CALL
Ayes: Representative(s) Baker, Brown, Burkhart, Jr, Burt, Henderson, Macguire, Obermueller, O'hearn, Styvar
Ayes 9 **Nays** 0 **Excused** 0 **Absent** 0 **Conflicts** 0

3/3/2022 H Placed on General File

SF0041HS001/ADOPTED

Page 5-line 5 Delete "July 1, 2022" and insert " immediately upon completion of all acts necessary for a bill to become law as provided by Article 4, Section 8 of the Wyoming Constitution". BURKHART, CHAIRMAN

3/7/2022 H COW:Passed
3/8/2022 H 2nd Reading:Passed
3/9/2022 H 3rd Reading:Passed 48-10-2-0-0

ROLL CALL

Ayes: Representative(s) Andrew, Baker, Banks, Barlow, Blackburn, Brown, Burkhart, Burt, Clausen, Connolly, Crago, Duncan, Eklund, Eyre, Flitner, Hallinan, Haroldson, Harshman, Henderson, Kinner, Larsen, L, Lebeau, Macguire, Neiman, Newsome, Nicholas, Oakley, Obermueller, Olsen, Ottman, Paxton, Provenza, Rodrig-Williams, Romero-Martinez, Roscoe, Schwartz, Sherwood, Simpson, Sommers, Stith, Sweeney, Walters, Washut, Western, Williams, Wilson, Yin, Zwonitzer
Nays: Representative(s) Bear, Fortner, Gray, Heiner, Jennings, Knapp, Laursen, D, Styvar, Wharff, Winter
Excused: Representative(s) Greear, O'hearn
Ayes 48 **Nays** 10 **Excused** 2 **Absent** 0 **Conflicts** 0

3/9/2022 S Received for Concurrence
3/9/2022 S Concur:Passed 29-1-0-0-0

ROLL CALL

Ayes: Senator(s) Anderson, Baldwin, Biteman, Boner, Bouchard, Cooper, Dockstader, Driskill, Ellis, French, Furphy, Gierau, Hicks, Hutchings, James, Kinskey, Kolb, Kost, Landen, Mckeown, Nethercott, Pappas, Perkins, Rothfuss, Salazar, Schuler, Scott, Steinmetz, Wasserburger
Nays: Senator Case
Ayes 29 **Nays** 1 **Excused** 0 **Absent** 0 **Conflicts** 0

3/9/2022 Assigned Number SEA No. 0038
3/10/2022 S President Signed SEA No. 0038
3/10/2022 H Speaker Signed SEA No. 0038
3/16/2022 Governor Signed SEA No. 0038
3/16/2022 Assigned Chapter Number 94

Chapter No. 94 Session Laws of Wyoming 2022

Bill No.: SF0041 **Effective:** **3/16/2022 12:00:00 AM**

LSO No.: **22LSO-0246**

Enrolled Act No.: SEA No. 0038

Chapter No.: 94

Prime Sponsor: Kost

Catch Title: **Expanding next generation 911.**

Subject: Amending the membership and duties of the Public Safety Communications Commission to reflect the transition to next generation 911 systems.

Summary/Major Elements:

- The Wyoming Public Safety Communications Commission is an entity that works in an advisory capacity to promote the development, improvement, and efficiency of public safety communications systems in Wyoming.

- This act amends the membership of the Commission to include two additional members, one of whom is a member appointed from the Wyoming Chapter of the Association of Public Safety Communications Officials or the National Emergency Number Association; the other new member is appointed from the Wyoming Office of Homeland Security.

- The act expands the duties of the Commission to recommend guidelines and standards for the development, implementation, and operation of a next generation 911 emergency communications system and to promulgate rules and regulations governing next generation 911 system operation and participation.

- The act provides that funds collected from the 911 emergency tax may be expended for personnel expenses for employees who are employed to integrate legacy communications infrastructure into interoperable next generation 911 emergency communications systems.

FISCAL NOTE

	FY 2023	FY 2024	FY 2025
NON-ADMINISTRATIVE IMPACT			
Anticipated Expenditure increase			
HIGHWAY FUND	$3,500	$3,500	$3,500

Source of expenditure increase:

This bill increases the number of members of the public safety communications commission from 11 to 13 members.

Assumptions:

On average, the annual cost for travel expenditures to attend the meetings in person throughout the year is $1,750 per member.

The expenditure increase reflected above could be considered an administrative cost. However, for simplicity and to follow consistent practice on legislation of this type, it is included on the fiscal note.

Prepared by: Leanne Hoag, LSO Phone: 777-7881
(Information provided by Rodney Freier, Jr., Department of Transportation, 777-4174)

3/31/2022

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 March 2022.

- 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 has been constructed
    - Microwave Donor site (Aspen Mountain) requires new tower, currently under construction, targeting June
    - Site planned to go into live testing (temporary cellular connection)

- Ten Sleep (Meadowlark)
    - Construction is underway (USFS assisted with expediting a road use agreement)
    - Completion scheduled for spring/summer 2022 due to supply delays and weather

- Northern Goshen County
    - NEPA/SHPO have been completed; approved for construction
    - Winter/Spring 2022 target

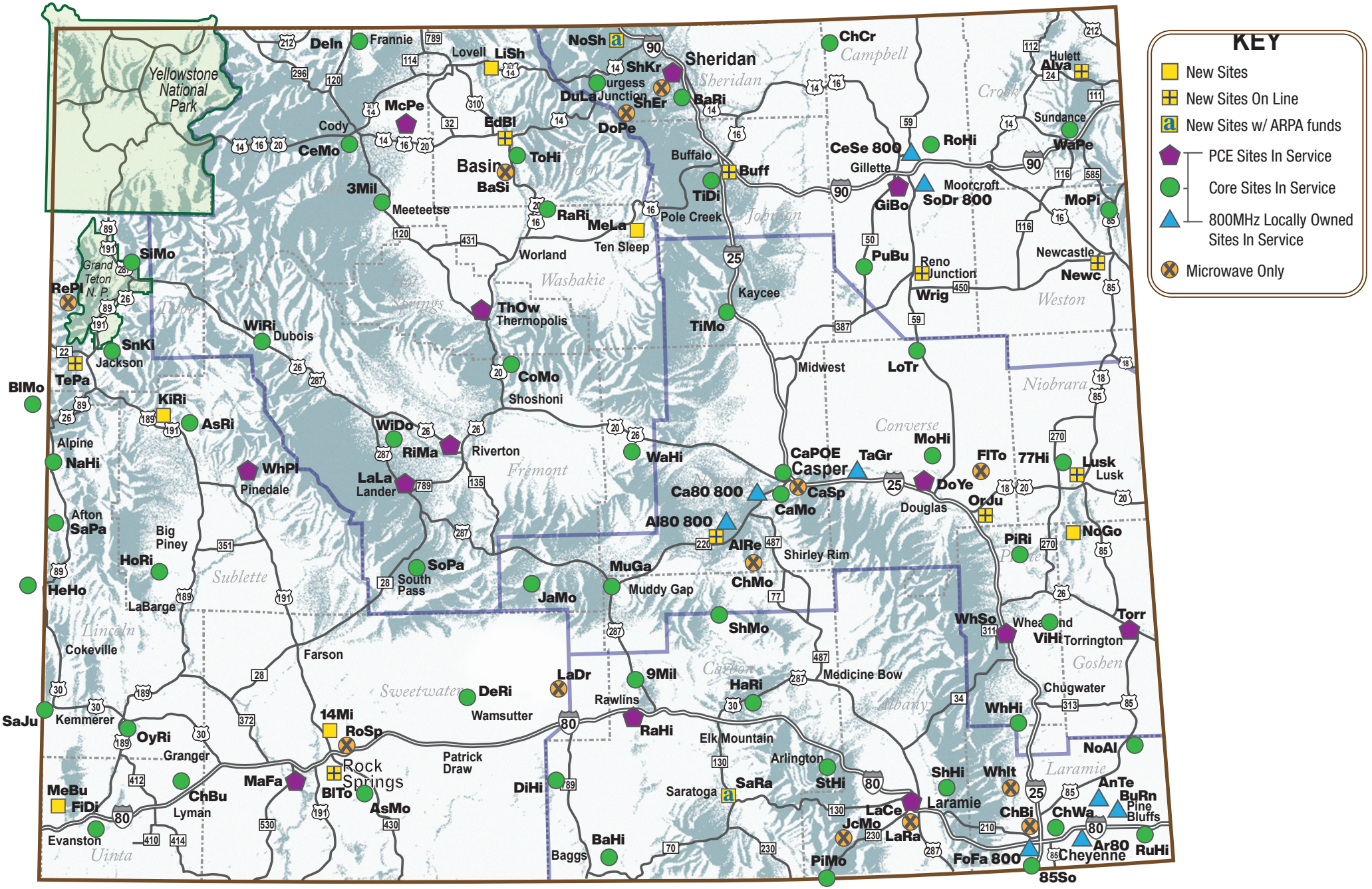
- Newcastle
    - Collocate design under approval with Union
    - Work continues with the city and a private landowner; waiting on lease

- Evanston
    - ROW finalizing agreement with private landowners; complete
    - Scheduling construction underway - Spring/Summer 2022

- North Big Horn County (Little Sheep Mnt)
    - Final BLM approval expected in early April
    - Coordinating with Utility providers for delivery of services
    - Spring/Summer 2022 target

- Bondurant
    - Private landowner lease for access completed
    - Holding discussions with Sublette County, lease draft has been agreeable; awaiting final tower equipment design proposal for submission and county review
    - Spring/Summer 2022 target

WyoLink Local Towers and Locations Site Map

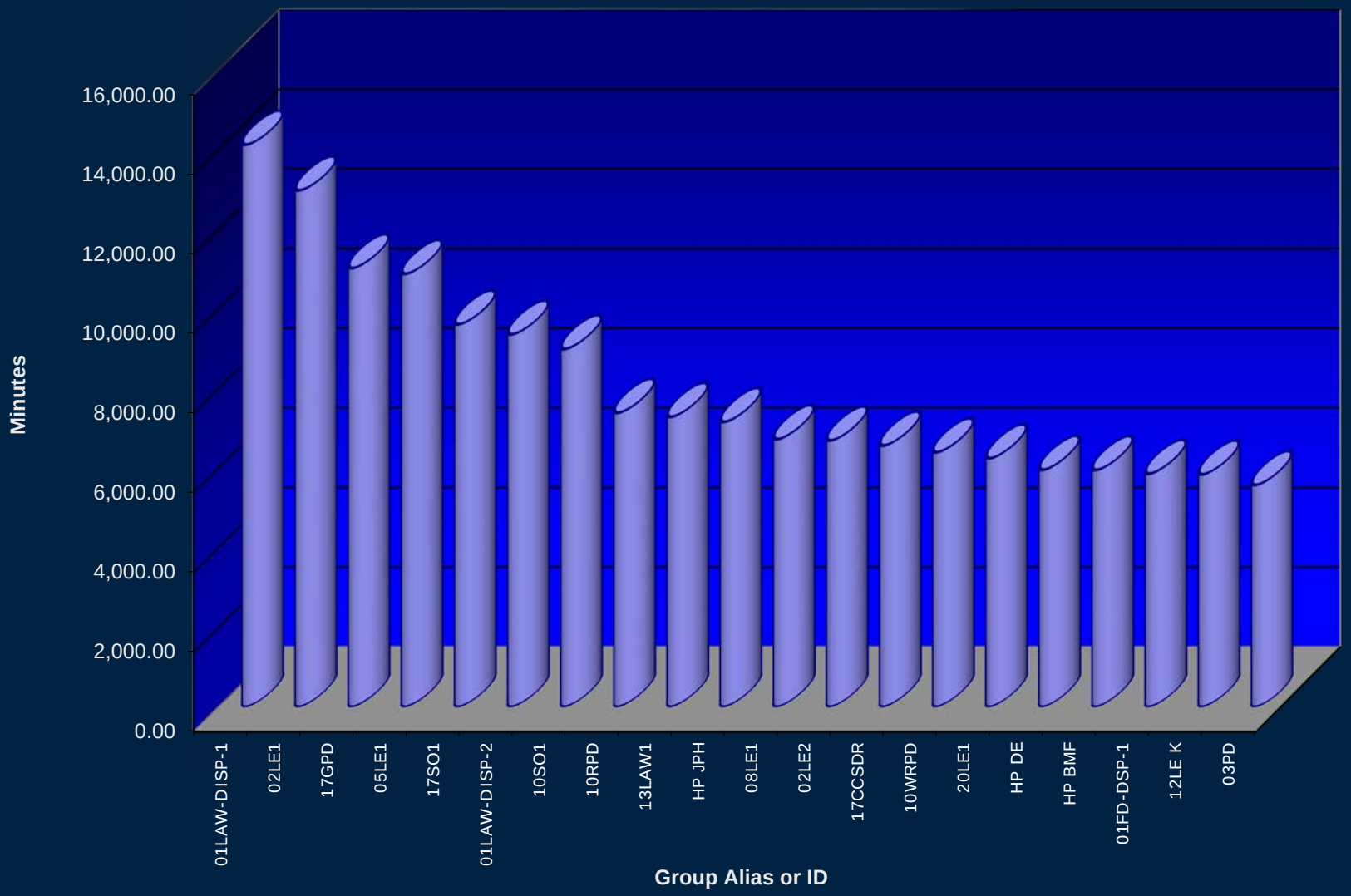


PSCC - May 11th 2022

Genesis
INTELLIGENCE AT YOUR COMMAND

Total Airtime Top 20 Talkgroups

01/01/2022 12:00:00 AM to 04/01/2022 12:00:00 AM
System: ALL RFSS: ALL Site: ALL



SYSTEM STATISTICS

MONTH	PTTs	AIRTIME (minutes)
January ‘22	1,624,780	137,569.49
February ‘22	1,485,247	125,300.67
March “22	1,695,829	142,988.24

APX NEXT


MOTOROLA
My Status
En Route
East Zone
Patrol 1
Clark, Robert
On my way
My Status
En Route
East Zone
Patrol 1
Clark, Robert

APX 8000

Mark Gordon
Governor
K. Luke Reiner
Director

WYOMING DEPARTMENT OF TRANSPORTATION
PUBLIC SAFETY COMMUNICATIONS COMMISSION
TERMS & ACRONYMS REFERENCE

Mark Harshman
Chairman
Telephone No.:
(307) 777-4015

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

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

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

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

SWIC	Statewide Interoperability Coordinator
TA	Technical Assistance
TIA	Telecommunications Industry Association
THIRA	Threat & Hazard Identification & Risk Assessment
TSBS	Telecommunications Systems Bulletins
TSP	Telecommunications Service Priority
UCM	U.S. Conference of Mayors
UNS	User needs Subcommittee
WOHS	Wyoming Office of Homeland Security
WPS	Wireless Priority Service

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 eleven (11) 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 Director of the Wyoming Department of Transportation, or his Designee, shall serve as an Ex Officio nonvoting member of the Commission. The eleven (11) 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.

(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 budget division of the Department of administration and information, 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.

(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.

National 911 Profile Database:

Data Definitions

This document provides acronyms and the complete list of data elements, definitions and instructions for the collection of 911 data for the calendar year 2021.

National 911 Program

Table of Contents

Contents

The National 911 Program obtained formal clearance from the Office of Management and Budget (OMB) for this data collection (OMB Control Number 2127-0679; expires November 30, 2024).

2021 Acronym List

The table below defines acronyms used in the National 911 Profile Database.

Acronym	Definition
ALI	Automatic Location Identification
ANI	Automatic Number Identification
ATIS	Alliance for Telecommunicators Industry Solutions
BCF	Border Control Function
CAD	Computer Aided Dispatch
CAMA	Centralized Automatic Message Accounting
CHS	Call Handling System
CONOPS	Concept of Operations
CPE	Call Processing Equipment
DOD	Department of Defense
DOI	Department of the Interior
E911	Enhanced 911
E2	European Model Multiplexing Level 2
ECRF	Emergency Call Routing Function
EMD	Emergency Medical Dispatch
ESInet	Emergency Services IP Network
ESRP	Emergency Services Routing Proxy
GIS	Geographic Information Systems
HELD	HTTP (Hypertext Transfer Protocol) Enabled Location Delivery
HTTPs	Hypertext Transfer Protocol Secure
IP	Internet Protocol
LNG	Legacy Network Gateway
LoST	Location-to-Service Translation Protocol
LPG	Legacy PSAP Gateway
LSRG	Legacy Selective Router Gateway
MLTS	Multi-line Telephone System
MSAG	Master Street Address Guide
NENA	National Emergency Number Association
NG911	Next Generation 911
NGCS	Next Generation Core Services
OSE	Originating Service Entity
OSP	Originating Service Provider
PBX	Private Branch Exchange
PSAP	Public Safety Answering Point
QA	Quality Assurance
RFAI	Request for Assistance Interface
RFP	Request for Proposal
RTP	Real Time Transport Protocol
RTT	Real Time Text
SIP	Session Initiation Protocol
SMS	Short Message Service
TCC	Text Control Center
TDM	Time-Division Multiplexing
VoIP	Voice over Internet Protocol

Section 1

Total 911 Calls and Call Type

1. Enter the total annual number of 911 calls delivered to primary PSAPs in your state, even if not answered or no dispatch occurred.

Total number of calls delivered to primary Public Safety Answering Points (PSAPs) in the calendar year, aggregated to the state level. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office."

2. Enter the total annual number of incoming wireline 911 calls delivered to primary PSAPs in your state, even if not answered or no dispatch occurred.

Number of incoming wireline 911 calls, aggregated to the state level. If you are able to separate the number of wireless calls from MLTS calls, provide the total wireline calls here and the separated MLTS calls in your answer for question 5. If you are unable to separate the call types, provide the total wireline calls here and submit "0" as your answer for question 5. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office."

3. Enter the total annual number of incoming wireless 911 calls delivered to primary PSAPs in your state, even if not answered or no dispatch occurred.

Number of incoming wireless 911 calls, aggregated to the state level. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office."

4. Enter the total annual number of incoming VoIP 911 calls delivered to primary PSAPs in your state, even if not answered or no dispatch occurred.

Number of incoming Voice over Internet Protocol (VoIP) 911 calls, aggregated to the state level. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office."

5. Enter the total annual number of incoming MLTS 911 calls delivered to primary PSAPs in your state, even if not answered or no dispatch occurred.

Number of incoming Multi-line Telephone System (MLTS) 911 calls, aggregated to the state level. If you are able to separate the number of MLTS calls from wireline calls, provide the total MLTS calls here and the separated wireline calls in your answer for question 2. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office."

6. Enter the total annual number of incoming texts-to-911 delivered to primary PSAPs in your state, even if not answered or no dispatch occurred.

Number of incoming texts-to-911, aggregated to the state level. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office."

Section 2

Number of PSAPs and Equipment Positions

7. Enter the number of primary PSAPs within your state.

NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office."

8. Enter the number of secondary PSAPs within your state.

NENA defines a secondary PSAP as "A PSAP to which 911 calls are transferred from a primary PSAP." A secondary PSAP does not receive any direct 911 calls. It only received 911 calls as transfers from another PSAP.

9. Enter the number of primary PSAPs that have 1-2 911 equipment positions.

This element identifies how many primary PSAPs in your state have 1-2 equipment positions, including call-taking and/or dispatching. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office." A call-taking equipment position is the customer premise equipment by which 911 calls are answered and responded to (source: NENA master glossary).

10. Enter the number of primary PSAPs that have 3-5 911 equipment positions.

This element identifies how many PSAPs in your state have 3-5 911 equipment positions, including call-taking and/or dispatching. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office." A call-taking equipment position is the customer premise equipment by which 911 calls are answered and responded to (source: NENA master glossary).

11. Enter the number of primary PSAPs that have 6-20 911 equipment positions.

This element identifies how many PSAPs in your state have 6-20 911 equipment positions, including call-taking and/or dispatching. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office." A call-taking equipment position is the customer premise equipment by which 911 calls are answered and responded to (source: NENA master glossary).

12. Enter the number of primary PSAPs that have 21-49 911 equipment positions.

This element identifies how many PSAPs in your state have 21-49 911 equipment positions, including call-taking and/or dispatching. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office." A call-taking equipment position is the customer premise equipment by which 911 calls are answered and responded to (source: NENA master glossary).

13. Enter the number of primary PSAPs that have 50 or more 911 equipment positions.

This element identifies how many PSAPs in your state have 50 or more 911 equipment positions, including call-taking and/or dispatching. NENA defines a primary PSAP as "A PSAP to which 911 calls are routed directly from the 911 Central Office." A call-taking equipment position is the customer premise equipment by which 911 calls are answered and responded to (source: NENA master glossary).

14. Enter the total number of 911 call-taking equipment positions in your state, whether hosted or local.

This element identifies the total number of 911 call-taking equipment positions in the state. A call-taking equipment position is the customer premise equipment by which 911 calls are answered and responded to (source: NENA master glossary).

Section 3

PSAPs with EMD and Operations

15. Enter the number of PSAPs in your state that provide Emergency Medical Dispatch (EMD) and follow a specific formal protocol.

This element identifies how many PSAPs in your state provide EMD and follow a formally state-recognized protocol, whether it be a commercial or a state-approved locally developed EMD protocol.

16. Enter the number of PSAPs in your state that are operated by the Department of Defense (DOD).

This element identifies how many PSAPs in your state are operated by the DOD (including those on military installations as well as the National Guard).

17. Enter the number of PSAPs in your state that are operated by the Department of the Interior (DOI).

This element identifies how many PSAPs in your state are operated by the DOI. The DOI includes the National Park Service.

Section 4

Call-Handling QA

18. Does your state have QA requirements for compliance with call-handling protocols for EMD?

This data element identifies whether a state has Quality Assurance (QA) requirements for compliance with call-handling protocols for EMD dispatch services.

19. Does your state have QA requirements for compliance with call-handling protocols for Fire?

This data element identifies whether a state has Quality Assurance (QA) requirements for compliance with call-handling protocols for Fire dispatch services.

20. Does your state have QA requirements for compliance with call-handling protocols for Police?

This data element identifies whether a state has Quality Assurance (QA) requirements for compliance with call-handling protocols for Police dispatch services.

Section 5

Minimum Training Requirements for Telecommunicators

21. Do minimum training requirements for telecommunicators exist statewide?

This element identifies if your state has minimum training requirements.

22. Are mechanisms in place at the state level to ensure minimum training requirements are carried out? Mechanisms may include regulation, legislation, funding or audits.

This element identifies if minimum training requirements are defined in state statute and can be enforced. Examples include having a 40-hour training program or a standard that identifies the number of trainee hours per year per PSAP.

23. Do minimum training requirements exist for EMD?

This element identifies if there are minimum training requirements for EMD in your state.

24. Do minimum training requirements exist for fire dispatch?

This element identifies if there are minimum training requirements for fire dispatch in your state.

25. Do minimum training requirements exist for police dispatch?

This element identifies if there are minimum training requirements for police dispatch in your state.

Section 6

NG911: Planning

26. Has your state developed and adopted a statewide NG911 Plan to include governance, funding, system components and operations, at any point?

This element identifies whether or not your state has, at any point, developed and adopted a statewide NG911 Plan, which includes governance, funding, system components (IP network, ESInet, NG911 software services, security architecture, user identity management, database architecture, and PSAP configuration), and operations. Locally administered and funded organizations can still develop and adopt a coordinated statewide NG911 plan.

NENA defines NG911 as, "an Internet Protocol (IP)-based system comprised of managed Emergency Services IP networks (ESInet), functional elements (applications), and databases that replicate traditional Enhanced 911 (E911) features and functions and provides additional capabilities. NG911 is designed to provide access to emergency services from all connected communications sources and provide multimedia data capabilities for PSAPs and other emergency service organizations."

27. Enter the number of sub-state or regional NG911 plans that exist within your state and are independent of a statewide NG911 plan.

Indicate the number of regional or local 911 authorities within your state who have developed and adopted NG911 plans for their area and currently have such a plan in place, regardless of when the plan was developed or adopted.

28. Has your state established a statewide concept of operations document or its equivalent, including operations for NG911 and related architecture, at any point?

A concept of operations (CONOPS) is a user-oriented document that describes the desired characteristics for a proposed system from a user's perspective and how its implementation will enhance the user's current operation.

The CONOPS would include, for example:

- User-oriented operational description for NG911 and related architecture
- Operational needs and use cases
- System overview and desired outcomes of users deploying the system
- Clear statement of responsibilities and authorities delegated

29. Enter the number of regional or local 911 authorities within your state who have developed an NG911 concept of operations or its equivalent for their area.

Indicate the number of regional or local 911 authorities within the state who have developed a concept of operations or its equivalent for their area.

Section 7

NG911: Procurement

Identify if your state has met any of the following milestones for NG911 procurement at the state level, this year or at any point in the past.

Select the milestone showing the farthest progress made for each NG911 part, function and component this year or at any point in the past.

- **Database (GIS Services) –** Databases that support the routing of 911 calls and dispatch of first responders that may include tabular and geographic information designed for 911. This may include supplemental and supportive location information for NG911.

- **NG Core Services –** The Next Generation Core Services (NGCS) required to deliver NG911 that include the Emergency Services Routing Proxy (ESRP), Emergency Call Routing Function (ECRF), and Border Control Function (BCF). Other elements of the ESInet are not considered NGCS (Legacy Network Gateway (LNG), Legacy PSAP Gateway (LPG), or Legacy Selective Router Gateway (LSRG)).

- **CAD –** Computer Aided Dispatch (CAD) is the software that is used by dispatchers to handle calls and information about the caller and to document the calls to 911 for a particular PSAP.

- **CPE (Hosted or Standalone)** – Call Processing Equipment (CPE) is the call termination device that provides the call control for a PSAP. The CPE is primarily an Automatic Number Identification/Automatic Location Identification (ANI/ALI) controller and Private Branch Exchange (PBX) that collects and distributes all calls at a PSAP.

- **Recording** – The recording of 911 calls is a requirement at all PSAPs. An NG-capable recorder is designed to record Session Initiation Protocol (SIP) and IP traffic instead of legacy analog calls.

NG911 Parts, Functions and Components	Milestones	
30. Database (GIS Services)	None, Released an RFP, Completed Procurement, Awarded Contract(s) or Installed/Tested/Deployed	Unknown
31. NG Core Services	None, Released an RFP, Completed Procurement, Awarded Contract(s) or Installed/Tested/Deployed	Unknown
32. CAD	None, Released an RFP, Completed Procurement, Awarded Contract(s) or Installed/Tested/Deployed	Unknown
33. CPE (Hosted or Standalone)	None, Released an RFP, Completed Procurement, Awarded Contract(s) or Installed/Tested/Deployed	Unknown
34. Recording	None, Released an RFP, Completed Procurement, Awarded Contract(s) or Installed/Tested/Deployed	Unknown

35. Enter the number of regional or local 911 authorities within your state that have utilized an RFP for any NG911 component this year or at any point in the past.

Identifies the number of regional or local 911 authorities within your state who have released a Request for Proposal (RFP) for NG911 components for their area, regardless of the date the RFP was released. If a sub-state 911 authority has released at least one RFP **for only one component of** NG911 at any point in the past, include them in your total.

Identify if regional or local 911 authorities in your state have met any of the following milestones for NG911 procurement at the sub-state level, this year or at any point in the past.

Select the milestone showing the farthest progress made at the regional or local level for each NG911 part, function and component this year or at any point in the past.

- **Database (GIS Services)** – Databases that support the routing of 911 calls and dispatch of first responders that may include tabular and geographic information designed for 911. This may include supplemental and supportive location information for NG911.

- **NG Core Services** – The Next Generation Core Services required to deliver NG911 that include the ESRP, ECRF, and BCF. Other elements of the ESInet are not considered NGCS (LNG, LPG, LSRG).

- **CAD** – Computer Aided Dispatch is the software that is used by dispatchers to handle calls and information about the caller and to document the calls to 911 for a particular PSAP.

- **CPE (Hosted or Standalone)** – Call Processing Equipment is the call termination device that provides the call control for a PSAP. The CPE is primarily an ANI/ALI controller and Private Branch Exchange (PBX) that collects and distributes all calls at a PSAP.

- **Recording** – The recording of 911 calls is a requirement at all PSAPs. An NG-capable recorder is designed to record SIP and IP traffic instead of legacy analog calls.

NG911 Parts, Functions and Components	Milestones	
36. Database (GIS Services)	None, Released an RFP, Completed Procurement, Awarded Contract(s) or Installed/Tested/Deployed	Unknown
37. NG Core Services	None, Released an RFP, Completed Procurement, Awarded Contract(s) or Installed/Tested/Deployed	Unknown
38. CAD	None, Released an RFP, Completed Procurement, Awarded Contract(s) or Installed/Tested/Deployed	Unknown
39. CPE (Hosted or Standalone)	None, Released an RFP, Completed Procurement, Awarded Contract(s) or Installed/Tested/Deployed	Unknown
40. Recording	None, Released an RFP, Completed Procurement, Awarded Contract(s) or Installed/Tested/Deployed	Unknown

Section 8

NG911: Transition

41. Enter the number of primary PSAPs in your state that are currently connected to an ESInet and are using the ESInet to perform location-based routing and call processing.

Identifies the number of primary PSAPs in your state that process NG911 emergency calls for all service types (wireline, wireless, VoIP) using NG911 infrastructure that conforms to nationally accepted standards. Specifically, this is the number of primary PSAPs in your state that have implemented NG911 systems for all service types.

42. Enter the percentage of population served by NG911 capable PSAPs within your state.

Identifies the percentage of the population for a reporting state served by NG911-capable 911 services meeting industry-accepted definitions for NG911. Note, using NENA's i3 standard alone is not the same as an NG911 system. The i3 standard only describes the network, components, and interfaces required to establish NG911 service. To deploy a "full function" NG911 system, states will need equipment and software vendors, access network providers, and originating service providers, all elements not included in the i3 standard. Enter whole numbers, ex. 25% instead of 0.25.

43. Enter the percentage of geographical area served by NG911 capable PSAPs within your state.

Identifies the percentage of geographic area served (as opposed to population) by NG911 services. NG911 capable services indicates that the infrastructure is in place to potentially allow a full-range of NG911 services. Data from this will help differentiate progress for those jurisdictions that have dense urban populations and reflect IP-capable 911 services meeting industry-accepted definitions for NG911. They may be serving a large percentage of the population but may be serving a very small geographic portion of the state. This metric could indirectly help gauge progress for rural areas. Enter whole numbers, ex. 25% instead of 0.25.

Section 9

NG911: Operations

44. Enter the total number of operational ESInets deployed within your state.

The number of ESInets deployed and operational within the state that are supporting emergency communications. NENA defines an ESInet as a managed IP network that is used for emergency services communications, and which can be shared by all public safety agencies. It provides the IP transport infrastructure upon which independent application platforms and core functional processes can be deployed, including, but not restricted to, those necessary for providing NG911 services. ESInets may be constructed from a mix of dedicated and shared facilities. ESInets may be interconnected at local, regional, state, federal, national and international levels to form an IP-based inter-network (network of networks).

45. Enter the number of primary PSAPs that have CPE processing IP calls from an ESInet in your state.

This element tracks how many primary PSAPs are processing IP emergency requests (calls) into their CPE directly (without conversion back to analog) from an ESInet.

46. Enter the number of ESInet connected PSAPs in your state.

This element tracks the progress of ESInet deployments and PSAP connectivity to ESInets for call delivery. This includes PSAPs that are receiving IP calls from an ESInet but have a Legacy PSAP Gateway (LPG) converting the calls back into analog to be processed by the CPE.

47. What percentage of your GIS data has been converted from the legacy data model to the NG911 data model? (Please consult your GIS specialist if available to aid in determining the appropriate percentage estimate).

The percentage of all the civic addresses in the state that have been geocoded into geospatial points. This occurs by synchronizing the Master Street Address Guide (MSAG) civic addresses to a Geographic Information System (GIS) geospatial database of road centerlines, site / structure locations, and related spatial databases. Converting civic addresses into GIS information enables NG911 systems to geospatially route calls and is necessary for other NG911 services. While ALI database normalization is a part of the GIS process; this question only pertains to the MSAG synchronization and not ALI. Enter whole numbers, ex. 25% instead of 0.25.

Section 10

NG911: Maturity Levels

48. What level of maturity is your state in for the category of governance?

Select the level of maturity that best fits your state's NG911 progress in the governance category.

Governance addresses the structured oversight of the 911 authorities and identifies whether there is a governing body with documented and tracked planning and implementation efforts.

- **Legacy** – No governance structure is in place to support NG911.
- **Foundational** – Governance support only exists for the initial stages of NG911 coordination. Limited state governance with many regional or local arrangements may exist with limited coordination and strategy to connect the individual PSAPs via an NG911 network. Many PSAPs operate under their own authority.
- **Transitional** – Governance and coordination exist for state and regional or local PSAP authorities to mandate or organize NG911 within a strategic plan. Many PSAPs are working within the governance structure to ensure long term success.
- **Intermediate** – NG911 governance is coordinated from a single entity responsible for administering and governing the NG911 strategy for the entire state. Most of the PSAPs follow the NG911 governance introduced by that single entity.
- **Jurisdictional End State** – NG911 governance flows from the designated entity for all NG911 activities for the state. All PSAPs operate under that single entity for governance.

49. What level of maturity is your state in for the category of routing and location?

Select the level of maturity that best fits your state's NG911 progress in the routing and location category.

Routing and location define how a system interprets 911 call location information to route the call and accompanying information to a given PSAP. This speaks to the ability to use geospatial capabilities to relay a caller's location to a PSAP.

- **Legacy** – No change to the existing routing and location of 911 calls.
- **Foundational** – Some transition to NG911 call routing and location has begun, but the call routing and location information for all 911 calls within a jurisdiction has not been fully implemented. This includes the initial database and GIS work to support NG911. PSAPs are not receiving calls via IP.
- **Transitional** - Transition to NG911 call routing and location has been implemented for some PSAPs or for some specific call types. PSAPs are receiving IP from the ESInet, but the call traffic is still using legacy location and data.
- **Intermediate** – PSAPS are utilizing NG911 geospatial routing and data for all 911 calls but are still reliant upon ALI information to verify call location.
- **Jurisdictional End State** – PSAPs are using a complete i3 call routing system and have fully implemented a system to meet or exceed the NG911 standard.

50. What level of maturity is your state in for the category of GIS data?

Select the level of maturity that best fits your state's NG911 progress in the GIS data category.

GIS data is a fundamental element of NG911 but is not utilized for legacy 911 call routing. The below options define the steps necessary to plan, process, and improve the existing data in order to begin utilizing GIS data for NG911.

- **Legacy** – No change or progress to GIS data at the present time.
- **Foundational** – GIS data transformation has begun, and the initial standardization (normalization and synchronization) of the GIS information has begun but is not completed.
- **Transitional** - GIS data transformation is in the late stage of development. Testing has begun and pilot projects are in progress to demonstrate readiness of the GIS data for NG911 use.
- **Intermediate** – GIS data and geospatial call routing has been implemented without location validation. All other functional components have been deployed including the final dataset, ECRF and PRF.
- **Jurisdictional End State** – PSAPs are using a complete i3 GIS data set and have fully implemented a system to meet or exceed the NG911 standard.

51. What level of maturity is your state in for the category of NG911 core service elements?

Select the level of maturity that best fits your state's NG911 progress in the NG911 core service elements category.

The central NG911 core services functions provide the logical processing interactions between the delivery of calls and data from the OSP to PSAPs, and manages NG911 call delivery under normal and abnormal conditions.

- **Legacy** – No change or progress to NG911 at the present time.
- **Foundational** – NG911 core services implementation progress is fragmented or limited to select PSAPs.
- **Transitional** - NG911 core services implementation progress has been made throughout the 911 authority's jurisdictional boundary and includes the deployment of core services to the state or individual PSAPs.
- **Intermediate** – NG911 core services have been implemented and are utilized for most PSAPs within the jurisdiction boundary.
- **Jurisdictional End State** – All PSAPs are operating with the NG911 core services.

52. What level of maturity is your state in for the category of network?

Select the level of maturity that best fits your state's NG911 progress in the network category.

Network area capabilities represent the various technology mechanisms for connecting external entities to PSAPs via either a legacy selective router or an ESInet to process 911 calls.

- **Legacy** – No change or progress to NG911 at the present time. No change to the call ingress or egress.
- **Foundational** – NG911 progress has begun through procurement of NG911 components, but call ingress and egress remains unchanged.
- **Transitional** – An ESInet has been implemented and call ingress modification has begun to interface the OSP traffic via IP; the call egress to the PSAP has been transformed to all IP.
- **Intermediate** – Call ingress is in the late stages of being transformed to IP. Call egress to the PSAPs is all IP and traffic is being delivered across the ESInet to all jurisdictions connected to the ESInet.
- **Jurisdictional End State** – All PSAPs are using the ESInet and all traffic has been transformed to IP.

53. What level of maturity is your state in for the category of PSAP call handling system and applications?

Select the level of maturity that best fits your state's NG911 progress in the PSAP call handling system and applications category.

Legacy call handling systems are defined by their use of CAMA trunk interfaces and legacy ALI interfaces. The first step toward NG911 is upgrading call handling equipment to be IP compatible. This step may optionally include replacing the legacy CAMA TDM circuits with the ATIS-defined IP technology-based transitional RFAI protocol.

- **Legacy** – No change or progress to NG911 at the present time, and no change to the call handling system.
- **Foundational** – NG911 progress has begun by procuring CPE systems that can handle NG911 calls but the features are not in use.
- **Transitional** – An ESInet is delivering IP traffic to many PSAPs' CPEs, and some have begun to deploy text, but there is not integration across the entire state.
- **Intermediate** – PSAPs are using the ESInet for all traffic, and all call handling is IP-based. Multimedia is supported for calls, text and logging across the entire state.
- **Jurisdictional End State** – All PSAPs are transitioned to the NG911 system and all traffic is being delivered consistent with the NG911 standard.

54. What level of maturity is your state in for the category of security?

Select the level of maturity that best fits your state's NG911 progress in the security category.

Security includes capabilities, operations and best practices expected at the ESInet level, all levels of the NENA i3 functional elements, the PSAP level, and all external facing interfaces.

- **Legacy** – Security posture/policy has not yet been developed.
- **Foundational** – PSAPs have begun to assess and prioritize the security risks of NG911/IP and have introduced initial security policies to minimize risks and threats to the PSAP.
- **Transitional** - PSAPs have conducted a full assessment of the vulnerabilities associated with security, and have begun to implement, administer, and coordinate security polices to manage security threats to their NG911 system.
- **Intermediate** – PSAPs have implemented security polices and a process to periodically audit and mitigate security vulnerabilities.
- **Jurisdictional End State** – All PSAPs are utilizing a common security framework baseline.

55. What level of maturity is your state in for the category of operations?

Select the level of maturity that best fits your state's NG911 progress in the operations category.

Operations planning addresses aspects of execution, oversight, plan management and efforts necessary to support the transition from legacy systems to the NG911 processing model and services.

- **Legacy** – No plan or coordination has been introduced.
- **Foundational** – Initial planning for operation of an NG911 system has begun and the long-term strategy for administration is in progress. Plans have been introduced but are not yet approved.
- **Transitional** – Operations plans for the NG911 system have been approved but have not begun to be implemented.
- **Intermediate** – Operations plans are fully approved and are in the late stage of implementation.
- **Jurisdictional End State** – All operations plans are fully implemented.

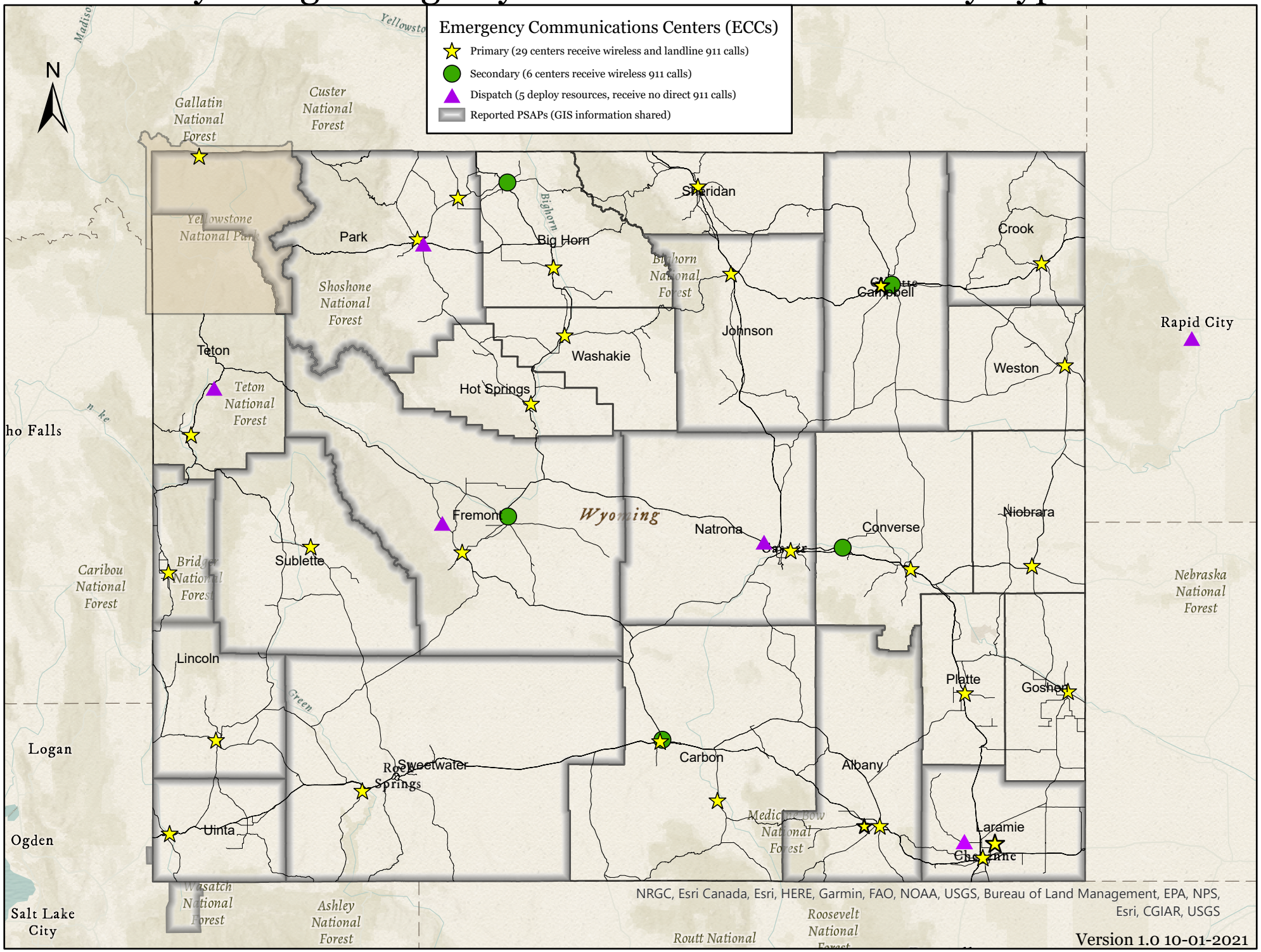
56. What level of maturity is your state in for the category of optional interfaces?

Select the level of maturity that best fits your state's NG911 progress in the optional interfaces category.

Optional Interfaces include those which are supplemental and supportive of 911 services but are not a basic necessity for receiving or responding to a call. Optional interfaces may include: CAD, Broadband, RapidSOS and location supporting tools, hosted logging systems, hosted recording solutions and cybersecurity taps. Any and all optional interfaces must comply with all applicable industry interface standards and must not interfere with or impact the function or security of the NG911 systems.

- **Legacy** – No optional interfaces have been documented.
- **Foundational** – Optional interfaces, which may be useful for NG911, have been documented, but they have not been assessed or reviewed.
- **Transitional** – Optional interfaces, which can be beneficial within the NG911 system, have been documented and assessed, and integration with those systems has begun.
- **Intermediate** – All potential optional interfaces have been documented and assessed and integration with those systems is complete.
- **Jurisdictional End State** – All optional interfaces have been implemented and jurisdictional support has begun.

Wyoming Emergency Communication Centers by Type



ORIGINAL SENATE ENGROSSED
FILE NO. SF0041

ENROLLED ACT NO. 38, SENATE

SIXTY-SIXTH LEGISLATURE OF THE STATE OF WYOMING
2022 BUDGET SESSION

AN ACT relating to the administration of government; amending the membership of the public safety communications commission; amending the duties of the public safety communications commission to include duties related to next generation 911 emergency communications systems; authorizing the use of funds collected under the Emergency Telephone Service Act for next generation 911 emergency communications systems; and providing for an effective date.

Be It Enacted by the Legislature of the State of Wyoming:

Section 1. W.S. 9-2-1102(a)(intro) and by creating new paragraphs (xviii) and (xix), 9-2-1104(a) by creating new paragraphs (viii) and (ix) and 16-9-105(b) are amended to read:

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

(a) The commission shall consist of ~~eleven (11)~~ 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 director of the Wyoming department of transportation, or his designee, shall serve as an ex officio nonvoting member of the commission.~~ The ~~eleven (11)~~ voting members shall be appointed from each of the following associations and agencies from their membership:

(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.

ORIGINAL SENATE ENGROSSED
FILE NO. SF0041

ENROLLED ACT NO. 38, SENATE

SIXTY-SIXTH LEGISLATURE OF THE STATE OF WYOMING
2022 BUDGET SESSION

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

(a) The commission shall:

(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.

16-9-105. Agreements or contract for 911 emergency reporting systems; use of funds collected.

(b) Funds collected from the 911 emergency tax imposed pursuant to this act shall be spent solely to pay for public safety answering point and service suppliers' equipment and service costs, installation costs, maintenance costs, monthly recurring charges and other costs directly related to the continued operation of a 911 system including enhanced wireless 911 service and next generation 911 emergency communications systems. Funds may

ENROLLED ACT NO. 38, SENATE

SIXTY-SIXTH LEGISLATURE OF THE STATE OF WYOMING
2022 BUDGET SESSION

also be expended for personnel expenses necessarily incurred by a public safety answering point. "Personnel expenses necessarily incurred" means expenses incurred for persons employed to:

(i) Take emergency telephone calls and dispatch them appropriately; ~~or~~

(ii) Maintain the computer ~~data base~~ database of the public safety answering point; ~~.~~ or

(iii) Integrate legacy communications infrastructure for 911 systems into interoperable next generation 911 emergency communications systems.

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Section 2. This act is effective immediately upon completion of all acts necessary for a bill to become law as provided by Article 4, Section 8 of the Wyoming Constitution.

(END)

Speaker of the House

President of the Senate

Governor

TIME APPROVED: _____

DATE APPROVED: _____

I hereby certify that this act originated in the Senate.

Chief Clerk

SF0041 Expanding next generation 911.

Sponsored By: Senator(s) Kost, Baldwin and Schuler and Representative(s) Newsome and Washut

AN ACT relating to the administration of government; amending the membership of the public safety communications commission; amending the duties of the public safety communications commission to include duties related to next generation 911 emergency communications systems; authorizing the use of funds collected under the Emergency Telephone Service Act for next generation 911 emergency communications systems; and providing for an effective date.

1/24/2022 Bill Number Assigned
2/7/2022 S Received for Introduction
2/18/2022 S Introduced and Referred to S01 - Judiciary 26-3-1-0-0

ROLL CALL
Ayes: Senator(s) Anderson, Baldwin, Biteman, Boner, Bouchard, Cooper, Dockstader, Driskill, Ellis, French, Furphy, Gierau, Hicks, James, Kinskey, Kolb, Kost, Mckeown, Nethercott, Pappas, Rothfuss, Salazar, Schuler, Scott, Steinmetz, Wasserburger
Nays: Senator(s) Case, Landen, Perkins
Excused: Senator Hutchings
Ayes 26 **Nays** 3 **Excused** 1 **Absent** 0 **Conflicts** 0

2/23/2022 S01 - Judiciary:Recommend Do Pass 5-0-0-0-0

ROLL CALL
Ayes: Senator(s) Cooper, French, Kolb, Kost, Nethercott
Ayes 5 **Nays** 0 **Excused** 0 **Absent** 0 **Conflicts** 0

2/23/2022 S Placed on General File
2/24/2022 S COW:Passed
2/25/2022 S 2nd Reading:Passed
2/28/2022 S 3rd Reading:Passed 29-1-0-0-0

ROLL CALL
Ayes: Senator(s) Anderson, Baldwin, Biteman, Boner, Bouchard, Cooper, Dockstader, Driskill, Ellis, French, Furphy, Gierau, Hicks, Hutchings, James, Kinskey, Kolb, Kost, Landen, Mckeown, Nethercott, Pappas, Perkins, Rothfuss, Salazar, Schuler, Scott, Steinmetz, Wasserburger
Nays: Senator Case
Ayes 29 **Nays** 1 **Excused** 0 **Absent** 0 **Conflicts** 0

2/28/2022 H Received for Introduction
3/1/2022 H Introduced and Referred to H08 - Transportation
3/3/2022 H08 - Transportation:Recommend Amend and Do Pass 9-0-0-0-0

ROLL CALL
Ayes: Representative(s) Baker, Brown, Burkhart, Jr, Burt, Henderson, Macguire, Obermueller, O'hearn, Styvar
Ayes 9 **Nays** 0 **Excused** 0 **Absent** 0 **Conflicts** 0

3/3/2022 H Placed on General File

SF0041HS001/ADOPTED

Page 5-line 5 Delete "July 1, 2022" and insert " immediately upon completion of all acts necessary for a bill to become law as provided by Article 4, Section 8 of the Wyoming Constitution". BURKHART, CHAIRMAN

3/7/2022 H COW:Passed
3/8/2022 H 2nd Reading:Passed
3/9/2022 H 3rd Reading:Passed 48-10-2-0-0

ROLL CALL

Ayes: Representative(s) Andrew, Baker, Banks, Barlow, Blackburn, Brown, Burkhart, Burt, Clausen, Connolly, Crago, Duncan, Eklund, Eyre, Flitner, Hallinan, Haroldson, Harshman, Henderson, Kinner, Larsen, L, Lebeau, Macguire, Neiman, Newsome, Nicholas, Oakley, Obermueller, Olsen, Ottman, Paxton, Provenza, Rodrig-Williams, Romero-Martinez, Roscoe, Schwartz, Sherwood, Simpson, Sommers, Stith, Sweeney, Walters, Washut, Western, Williams, Wilson, Yin, Zwonitzer
Nays: Representative(s) Bear, Fortner, Gray, Heiner, Jennings, Knapp, Laursen, D, Styvar, Wharff, Winter
Excused: Representative(s) Greear, O'hearn
Ayes 48 **Nays** 10 **Excused** 2 **Absent** 0 **Conflicts** 0

3/9/2022 S Received for Concurrence
3/9/2022 S Concur:Passed 29-1-0-0-0

ROLL CALL

Ayes: Senator(s) Anderson, Baldwin, Biteman, Boner, Bouchard, Cooper, Dockstader, Driskill, Ellis, French, Furphy, Gierau, Hicks, Hutchings, James, Kinskey, Kolb, Kost, Landen, Mckeown, Nethercott, Pappas, Perkins, Rothfuss, Salazar, Schuler, Scott, Steinmetz, Wasserburger
Nays: Senator Case
Ayes 29 **Nays** 1 **Excused** 0 **Absent** 0 **Conflicts** 0

3/9/2022 Assigned Number SEA No. 0038
3/10/2022 S President Signed SEA No. 0038
3/10/2022 H Speaker Signed SEA No. 0038
3/16/2022 Governor Signed SEA No. 0038
3/16/2022 Assigned Chapter Number 94

Chapter No. 94 Session Laws of Wyoming 2022

Bill No.: SF0041 **Effective:** **3/16/2022 12:00:00 AM**

LSO No.: **22LSO-0246**

Enrolled Act No.: SEA No. 0038

Chapter No.: 94

Prime Sponsor: Kost

Catch Title: **Expanding next generation 911.**

Subject: Amending the membership and duties of the Public Safety Communications Commission to reflect the transition to next generation 911 systems.

Summary/Major Elements:

- The Wyoming Public Safety Communications Commission is an entity that works in an advisory capacity to promote the development, improvement, and efficiency of public safety communications systems in Wyoming.

- This act amends the membership of the Commission to include two additional members, one of whom is a member appointed from the Wyoming Chapter of the Association of Public Safety Communications Officials or the National Emergency Number Association; the other new member is appointed from the Wyoming Office of Homeland Security.

- The act expands the duties of the Commission to recommend guidelines and standards for the development, implementation, and operation of a next generation 911 emergency communications system and to promulgate rules and regulations governing next generation 911 system operation and participation.

- The act provides that funds collected from the 911 emergency tax may be expended for personnel expenses for employees who are employed to integrate legacy communications infrastructure into interoperable next generation 911 emergency communications systems.

FISCAL NOTE

	FY 2023	FY 2024	FY 2025
NON-ADMINISTRATIVE IMPACT			
Anticipated Expenditure increase			
HIGHWAY FUND	$3,500	$3,500	$3,500

Source of expenditure increase:

This bill increases the number of members of the public safety communications commission from 11 to 13 members.

Assumptions:

On average, the annual cost for travel expenditures to attend the meetings in person throughout the year is $1,750 per member.

The expenditure increase reflected above could be considered an administrative cost. However, for simplicity and to follow consistent practice on legislation of this type, it is included on the fiscal note.

Prepared by: Leanne Hoag, LSO Phone: 777-7881
(Information provided by Rodney Freier, Jr., Department of Transportation, 777-4174)

Federal Communications Commission
Washington, D.C. 20554

April 1, 2022

Approved by OMB
OMB Control No. 3060-1122
Expires: March 31, 2025
Estimated time per response: 10-55 hours

The Honorable Mark Gordon
Governor of Wyoming
State Capitol Building
Room 124
Cheyenne, WY 82002

Re: Annual Report on the Collection and Use of 911 Fees; Response Due No Later Than June 30, 2022.

Dear Governor:

As part of the fourteenth annual, Congressionally-mandated data collection on the use of 911 fees, the Public Safety and Homeland Security Bureau of the Federal Communications Commission (FCC) requests that, no later than June 30, 2022, your state or jurisdiction provides complete and accurate responses regarding 911 and Enhanced 911 (E911) support in your state or jurisdiction from January 1, 2021 through December 31, 2021.[1] Please submit the required information by accessing the fillable questionnaire from the FCC website at https://www.fcc.gov/general/911-fee-reports. The information required to complete the questionnaire may be obtained from your state or jurisdiction 911 office, agency, or administrator.

By way of background, the New and Emerging Technologies Improvement Act of 2008 (NET 911 Act) requires the FCC to submit an annual report to Congress on the collection and distribution of 911 and Enhanced 911 (E911) fees and charges by the states, the District of Columbia, and U.S. territories.[2] This annual report includes findings on which jurisdictions have diverted the 911 fees they collected during the prior calendar year. In late 2020, Congress revised 47 U.S.C. Section 615a-1,[3] requiring the FCC to issue new 911 fee diversion rules and amending the statutory standard for what constitutes 911 fee diversion for purposes of the annual 911 fee report to Congress.[4] On June 25, 2021, the FCC released a *Report and Order* adopting new rules to implement the requirements of the revised statute.[5]

[1] 47 U.S.C. 615a-1(f), as amended by the New and Emerging Technologies Improvement Act of 2008, Pub. L. No. 110-283, 122 Stat. 2620 at Section 6(f)(2) (2008) (NET 911 Act) and the Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, Division FF, Title IX, Section 902, Don't Break Up the T-Band Act of 2020 (Section 902).

[2] NET 911 Act; 47 U.S.C. § 615a-1(f)(2).

[3] Section 902; 47 U.S.C. § 615a-1(f).

[4] Section 902(c)(1)(C); 47 U.S.C. § 615a-1(f)(3)(A).

[5] *911 Fee Diversion; New and Emerging Technologies 911 Improvement Act of 2008*, PS Docket Nos. 20-291 and 09-14, Report and Order, 36 FCC Rcd 10804 (2021) (*Report and Order*), corrected by Erratum (PSHSB Aug. 12, 2021). A copy of the *Report and Order* may be viewed at: https://www.fcc.gov/document/fcc-adopts-order-address-

Under the revised statute, the FCC must obtain information "detailing the status in each State of the collection and distribution of such fees or charges, and including findings on the amount of revenues obligated or expended by each State or political subdivision thereof for any purpose or function other than the purposes and functions designated in the final rules issued [by the FCC] as purposes and functions for which the obligation or expenditure of any such fees or charges is acceptable."[6] This year, the questionnaire has been modified in accordance with the revised statute and the FCC's final fee diversion rules adopted in the June 2021 *Report and Order*.

Your answers help the FCC to provide more constructive information to Congress about how your state and other reporting jurisdictions spent the 911 fees collected for calendar year 2021. Pursuant to Office of Management and Budget (OMB) authorization 3060-1122, your state or territory, using the questionnaire, must provide the following information under 47 U.S.C. 615a-1(f)(2), as amended:

1. An overview of your state's or jurisdiction's 911 system, including information on (a) the total number of active Public Safety Answering Points (PSAPs); (b) the total number of full- and part-time telecommunicators funded by 911/E911 fees; (c) the total annual cost to provide 911/E911 service; and (d) the total number of 911 calls and texts received for the annual period under review. You should feel free to share your future plans for technical consolidation of PSAPs or other restructuring plans.

2. Information regarding (a) the legal authority that establishes 911/E911 funding mechanisms in your state or jurisdiction, including whether there is a funding mechanism designated for or imposed for the purposes of 911 or E911 support or implementation; (b) a citation to the legal authority; (c) any changes to existing legal authority; (d) how the funds collected are made available to localities; (e) how funds collected are made available to localities.

3. A description of the authority in your state or jurisdiction that determines (a) how 911/E911 fees are collected and spent, including which entities have authority to approve expenditure of funds and any limitations on authority, and (b) whether a funding mechanism exists that mandates how collected funds can be used.

4. A detailed description of how collected 911/E911 fees are used, including a statement identifying with specificity (a) all activities, programs, and organizations for whose benefit your state, or political subdivision thereof, obligated or expended funds collected for 911/E911 purposes and how these activities, programs, and organizations support 911/E911 services or enhancements of such services, and (b) the allowed uses of collected funds, including operating costs, personnel costs, administrative costs, dispatch costs, and grant programs. You are encouraged to describe your long-term strategic 911 goals. This will aid the FCC and Congress in understanding (a) capitalization of new projects and (b) goals for efficiently managing recurring costs.

911-fee-diversion. The rules adopted in the Report and Order went into effect on October 18, 2021. *Public Safety and Homeland Security Bureau Announces the Effective Date of Rules Adopted Pursuant to the 911 Fee Diversion Report and Order*, PS Docket Nos. 20-291 and 09-14, Public Notice, DA 21-1007 (PSHSB Aug. 17, 2021). The rules were promulgated at 47 CFR Part 9, Subpart I, and may be viewed at: https://www.ecfr.gov/current/title-47/chapter-I/subchapter-A/part-9/subpart-I?toc=1. The FCC's Small Entity Compliance Guide on Section 902 and the new rules may be viewed at: https://www.fcc.gov/document/911-fee-diversion.

[6] 47 U.S.C. § 615a-1(f)(2).

5. An itemized list of 911/E911 fees collected, specifying: (a) the amount of the fees or charges imposed for the implementation and support of 911/E911 services; (b) the total amount collected pursuant to the assessed fees or charges for the annual period under review, organized by service type; and (c) identification of any other sources of 911 funding.

6. A description of any and all fees collected for 911/E911 purposes that were obligated or expended for purposes other than the acceptable 911/E911 purposes as provided under 47 CFR § 9.23 of the FCC's rules. Your response must include an explicit statement of whether:

   (a) in the annual period under review, all funds collected for 911/E911 purposes in your state or jurisdiction were obligated or expended exclusively for the acceptable purposes as provided under 47 CFR § 9.23 of the FCC's rules; or

   (b) if funds collected for 911/E911 purposes in your state or jurisdiction were obligated or expended for purposes other than those designated as acceptable under 47 CFR § 9.23 of the FCC's rules, a complete description of each such other purpose and, for each such purpose, the amount of funds obligated or expended.

7. If funds collected for 911/E911 purposes in your state or jurisdiction were used for the purchase, maintenance, replacement, or upgrade of public safety radios, networks, or equipment, a complete description of each such obligation or expenditure and, for each, the amount of funds obligated or expended.

8. If your state or jurisdiction collects multi-purpose fees designated for "public safety," "emergency services," or other similar purposes where a portion of those fees or charges supports 911 services, a description of such fees, including the statutory authority by which an amount or percentage is designated for 911, the amount or percentage designated, the authority for segregating the 911 portion of the fee, and whether the 911 portion is only used for acceptable purposes as provided under 47 CFR § 9.23.

9. A description of how the collection and uses of 911/E911 fees are overseen or audited, including (a) whether your state or jurisdiction has established oversight or auditing mechanisms or procedures to determine whether collected funds have been made available for the purposes designated by the funding mechanism; (b) whether your state or jurisdiction has the authority to audit service providers regarding the amount of 911/E911 fees they collect from subscribers; (c) whether your state or jurisdiction has conducted an audit during the relevant annual period; and (d) whether any auditing, enforcement, or other actions were taken during the relevant annual period. We encourage you to describe any factors that may have impeded oversight or auditing of collected 911/E911 fees.

10. A description of NG911 services and expenditures, if any. Your response must include (a) a statement of whether your state or jurisdiction classifies NG911 services as within the scope of permissible expenditures of funds for 911 or E911 purposes; (b) the amount spent, if any, for NG911 services and expenditures in the relevant annual period; (c) the type and number of NG911 ESInets[7] operated within the state or jurisdiction, if any; (d) a description of any NG911 projects completed or underway during the annual period under review, including

[7] Emergency Services IP networks.

plans to consolidate networks or expand their operation beyond 911 services; and (e) the number of PSAPs in your state or jurisdiction that are (i) accepting text-to-911 messages, or (ii) actively planning to become text-to-911 capable. In responding to this inquiry, we recommend you consult the reports and recommendations of the Task Force on Optimal Public Safety Answering Point Architecture (TFOPA), an advisory committee to the FCC, which recommended objective network architecture, security, and funding concepts to facilitate the transition to NG911.[8]

11. A description of cybersecurity expenditures, if any, and including the following: (a) whether your state or jurisdiction expended funds derived from 911 fees on cybersecurity programs for PSAPs and if so, the amount expended, and (b) the number of PSAPs in your state that either (i) implemented a cybersecurity program or (ii) participated in a regional or state-run cybersecurity program. Your response should include whether your state or jurisdiction adheres to the National Institute of Standards and Technology Framework for Improving Critical Infrastructure Cybersecurity[9] for networks supporting one or more PSAPs in your state or jurisdiction.

12. A description of the methods your state or jurisdiction has for determining whether 911/E911 fees are effectively and efficiently used, including: (a) any assessment of the results achieved with state or jurisdiction 911/E911 or NG911 funds, and (b) the criteria your state or jurisdiction uses to measure the effectiveness of expended 911/E911 funds.

13. For your state or taxing jurisdiction during the relevant annual period, a description of the impact of any underfunding of 911 services and how any fee diversion has affected 911 underfunding. For the purposes of this questionnaire, underfunding occurs when funding levels are below the levels required for optimal performance of 911 operations.

The fillable Microsoft Word questionnaire with fillable response fields referenced above must be used for your responses. When you access the web page at https://www.fcc.gov/general/911-fee-reports, please click on "2022 911 Fee Report Information Collection Questionnaire" to download the questionnaire. When you complete the questionnaire, please email it to the FCC's 911 Fee Report e-mail inbox at 911feereport@fcc.gov no later than **June 30, 2022.**

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[8] *See* Task Force on Optimal Public Safety Answering Architecture (TFOPA), Adopted Final Report, Jan. 29, 2016, available at https://transition.fcc.gov/pshs/911/TFOPA/TFOPA_FINALReport_012916.pdf; TFOPA Working Group 1 Supplemental Report, Optimal Cybersecurity Approach for PSAPs, Dec. 2, 2016, available at https://transition.fcc.gov/pshs/911/TFOPA/TFOPA_WG1_Supplemental_Report-120216.pdf; TFOPA Working Group 2 Supplemental Report, NG911 Readiness Scorecard, Dec. 2, 2016, available at https://transition.fcc.gov/pshs/911/TFOPA/TFOPA_WG2_Supplemental_Report-120216.pdf; and TFOPA Working Group 3 Supplemental Report, Funding Sustainment Model, Dec. 2, 2016, available at https://transition.fcc.gov/pshs/911/TFOPA/TFOPA_WG3_Supplemental_Report-120216.pdf.

[9] *See* National Institute for Standards and Technology, Framework for Improving Critical Infrastructure Cybersecurity (2018), https://nvlpubs.nist.gov/nistpubs/CSWP/NIST.CSWP.04162018.pdf.

Thank you for your cooperation with this important undertaking. Please direct any questions to Ms. Kim Anderson of my staff at 911feereport@fcc.gov or (202) 418-7604.

Sincerely,

Debra Jordan
Chief
Public Safety and Homeland Security Bureau

Federal Communications Commission
Washington, D.C. 20554

Approved by OMB
3060-1122
Expires: March 31, 2024
Estimated time per response: 10-55 hours

Annual Collection of Information

Related to the Collection and Use of 911 and E911 Fees by States and Other Jurisdictions

Pursuant to OMB authorization 3060-1122, the FCC's Public Safety and Homeland Security Bureau seeks the following specific information in order to fulfill the Commission's obligations under Section 6(f)(2) of the NET 911 Act:

A. Filing Information

1. Name of State or Jurisdiction

State or Jurisdiction
WY

2. Name, Title and Organization of Individual Filing Report

Name	Title	Organization
Aimee Binning	911 Planning Coordinator	WYDOT

Addendum Section A

Federal Communications Commission
Washington, D.C. 20554

B. Overview of State or Jurisdiction 911 System

1. **Please provide the total number of active Public Safety Answering Points (PSAPs) in your state or jurisdiction that received funding derived from the collection of 911/E911 fees during the annual period ending December 31, 2020:**

PSAP Type[1]	Total
Primary	29
Secondary	7
Total	36

Addendum Section B1

[1] A Primary PSAP is one to which 911 calls are routed directly from the 911 Control office. A secondary PSAP is one to which 911 calls are transferred from a Primary PSAP. *See* National Emergency Number Association, Master Glossary of 9-1-1 Terminology (*Master Glossary*), Apr. 13, 2018, at 162, available at https://cdn.ymaws.com/www.nena.org/resource/resmgr/standards/NENA-ADM-000.22-2018_FINAL_2.pdf.

2. Please provide the total number of active telecommunicators[2] in your state or jurisdiction that were funded through the collection of 911 and E911 fees during the annual period ending December 31, 2020:

Number of Active Telecommunicators	Total
Full Time	397
Part Time	41

Addendum Section B2

3. For the annual period ending December 31, 2020, please provide an estimate of the total cost to provide 911/E911 service in your state or jurisdiction.

Amount ($)	

3a. If an amount cannot be provided, please explain why.

State-level authority over 9-1-1 fees does not exist.

[2] A telecommunicator, also known as a call taker or a dispatcher, is a person employed by a PSAP who is qualified to answer incoming emergency telephone calls and/or who provides for the appropriate emergency response either directly or through communication with the appropriate PSAP. *See Master Glossary* at 192.

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Addendum Section B3

4. **Please provide the total number of 911 calls your state or jurisdiction received during the period January 1, 2020 to December 31, 2020.**

Type of Service	Total 911 Calls
Wireline	16250
Wireless	174835
VoIP	3961
Other	
Total	195046

Addendum Section B4

C. **Description of Authority Enabling Establishment of 911/E911 Funding Mechanisms**

1. **Has your State, or any political subdivision, Indian Tribe, village or regional corporation therein as defined by Section 6(f)(1) of the NET 911 Act, established a funding mechanism designated for or imposed for the purposes of 911 or E911 support or implementation (please include a citation to the legal authority for such mechanism)?** *Check one.*

- Yes …….. ☒
- No ……..….. ☐

1a. If YES, provide a citation to the legal authority for such a mechanism.

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Wyoming State Statute 16-9-103(b)

1b. If YES, during the annual period January 1, 2020 to December 31, 2020, did your state or jurisdiction amend, enlarge, or in any way alter the funding mechanism.

No

Addendum Section C1

2. **Which of the following best describes the type of authority arrangement for the collection of 911/E911 fees?** *Check one.*
   - The State collects the fees …….. ☐
   - A Local Authority collects the fees …….. ☐
   - A hybrid approach where two or more governing bodies (*e.g.*, state and local authority) collect the fees …….. ☒

Addendum Section C2

3. Describe how the funds collected are made available to localities.

per line fees are submitted directly to local authorities and maintained in segregated accounts. Pre-paid fees are collected at a State level.

D. Description of State or Jurisdictional Authority That Determines How 911/E911 Fees are Spent

1. Indicate which entities in your state have the authority to approve the expenditure of funds collected for 911 or E911 purposes.

Jurisdiction	Authority to Approve Expenditure of Funds *(Check one)*	
	Yes	**No**
State	☐	☒
Local (*e.g.*, county, city, municipality)	☒	☐

1b. Please briefly describe any limitations on the approval authority per jurisdiction (*e.g.*, limited to fees collected by the entity, limited to wireline or wireless service, etc.)

Addendum Section D1

2. Has your state established a funding mechanism that mandates *how* collected funds can be used? *Check one.*

- Yes …….. ☒
- No ……..….. ☐

2a. If you checked YES, provide a legal citation to the funding mechanism of any such criteria.

911 system costs are authorized in Wyoming State Statue 16-9-105

2b. If you checked NO, describe how your state or jurisdiction decides how collected funds can be used.

E. Description of Uses of Collected 911/E911 Fees

1. Provide a statement identifying with specificity all activities, programs, and organizations for whose benefit your state, or political subdivision thereof, has obligated or expended funds collected for 911 or E911 purposes and how these activities, programs, and organizations support 911 and E911 services or enhancements of such services.

16-9-105. Agreements or contract for 911 emergency reporting systems; use of funds collected.

(a) Any governing body imposing the tax authorized by this chapter may enter into an agreement directly with any service supplier to the 911 system or may contract and cooperate with any public agency or any other state for the administration of a 911 system in accordance with law.

(b) Funds collected from the 911 emergency tax imposed pursuant to this chapter shall be spent solely to pay for public safety answering point and service suppliers' equipment and service costs, installation costs, maintenance costs, monthly recurring charges and other costs directly related to the continued operation of a 911 system including enhanced wireless 911 service. Funds may also be expended for personnel expenses necessarily incurred by a public safety answering point. 'Personnel expenses necessarily incurred' means expenses incurred for persons employed to:

(i) Take emergency telephone calls and dispatch them appropriately; or

(ii) Maintain the computer data base of the public safety answering point.

(c) Funds collected from the charge pursuant to this chapter shall be credited to a cash account separate from the general fund of the public agency, for payments for public safety answering points and service supplier costs pursuant to subsection (b) of this section. Any monies remaining in the cash account at the

end of any fiscal year shall remain in the account for payments during any succeeding year. If any 911 system is discontinued, monies remaining in the account shall, after all payments to the service supplier pursuant to subsection (b) of this section, be transferred to the general fund of the public agency or proportionately to the general fund of each participating public agency.

2. Please identify the allowed uses of the collected funds. *Check all that apply*.

Type of Cost		Yes	No
Operating Costs	Lease, purchase, maintenance of customer premises equipment (CPE) (hardware and software)	☒	☐
	Lease, purchase, maintenance of computer aided dispatch (CAD) equipment (hardware and software)	☒	☐
	Lease, purchase, maintenance of building/facility	☒	☐
Personnel Costs	Telecommunicators' Salaries	☒	☐

	Training of Telecommunicators	☒	☐
Administrative Costs	Program Administration	☒	☐
	Travel Expenses	☒	☐
Dispatch Costs	Reimbursement to other law enforcement entities providing dispatch	☒	☐
	Lease, purchase, maintenance of Radio Dispatch Networks	☐	☐
Grant Programs		☐ **If YES, see 2a.**	☐

2a. During the annual period ending December 31, 2020, describe the grants that your state paid for through the use of collected 911/E911 fees and the purpose of the grant.

None

Addendum Section E2

F. Description of 911/E911 Fees Collected

1. Please describe the amount of the fees or charges imposed for the implementation and support of 911 and E911 services. Please distinguish between state and local fees for each service type.		
Service Type	**Fee/Charge Imposed**	**Jurisdiction Receiving Remittance (*e.g.*, state, county, local authority, or a combination)**
Wireline	up to $0.75 per line	Jurisdiction
Wireless	up to $0.75 per line	Jurisdiction
Prepaid Wireless	1.5% @ point of sale	Combination
Voice Over Internet Protocol (VoIP)	up to $0.75 per line	Jurisdiction
Other		

Addendum Section F1

2. For the annual period ending December 31, 2020, please report the total amount collected pursuant to the assessed fees or charges described in Question F 1.

Service Type	Total Amount Collected ($)
Wireline	
Wireless	
Prepaid Wireless	
Voice Over Internet Protocol (VoIP)	
Other	
Total	

2a. If an amount cannot be provided, please explain why.

Not tracked on a statewide basis.

Addendum Section F2

3. Please identify any other sources of 911/E911 funding.

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Local jurisdiction budgets.

Question	Yes	No
4. **For the annual period ending December 31, 2020, were any 911/E911 fees that were collected by your state or jurisdiction combined with any federal, state or local funds, grants, special collections, or general budget appropriations that were designated to support 911/E911/NG911 services?** *Check one.*	☐	☒
4a. If YES, please describe the federal, state or local funds and amounts that were combined with 911/E911 fees.		

Addendum Section F4

5. Please provide an estimate of the proportional contribution from each funding source towards the total cost to support 911 in your state or jurisdiction.	**Percent**
State 911 Fees	Varies by local jurisdiction
Local 911 Fees	Varies by local jurisdiction
General Fund - State	Varies by local jurisdiction
General Fund - County	Varies by local jurisdiction
Federal Grants	Varies by local jurisdiction
State Grants	Varies by local jurisdiction

Addendum Section F5

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Washington, D.C. 20554

G. Description of Diversion or Transfer of 911/E911 Fees for Other Uses

Question	Yes	No
1. In the annual period ending December 31, 2020, were funds collected for 911 or E911 purposes in your state or jurisdiction made available or used solely for the purposes designated by the funding mechanism? *Check one.*	☒	☐

1a. If NO, please identify what amount of funds collected for 911 or E911 purposes were made available or used for any purposes other than the ones designated by the funding mechanism or used for purposes otherwise unrelated to 911 or E911 implementation or support, including any funds transferred, loaned, or otherwise used for the state's general fund. Along with identifying the amount, please include a statement identifying the non-related purposes for which the collected 911 or E911 funds were made available or used.

Amount of Funds ($)	Identify the non-related purpose(s) for which the 911/E911 funds were used. (*Add lines as necessary*)

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Addendum Section G1

H. **Oversight and Auditing of Collection and Use of 911/E911 Fees**

Question	Yes	No
1. Has your state established any oversight or auditing mechanisms or procedures to determine whether collected funds have been made available or used for the purposes designated by the funding mechanism or otherwise used to implement or support 911? *Check one.*	☐	☒
1a. If YES, provide a description of the mechanisms or procedures and any enforcement or other corrective actions undertaken in connection with such auditing authority, for the annual period ending December 31, 2020. *(Enter "None" if no actions were taken.)*		

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Question	Yes	No
2. Does your state have the authority to audit service providers to ensure that the amount of 911/E911 fees collected from subscribers matches the service provider's number of subscribers? *Check one.*	☐	☒
2a. If YES, provide a description of any auditing or enforcement or other corrective actions undertaken in connection with such auditing authority, for the annual period ending December 31, 2020. *(Enter "None" if no actions were taken.)*		

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I. Description of Next Generation 911 Services and Expenditures

Question	Yes	No
1. Does your state or jurisdiction classify expenditures on Next Generation 911 as within the scope of permissible expenditures of funds for 911 or E911 purposes? *Check one.*	☒	☐
1a. If YES, in the space below, please cite any specific legal authority:		

Question	Yes	No
2. In the annual period ending December 31, 2020, has your state or jurisdiction expended funds on Next Generation 911 programs? *Check one.*	☐	☒
2a. If YES, in the space below, please enter the dollar amount that has been expended.		
Amount ($)		

Addendum Section I2

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Washington, D.C. 20554

3. For the annual period ending December 31, 2020, please describe the type and number of NG911 Emergency Service IP Network(s) (ESInets) that operated within your state.

Type of ESInet	Yes	No	If Yes, Enter Total PSAPs Operating on the ESInet	If Yes, does the type of ESInet interconnect with other state, regional or local ESInets?	
				Yes	No
a. A single, state-wide ESInet	☐	☒		☐	☐
b. Local (*e.g.*, county) ESInet	☐	☒		☐	☐
c. Regional ESInets	☐	☒	[If more than one Regional ESInet is in operation, in the space below, provide the total PSAPs operating on each ESInet]	☐	☐
Name of Regional ESInet 1:				☐	☐

Name of Regional ESInet 2:		☐	☐
Name of Regional ESInet 3:		☐	☐
Name of Regional ESInet 4:		☐	☐
Name of Regional ESInet 5:		☐	☐
Name of Regional ESInet 6:		☐	☐
Name of Regional ESInet 7:		☐	☐
Name of Regional ESInet 8:		☐	☐
Name of Regional ESInet 9:		☐	☐
Name of Regional ESInet 10:		☐	☐
Name of Regional ESInet 11:		☐	☐

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Name of Regional ESInet 12:		☐	☐
Name of Regional ESInet 13:		☐	☐
Name of Regional ESInet 14:		☐	☐
Name of Regional ESInet 15:		☐	☐
Name of Regional ESInet 16:		☐	☐
Name of Regional ESInet 17:		☐	☐
Name of Regional ESInet 18:		☐	☐
Name of Regional ESInet 19:		☐	☐
Name of Regional ESInet 20:		☐	☐
Name of Regional ESInet 21:		☐	☐

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Name of Regional ESInet 22:		☐	☐
Name of Regional ESInet 23:		☐	☐
Name of Regional ESInet 24:		☐	☐
Name of Regional ESInet 25:		☐	☐
Name of Regional ESInet 26:		☐	☐
Name of Regional ESInet 27:		☐	☐
Name of Regional ESInet 28:		☐	☐
Name of Regional ESInet 29:		☐	☐
Name of Regional ESInet 30:		☐	☐
Name of Regional ESInet 31:		☐	☐

Name of Regional ESInet 32:		☐	☐
Name of Regional ESInet 33:		☐	☐
Name of Regional ESInet 34:		☐	☐
Name of Regional ESInet 35:		☐	☐

Addendum Section I3

4. Please provide a description of any NG911 projects completed or underway during the annual period ending December 31, 2020.

The State of Wyoming has conviened workgroups with representatives from local jurisdictions to assist in developing the state NG911 plan. Local jurisdictions, to varying degrees, have planned, installed or updated CPE to be i3 compliant.

Question	Total PSAPs Accepting Texts
5. During the annual period ending December 31, 2020, how many PSAPs within your state implemented text-to-911 and are accepting texts?	25
Question	**Estimated Number of PSAPs that will Become Text Capable**

6. In the next annual period ending December 31, 2021, how many PSAPs do you anticipate will become text capable?	2

Addendum Section I5

Addendum Section I6

J. **Description of Cybersecurity Expenditures**

Question	Check the appropriate box		If Yes, Amount Expended ($)
1. During the annual period ending December 31, 2020, did your state expend funds on cybersecurity programs for PSAPs?	Yes ☐	No ☒	

Addendum Section J1

Question	Total PSAPs

2. During the annual period ending December 31, 2020, how many PSAPs in your state either implemented a cybersecurity program or participated in a regional or state-run cybersecurity program?	Unknown

Addendum Section J2

Question	Yes	No	Unknown
3. Does your state or jurisdiction adhere to the National Institute of Standards and Technology *Framework for Improving Critical Infrastructure Cybersecurity* (February 2014) for networks supporting one or more PSAPs in your state or jurisdiction?	☐	☒	☐

Addendum Section J3

K. **Measuring Effective Utilization of 911/E911 Fees**

1. Please provide an assessment of the effects achieved from the expenditure of state 911/E911 or NG911 funds, including any criteria your state or jurisdiction uses to measure the effectiveness of the use of 911/E911 fees and charges. If your state conducts annual or other periodic assessments, please provide an electronic copy (*e.g.*, Word, PDF) of the latest such report upon submission of this questionnaire to the FCC or provide links to online versions of such reports in the space below.

Federal Communications Commission
Washington, D.C. 20554

A statewide assessment of the effects of 911 funds is not available. State-level review is not authorized for the impacts on local jurisdictions.

We have estimated that your response to this collection of information will take an average of 10 to 55 hours. Our estimate includes the time to read the instructions, look through existing records, gather and maintain required data, and actually complete and review the form or response. If you have any comments on this estimate, or on how we can improve the collection and reduce the burden it causes you, please write the Federal Communications Commission, Office of Managing Director, AMD-PERM, Washington, DC 20554, Paperwork Reduction Act Project (3060-1122). We will also accept your PRA comments via the Internet if you send an e-mail to PRA@fcc.gov.

Please DO NOT SEND COMPLETED FORMS TO THIS ADDRESS. You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number and/or we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-1122.

THIS NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

Federal Communications Commission
Washington, D.C. 20554

Fourteenth 911 Annual Fee Report, Response For Calendar Year 2021

Approved by OMB
3060-1122
Expires: March 31, 2025
Estimated time per response: 10-55 hours

Annual Collection of Information

Related to the Collection and Use of 911 and E911 Fees by States and Other Jurisdictions

Pursuant to OMB authorization 3060-1122, the FCC's Public Safety and Homeland Security Bureau (the Bureau) seeks the following specific information in order to fulfill the Commission's obligations under Section 6(f)(2) of the NET 911 Act, as amended by Section 902.[1]

Instructions for Filling Out the Questionnaire

Please read and follow these general instructions:

- Please complete all sections of this form.
- Please enter only numeric responses where requested.
  - Dollar or percentage signs, decimal points, and thousands separator commas are acceptable.
  - Blank responses, "None", "Unknown", or "N/A" are also acceptable.
  - To facilitate the Bureau's calculations for the Annual Fee Report, please avoid stray characters such as: *, ~, (), or [] in numeric responses.
- Use the associated Addendum fields to enter other information, such as footnotes, qualifiers, text, descriptions, and/or explanations.
- All responses should pertain to calendar year (January 1 – December 31), not fiscal year.
- Unless otherwise directed, please provide requested information directly on this form, rather than submit, refer to, and/or rely on supplemental materials.
- Please consolidate separate response forms (and/or responses to individual questions) completed by counties, municipalities, or other local jurisdictions into one response form for the entire state, using sums and averages as appropriate.

A. Filing Information

A1. Name of State or Jurisdiction

State or Jurisdiction

[1] *See* Consolidated Appropriations Act, 2021, Public Law 116-260, Division FF, Title IX, section 902.

A2. Name, Title and Organization of Individual Filing Report

Name	Title	Organization

Addendum Section A

B. <u>Overview of State or Jurisdiction 911 System</u>

B1. Please provide the total number of active primary and secondary Public Safety Answering Points (PSAPs) in your state or jurisdiction that received funding derived from the collection of 911/E911 fees during the annual period ending December 31, 2021. PSAPs that did not receive funding derived from the collection of 911/E911 fees need not be included in the response boxes, but may be reported in Addendum Section B1.

PSAP Type[2]	Number of PSAPs
Primary	
Secondary	
Total	

Addendum Section B1

[2] A Primary PSAP is one to which 911 calls are routed directly from the 911 Control office. A secondary PSAP is one to which 911 calls are transferred from a Primary PSAP. *See* National Emergency Number Association (NENA), Master Glossary of 9-1-1 Terminology at 174 (June 22, 2021), https://cdn.ymaws.com/www.nena.org/resource/resmgr/standards/nena-adm-000.24-2021_final_2.pdf.

B2. Please provide the total number of active telecommunicators[3] in your state or jurisdiction that were funded through the collection of 911 and E911 fees during the annual period ending December 31, 2021. Telecommunicators that were not funded through the collection of 911 and E911 fees need not be included in the response boxes, but may be reported in Addendum Section B2.

Telecommunicator Type	Number of Active Telecommunicators Funded by 911/E911 Fees
Full Time	
Part Time	

Addendum Section B2

B3. For the annual period ending December 31, 2021, please provide an estimate of the total cost to provide 911/E911 service in your state or jurisdiction.

Amount ($)	

B3a. If an amount cannot be provided, please explain why.

Addendum Section B3

B4. Please provide the total number of 911 voice calls that your state or jurisdiction received during the period January 1, 2021 to December 31, 2021.

[3] For the purposes of this questionnaire, a telecommunicator, also known as a call taker or a dispatcher, is a person employed by a PSAP who is qualified to answer incoming emergency telephone calls and/or who provides for the appropriate emergency response either directly or through communication with the appropriate PSAP. *See* https://nenawiki.org/wiki/Telecommunicator.

Type of Service	Total 911 Voice Calls
Wireline	
Wireless	
VoIP	
Other (report 911 texts separately below in B.4a)	
Total	

B4a. Please provide the total number of 911 texts that your state or jurisdiction received during the period January 1, 2021 to December 31, 2021.

Texts to 911	

Addendum Section B4

C. <u>Description of Authority Enabling Establishment of 911/E911 Funding Mechanisms</u>

C1. Has your State, or any political subdivision, Indian Tribe, village or regional corporation therein as defined by Section 6(f)(1) of the NET 911 Act, established a funding mechanism designated for or imposed for the purposes of 911 or E911 support or implementation (please include a citation to the legal authority for such mechanism)? *Check one.*

- Yes …….. ☐
- No ……..….. ☐

C1a. If YES, provide a citation to the legal authority for such a mechanism.

C1b. If YES to C1, during the annual period January 1, 2021 to December 31, 2021, did your state or jurisdiction amend, enlarge, or in any way alter the funding mechanism? *Check one (leave blank if NO to C1).*

- Yes …….. ☐
- No ……..….. ☐
- Unknown ……..….. ☐

C1c. If YES to C1b., provide a description of amendments, enlargements, or alterations to the funding mechanism, if applicable.

Addendum Section C1

C2. Which of the following best describes the type of authority arrangement for the collection of 911/E911 fees? *Check one.*

- The State collects the fees …….. ☐
- A local authority collects the fees ……..… ☐
- A hybrid approach where two or more governing bodies (*e.g.*, state and local authority) collect the fees …….. ☐

Addendum Section C2

C3. Describe how the funds collected are made available to localities.

D. <u>Description of State or Jurisdictional Authority That Determines How 911/E911 Fees are Spent</u>

D1. Indicate which entities in your state have the authority to approve the expenditure of funds collected for 911 or E911 purposes. *Check one*.

- The State has authority to approve the expenditure of funds ……..….. ☐

- One or more local authorities has authority to approve the expenditure of funds… ☐
- A hybrid approach where two or more governing bodies (e.g., state or local authority) have authority to approve the expenditure of funds ……. ☐

D1a. Please briefly describe any limitations on the approval authority per jurisdiction (*e.g.*, limited to fees collected by the entity, limited to wireline or wireless service, etc.).

Addendum Section D1

D2. Has your state established a funding mechanism that mandates *how* collected funds can be used? *Check one*.

- Yes …….. ☐
- No ……..….. ☐

D2a. If you checked YES, provide a legal citation to the funding mechanism of any such criteria.

D2b. If you checked NO, describe how your state or jurisdiction decides how collected funds can be used.

E. <u>Description of Uses of Collected 911/E911 Fees</u>

E1. Provide a statement identifying with specificity all activities, programs, and organizations for whose benefit your state, or political subdivision thereof, has obligated or expended funds collected for 911 or E911 purposes and how these activities, programs, and organizations support 911 and E911 services or enhancements of such services.

E2. Please identify the uses of the collected funds.[4] *Check all that apply*.			
Type of Cost		**Yes**	**No**
PSAP operating costs, including technological innovation that supports 911	Lease, purchase, maintenance, replacement, and upgrade of customer premises equipment (CPE) (hardware and software)	☐	☐
	Lease, purchase, maintenance, replacement, and upgrade of computer aided dispatch (CAD) equipment (hardware and software)	☐	☐
	Lease, purchase, maintenance, replacement, and upgrade of PSAP building/facility	☐	☐
	NG911, cybersecurity, pre-arrival instructions, and emergency notification systems (ENS)	☐	☐
PSAP personnel costs	Telecommunicators' Salaries	☐	☐
	Training of Telecommunicators	☐	☐
PSAP administrative costs	Program Administration	☐	☐
	Travel Expenses	☐	☐
Costs for integration and interoperability of 911 systems and public safety/first responder radio systems	Integrating public safety/first responder dispatch and 911 systems, including lease, purchase, maintenance, and upgrade of CAD hardware and software to support integrated 911 and public safety dispatch operations	☐	☐
	Providing for the interoperability of 911 systems with one another and with public safety/first responder radio systems	☐	☐
Grant programs		☐ **If YES, see E2a.**	☐
E2a. During the annual period ending December 31, 2021, describe the grants that your state paid for through the use of collected 911/E911 fees and the purpose of such grants.			

[4] *See* 47 CFR § 9.23(b)(1)–(5).

Addendum Section E2

F. Description of 911/E911 Fees Collected

F1. Please describe the amount of fees or charges imposed for the implementation and support of 911 and E911 services. Please distinguish between state and local fees for each service type.

Service Type	**Fee/Charge Imposed**	**Jurisdiction Receiving Remittance** *Check one for each Service Type.*		
		State	**County or Local Authority**	**Combination of State and County/Local**
Wireline – monthly fee ($)	$	☐	☐	☐
Wireless – monthly fee ($)	$	☐	☐	☐
Prepaid Wireless – provide *either* flat fee ($) or percentage (%) per retail transaction *(leave inapplicable cell blank)*	$ %	☐	☐	☐
Voice Over Internet Protocol (VoIP) – monthly fee ($)	$	☐	☐	☐
Other – monthly fee ($)	$	☐	☐	☐

Addendum Section F1

F2. For the annual period ending December 31, 2021, please report the total amount collected pursuant to the assessed fees or charges described in Question F1.

Service Type	Total Amount Collected ($)
Wireline	
Wireless	
Prepaid Wireless	
Voice Over Internet Protocol (VoIP)	
Other	
Total	

F2a. If an amount cannot be provided, please explain why.

Addendum Section F2

F3. Please identify any other sources of 911/E911 funding.

Question	Yes	No
F4. For the annual period ending December 31, 2021, were any 911/E911 fees that were collected by your state or jurisdiction combined with any federal, state or local funds, grants, special collections, or general budget	☐	☐

appropriations that were designated to support 911/E911/NG911 services? *Check one.*		

F4a. If YES, please describe the federal, state or local funds and amounts that were combined with 911/E911 fees.

Addendum Section F4

F5. Please provide an estimate of the proportional contribution from each funding source towards the total cost to support 911 in your state or jurisdiction.	**Percent (%)**
State 911 Fees	
Local 911 Fees	
General Fund - State	
General Fund - County	
Federal Grants	
State Grants	

Addendum Section F5

G. Description of Diversion or Transfer of 911/E911 Fees for Other Uses

For the purposes of this questionnaire, diversion is the obligation or expenditure of a 911 fee or charge for a purpose or function other than the purposes and functions identified in 47 CFR § 9.23 of the Commission's rules as acceptable.

Question	Yes	No
G1. In the annual period ending December 31, 2021, were funds collected for 911 or E911 purposes in your state or jurisdiction obligated or expended solely for acceptable purposes and functions as provided under 47 CFR § 9.23? *Check one.*	☐	☐

G1a. If NO, please identify what amount of funds collected for 911 or E911 purposes were obligated or expended for purposes or functions other than those designated as acceptable under 47 CFR § 9.23, including any funds transferred, loaned, or otherwise used for the state's general fund. Along with identifying the amount, please include a statement identifying the purposes or functions for such funds.

Amount of Funds ($)	Identify the purposes or functions other than those designated as acceptable by the Commission for which the 911/E911 funds were obligated or expended. (*If you need more rows for your response, please enter the information in Addendum Section G1.*)

Addendum Section G1

Question	Yes	No
G2. In the annual period ending December 31, 2021, were funds collected for 911 or E911 purposes in your state or jurisdiction obligated or expended for the purchase, maintenance, replacement, or upgrade of public safety radios, networks, equipment, or related infrastructure? *Check one.*	☐	☐

G2a. If YES to G2, are all of the public safety radios, networks, equipment, or related infrastructure on which funds were obligated or expended used to deliver 911-originated information to emergency responders? For the purposes of this questionnaire, 911-originated information includes all data and information delivered between the 911 request for assistance and the emergency responders.	☐	☐

G2a(i). If NO to G2a, please explain.

G2b. If YES to G2, please itemize the amounts that were obligated or expended and include descriptions of the public safety radios, networks, equipment, or related infrastructure.

Amount of Funds ($)	**Description of such obligations or expenditures. (*If you need more rows for your response, please enter the information in Addendum Section G2.*)**

Addendum Section G2

Safe Harbor for Multi-Purpose Fees. Section 9.23(d) of the rules provides an elective safe harbor for states and taxing jurisdictions that designate multi-purpose fees or charges for "public safety," "emergency services," or other similar purposes where a portion of those fees or charges supports 911 services. *See* 47 CFR § 9.23(d). The rule provides that the obligation or expenditure of such a fee or charge will not constitute diversion if the state or taxing jurisdiction (i) specifies the amount or percentage of such fees or charges that is dedicated to 911 services; (ii) ensures that the 911 portion

of such fees or charges is segregated and not commingled with any other funds; and (iii) obligates or expends the 911 portion of such fees or charges for acceptable purposes and functions as defined under the Commission's rules.

G3. Does your state or taxing jurisdiction collect fees or charges designated for "public safety," "emergency services," or other similar purposes where a portion of those fees or charges supports 911 services? *Check one.*

- Yes …….. ☐
- No ……..….. ☐

If YES to G3, please answer Questions G3a – G3c below. *(If NO to G3, leave blank.)*

Question	Yes	No
G3a. Does the state or taxing jurisdiction specify the amount or percentage of such fees or charges that is dedicated to 911 services? *Check one.*	☐	☐
Question	**Response**	
G3a(i). Cite to the authority by which the state or taxing jurisdiction specifies the amount or percentage.		
G3a(ii). Indicate the amount or percentage of such a fee dedicated to 911 services. Provide *either* dollar amount or percentage. *(Leave inapplicable cell blank.)*	$	
	%	
Question	**Yes**	**No**
G3b. Does the state or taxing jurisdiction ensure that the 911 portion of such fees or charges is segregated and not commingled with any other funds? *Check one.*	☐	☐
G3b(i). Cite to the authority by which the state or taxing jurisdiction segregates such fees.		
Question	**Yes**	**No**
G3c. Does the state or taxing jurisdiction obligate or expend the 911 portion of such fees or charges only for the	☐	☐

purposes and functions designated by the Commission as acceptable pursuant to 47 CFR § 9.23? *Check one.*		
G3c(i). If NO to G3c, please explain.		

Addendum Section G3

H. Oversight and Auditing of Collection and Use of 911/E911 Fees

Question	Yes	No
H1. Has your state established any oversight or auditing mechanisms or procedures to determine whether collected funds have been obligated or expended for acceptable purposes and functions as designated under the Commission's rules? *Check one.*	☐	☐
H1a. If YES, provide a description of the mechanisms or procedures and any enforcement or other corrective actions undertaken in connection with such auditing authority, for the annual period ending December 31, 2021. *(Enter "None" if no actions were taken.)*		

Addendum Section H1

Question	Yes	No
H2. Does your state have the authority to audit service providers to ensure that the amount of 911/E911 fees collected from subscribers matches the service provider's number of subscribers? *Check one.*	☐	☐

Question	Yes	No	N/A
H2a. Did your state conduct an audit of service providers in connection with such auditing authority during the annual period ending December 31, 2021? *Check one; check N/A if Question H2 response above is NO.*	☐	☐	☐
H2b. If YES to H2 and H2a, provide a description of any auditing or enforcement or other corrective actions undertaken in connection with such auditing authority for the annual period ending December 31, 2021. *(Leave blank if not applicable / no actions were taken.)*			

Addendum Section H2

I. Description of Next Generation 911 Services and Expenditures

Question	Yes	No
I1. Does your state or jurisdiction classify expenditures on Next Generation 911 (NG911) as within the scope of acceptable purposes and functions for the obligation or expenditure of 911 fees or charges? *Check one.*	☐	☐
I1a. If YES, please cite any specific legal authority:		

Question	Yes	No
I2. In the annual period ending December 31, 2021, has your state or jurisdiction expended funds on NG911 programs? *Check one.*	☐	☐
I2a. If YES, please enter the dollar amount that has been expended during the annual period.		
Amount ($)		

Addendum Section I2

I3. For the annual period ending December 31, 2021, please provide the number of PSAPs that operated on each type of NG911 Emergency Service IP Network(s) (ESInets) that operated within your state.

Type of ESInet	Yes	No	If Yes, Enter Total PSAPs Operating on the ESInet	If Yes, does the type of ESInet interconnect with other state, regional or local ESInets?	
				Yes	No
I3a. A single, state-wide ESInet	☐	☐		☐	☐
I3b. Local (*e.g.*, county) ESInet(s)	☐	☐		☐	☐
I3c. Regional ESInets	☐	☐	[If one Regional ESInet is in operation, provide the total PSAPs on the first line below. If more than one Regional ESInet is		

			in operation, provide the total PSAPs operating on each ESInet.]		
Name of Regional ESInet 1:				☐	☐
Name of Regional ESInet 2:				☐	☐
Name of Regional ESInet 3:				☐	☐
Name of Regional ESInet 4:				☐	☐
Name of Regional ESInet 5:				☐	☐
Name of Regional ESInet 6:				☐	☐
Name of Regional ESInet 7:				☐	☐
If more Regional ESInets operate in your state or taxing jurisdiction, please list the names of Regional ESInets 8 and higher, and numbers of associated PSAPs, in the space below:					

Addendum Section I3

I4. Please provide a description of any NG911 projects completed or underway during the annual period ending December 31, 2021.

I4a. Based on your response to I4, please indicate which categories of NG911 expenditures from this non-exhaustive list apply.	***Check all that apply*.**
General Project or Not Specified	☐
Planning or Consulting Services	☐
ESInet Construction	☐
NG911 Core Services	☐
Hardware or Software Purchases or Upgrades	☐
GIS	☐
NG911 Security Planning	☐
Training	☐

I5. As of December 31, 2021, how many PSAPs within your state have implemented text-to-911 and are accepting texts? Please refrain from non-numeric responses such as "all PSAPs." Enter any text in Addendum Section I5.

Total Number of PSAPs Accepting Texts as of December 31, 2021	

Addendum Section I5

I6. By the end of the *next* annual period ending December 31, 2022, how many *total* PSAPs do you anticipate will have implemented text-to-911 and will be accepting texts?

Estimated Total Number of PSAPs Accepting Texts as of December 31, 2022	

Addendum Section I6

J. <u>Cybersecurity Expenditures</u>

Question	Check the appropriate box		If Yes, Amount Expended ($)
J1. During the annual period ending December 31, 2021, did your state expend funds on cybersecurity programs for PSAPs?	Yes ☐	No ☐	

Addendum Section J1

Question	Total PSAPs
J2. During the annual period ending December 31, 2021, how many PSAPs in your state either implemented a cybersecurity program or participated in a regional or state-run cybersecurity program?	

Addendum Section J2

Question	Yes	No	Unknown
J3. Does your state or jurisdiction adhere to the National Institute of Standards and Technology *Framework for Improving Critical Infrastructure Cybersecurity* (April 2018) for networks supporting one or more PSAPs in your state or jurisdiction?[5] *Check one.*	☐	☐	☐

[5] National Institute of Standards and Technology, Framework for Improving Critical Infrastructure Cybersecurity (2018), https://nvlpubs.nist.gov/nistpubs/cswp/nist.cswp.04162018.pdf.

Addendum Section J3

K. Measuring Effective Utilization of 911/E911 Fees

K1. Please provide an assessment of the effects achieved from the expenditure of state 911/E911 or NG911 funds, including any criteria your state or jurisdiction uses to measure the effectiveness of the use of 911/E911 fees and charges. If your state conducts annual or other periodic assessments, please provide an electronic copy (*e.g.*, Word, PDF) of the latest such report upon submission of this questionnaire to the FCC or provide links to online versions of such reports in the space below.

L. Underfunding of 911

For the purposes of this questionnaire, underfunding occurs when funding levels are below the levels required for optimal performance of 911 operations.

L1. Describe the impact of any underfunding of 911 services in your state or taxing jurisdiction during the annual period ending December 31, 2021.

L2. Describe how any fee diversion affected 911 underfunding in your state or taxing jurisdiction during the annual period ending December 31, 2021. *Indicate N/A if your state or taxing jurisdiction did not divert.*

We have estimated that your response to this collection of information will take an average of 10 to 55 hours. Our estimate includes the time to read the instructions, look through existing records, gather and maintain required data, and actually complete and review the form or response. If you have any comments on this estimate, or on how we can improve the collection and reduce the burden it causes you, please write the Federal Communications Commission, Office of Managing Director, AMD-PERM, Washington, DC 20554, Paperwork Reduction Act Project (3060-1122). We will also accept your PRA comments via the Internet if you send an e-mail to PRA@fcc.gov.

Please DO NOT SEND COMPLETED FORMS TO THIS ADDRESS. You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number and/or we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-1122.

THIS NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

State of Wyoming

Next Generation 9-1-1 State Plan

March 2022v1

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

This state plan provides the baseline strategies, goals, and initiatives to continue moving the planning and implementation of Next Generation 9-1-1 (NG9-1-1) forward for the benefit of the citizens of Wyoming.

Strategic plans are considered mid- to long-range planning documents that normally cover a period of multiple years. The development of a strategic plan includes identifying and evaluating the background information, status of the situation, a vision of the future, and then the development of a roadmap of how to get to that desired future state.

A strategic plan is routinely reviewed on an annual or semi-annual basis to evaluate whether changes to the plan are required. As such, the strategic plan is a living document that will typically change and evolve over time as the long-term strategies are implemented.

Overall Approach

There are significant improvements in public safety effectiveness that can be achieved through the implementation of NG9-1-1. Those efficiency improvements should not only reduce response times, but they will also ultimately save lives. This document provides the overall path to pursue development of a comprehensive plan.

While that planning is critical to a successful NG9-1-1 implementation, it is only one facet of successful implementation. Leadership must execute the plan with some level of flexibility because this plan will undoubtedly be modified as the implementation progresses.

Also, because the implementation process will take place over several years, there must be a communication plan. Communicating on a regular basis with the NG9-1-1 stakeholders is necessary to maintain momentum and stakeholder commitment. Without both of those, the success of the overall project will be jeopardized.

Consumer Demand for NG9-1-1

In response to advances in technology and consumer demand, traditional analog 9-1-1 service has had to commence a shift over to NG9-1-1. NG9-1-1 will create a faster, more resilient system that allows voice, photos, videos, and text messages to flow seamlessly from the public to the 9-1-1 network. Furthermore, those photos, videos and text messages can also be shared with responders to increase their situational awareness.

NG9-1-1 will improve the ability of the Public Safety Answering Point (PSAP) to manage call overload and downtime during disasters. It also allows the transferring of 9-1-1 calls and proper jurisdictional responses based on the exact location of the caller.

Strategic Plan Approach

This NG9-1-1 Strategic Plan (the Plan) articulates the State of Wyoming's vision, goals, and actionable objectives to implement NG9-1-1. It aligns with the guiding principles, as well as existing and planned resources. The intent of this Plan is to guide operational, technical, resource, funding, and legislative decisions based on identified needs for advancing NG9-1-1 capabilities and services. From an overall perspective, it will provide guidance for the establishment and implementation of NG9-1-1 throughout the State.

Overview and Background of Wyoming 9-1-1

In 2020, over 285,349 9-1-1 calls were placed in Wyoming. All areas of the state are served by 9-1-1 or E9-1-1, with 16 counties being able to receive text-to 9-1-1.

Substantially all control over 9-1-1 operations rests at the local or county level. As the transition to NG9-1-1 moves forward, the State will be responsible for overall NG9-1-1 coordination, however, control will be retained locally. To reduce the potential for inefficiencies, certain enhancements to overall governance will be required, because 9-1-1 is handled differently from city-to-city and county-to-county.

Local governments maintain all PSAP equipment and software. It is widely believed that the majority of these assets are at the end of their useful lives. Given that, there will be the need to inventory existing infrastructure and equipment to develop a plan for replacement.

Motivation for Development of this Strategic Plan

Stakeholders met in Casper, Wyoming in late 2019 to discuss 9-1-1 and the incorporation of new technologies that included the migration to an Internet Protocol (IP)-enabled emergency network and the adoption and operation of NG 9-1-1 services. The stakeholders represented local communities across the state of Wyoming including public safety answering point (PSAP) managers, IT directors, county emergency managers, and county commissioners. The motivating factor that garnered strong attention from the group was the discussion of NG9-1-1 and the $109 million in federal grant funds that could not be obtained to support jurisdictions in building NG9-1-1 technologies for their local communities.

The 9-1-1 Grant Program authorized by the Enhance 9-1-1 Act released funding that could have been used for the implementation and operation of 9-1-1 services, E9-1-1 services, migration to an IP-enabled emergency network, and adoption and operation of NG 9-1-1 services and applications. Grants were awarded to 33 states and territories in amounts ranging from $200,000 to $5.4 million. Wyoming did not qualify for the grants due to four factors. Grant applicants were required to:

- Have a designated 9-1-1 Coordinator
- Have an established governance board for NG9-1-1
- Provide a state 9-1-1 plan and project budget
- Certify that funds designated for 9-1-1 systems are not used for other purposes

The gathering of stakeholders was the first major action to make sure that Wyoming communities would not miss future opportunities for similar NG9-1-1 grant funding. The resulting actions have addressed most of the identified deficiencies:

- Stakeholders worked closely together to develop legislation for a 9-1-1 Planning Coordinator, and a designated 9-1-1 Coordinator has been installed.
- The Wyoming NG9-1-1 Plan is the result of the workgroups that were established in 2020 and were supported by the Wyoming 9-1-1 Coordinator and Planning Coordinator. This statewide plan will serve as the backbone for projects and priorities that the grant funds could be used for. A NG9-1-1 project implementation budget will be developed.
- Wyoming's collection and reporting of 9-1-1 funds are statutorily the responsibility of the local government. The disbursement of those costs is also controlled by the local jurisdictions as authorized by Wyoming State Statute 16-9-105. As a result, a consensus will need to be developed regarding the levy and collection of cell phone user fees and an affirmation that cell phone service fees would not be used for anything other than their designated purpose.

Current 9-1-1 Environment

2019 is the latest year for which the Federal Communications Commission (FCC) has information available. The 29 primary and 6 secondary PSAPs in Wyoming answered 285,349 9-1-1 calls. As of July 1, 2020, Wyoming PSAPs were staffed by 342 full-time and 29 part-time dispatchers.

It is generally believed that the majority of the 9-1-1 system equipment is at the end of its useful life. Given that, there will be the need to inventory existing infrastructure and equipment to develop a plan for replacement. While there has been discussion about converting from the legacy network and moving onto a statewide Emergency Services IP Network (ESInet) with redundancy, there has been no investigation or estimation of the costs of doing so.

Current Governance

As stated above, substantially all control over 9-1-1 operations rests at the local or county level. On March 25, 2022, Governor Mark Gordon signed SF0041 which amended the duties of the Public Safety Communication Commission (PSCC) as the governance board for NG911.

Current Funding Mechanisms

The primary funding for the implementation and maintenance of the Wyoming NG9-1-1 system is expected to come from two (2) primary sources; the collection of 9-1-1 surcharge fees on telephone service, and federal grants. Until such time as the annual surcharge revenues and legacy 9-1-1 system spending are summarized and the costs of NG9-1-1 implementation and operating costs are estimated, it is impossible to determine

how much additional funding will have to come from increased 9-1-1 surcharges, the Wyoming General Fund, or other sources.

Future Environment & State NG9-1-1 Vision

The future 9-1-1 environment in Wyoming will look much different than the current one. The Wyoming NG9-1-1 system is envisioned to utilize evolving technology to enable all PSAPs to receive, process, and dispatch 9-1-1 requests for emergency services effectively and efficiently to meet the needs of the citizens, public safety, and the service providers. The NG9-1-1 system will enable among other things:

- Transfer of 9-1-1 calls between geographically dispersed PSAPs, including across state lines with data capabilities
- Maximized public capital and operating cost savings for emergency communication services
- Promotion of increased coordination and partnerships within the emergency communication services community despite jurisdiction boundaries

Infrastructure, Equipment & Technology

Wyoming PSAPs will achieve NG9-1-1 through a phased approach, including the development of local and regional intranets capable of supporting an IP-Based 9-1-1 system; the development of public and/or private networks capable of transferring IP data between and among local networks; the development of appropriate interlocal agreements and supporting legislation; the development and maintenance of seamless, statewide GIS data that meets national data standards; the technology to interconnect multiple networks seamlessly; and the replacement of PSAP Customer Premises Equipment (CPE) with equipment capable of receiving and processing IP data, resulting in a statewide interconnected and interoperable system of local, regional, and national emergency services networks. The key system components required for an effective NG9-1-1 system in Wyoming will include Originating Service Providers (OSPs), PSAPs, GIS systems, and radio networks.

GIS

Geographic Information System (GIS) technology is the cornerstone of a NG9-1-1 system. GIS data produced at the local level forms the foundation upon which emergency call processing and call routing are successfully executed within Emergency Call Centers (ECC). Numerous aspects of the NG9-1-1 GIS ecosystem need to be planned, implemented, and managed in synchronicity to ensure program success. The data ecosystem begins with local data creation and maintenance, and migrates to standards and regulations development and implementation, outreach and training, statewide GIS database aggregation and ongoing maintenance, implementation planning and support for spatial data components, and long-term financial planning.

The state, counties, local jurisdictions and their PSAPs will need to work together to conduct a gap analysis to identify incomplete and/or missing data, which can also gauge the relative accuracy of existing GIS data throughout the state required for fully

functional NG9-1-1 call routing. Finally, best practices related to the standardization and synchronization of GIS road centerlines, site structure/address points, and other data will be employed. This synchronization process will improve the accuracy of the locally sourced GIS, Master Street Address Guide (MSAG) and Automatic Location Identification (ALI) data as well as aiding in the accuracy and preparation of the data for NG9-1-1.

Operations, Staff & Training

Applicable standards and best practices will be adopted as the most effective way to ensure successful NG9-1-1 implementation and excellent PSAP performance. Specific standards and best practices for Wyoming's NG9-1-1 system will be determined at a later date.

Because control over 9-1-1 is at the local level, 9-1-1 is handled differently from county-to-county and city-to-city. There is mandatory statewide training for dispatchers, but there is a lack of standardization between PSAPs/dispatch centers. Given this situation, there will need to be a comprehensive training program in connection with the implementation of the NG9-1-1 system.

State of Wyoming 9-1-1 Plan Objectives

During 2019 & 2020, several planning sessions took place whereby a set of Goals and Objectives for the transition to NG9-1-1 were determined. Most of these Goals and Objectives have been in development for over a year; however, various internal and external factors have resulted in minimal progress being made on them. It is expected that the addition of the Statewide 9-1-1 Coordinator and establishment of the previously mentioned working groups will allow for progress to be made in their implementation.

- Goal 1: Ensure NG9-1-1 capabilities are accessible statewide
- Goal 2: Develop a conceptual network design
- Goal 3: Develop an outreach and education plan
- Goal 4: Apply for 9-1-1 Grant Program funds
- Goal 5: Utilize survey(s) to gather stakeholder input
- Goal 6: Identify technology standards
- Goal 7: Update the membership of the Public Safety Communications Commission (PSCC) to include 9-1-1 representation
- Goal 8: Conduct an inventory of primary PSAPs and back-up centers throughout Wyoming
- Goal 9: Formally establish Working Groups: 1) Outreach and Education; 2) Technology; 3) Strategic Planning; 4) Governance; and 5) GIS
- Goal 10: Identify sustainable funding, future needs, and costs to upgrade to NG9-1-1
- Goal 11: Establish statewide GIS standards

Plan Maintenance & Progress Tracking

The purpose of this Plan is to establish a vision for statewide implementation of NG9-1-1 services. The Plan will provide directives with high-level goals and concise, specific, and measurable objectives. As goals and objectives are achieved, successes will also be documented.

The transition timeline to NG9-1-1 must include all aspects of the vision as outlined in this document. As expected, timing is highly dependent on NG9-1-1 standards maturation, the legislative process, and the available resources including both people and budget.

Because this document serves as a strategic planning guide, its implementation will be a dynamic and evolving process. As a result, the Plan is a living document that is intended to be updated periodically as more is learned in execution of this Plan.

2. INTRODUCTION

This section will provide a brief history and background of Wyoming's 9-1-1 system and an introduction to the 9-1-1 Plan and its purpose.

2.1 National Overview of the History and Background of 9-1-1

The concept of a nationwide emergency telephone number was first adopted in Great Britain in 1937. In the United States in 1967, President Johnson's Commission on Law Enforcement and Administration of Criminal Justice recommended a nationally uniform three-digit emergency telephone number. In November of that year, the Federal Communications Commission (FCC) met with the American Telephone and Telegraph Company (AT&T) and shortly thereafter AT&T announced it had reserved the numbers 9-1-1 for emergency use nationwide.

The nation's first 9-1-1 system was implemented by the Alabama Telephone Company in Haleyville, Alabama. On February 16, 1968, Alabama Speaker of the House, Rankin Fite, made the first 9-1-1 call from Haleyville City Hall. Congressman Tom Bevill answered the call on a red telephone located in the police department.

When 9-1-1 service was first introduced, 9-1-1 calls were sent to a single destination based on the caller's telephone exchange. Since there was little or no correlation between a telephone exchange boundary and the emergency responder's jurisdiction, a 9-1-1 call could end up at a PSAP that did not serve the caller's location. This early 9-1-1 service, now known as Basic 9-1-1, did not provide any telephone number or location information with the call. It was a voice service only; the caller had to provide his or her location and call back information.

Significant advancement in 9-1-1 technology occurred with the introduction of E9-1-1 in the 1980's. This level of service enabled a 9-1-1 call to be selectively routed to the PSAP serving the caller's location and delivered that call with Automatic Number Identification (ANI) and Automatic Location Identification (ALI). Other features, such as selective transfer, further streamlined the call handling process.

The pace of change in telecommunications technology continues to increase rapidly. Voice over Internet Protocol (VoIP), text messaging, and picture messaging are being enthusiastically adopted by consumers for their everyday communications – and these same consumers expect to be able to use these technologies to communicate with 9-1-1.

2.2 Overview and Background of Wyoming 9-1-1

State-level oversight of the 9-1-1 system in Wyoming is the responsibility of the local government at the county level.

Responsibility for 9-1-1 is at the county level. As such, there is currently minimal guidance that can be provided on a statewide basis. On March 8, 2019, Governor Mark Gordon signed House Bill 161, which assigned the 9-1-1 Coordinator to be located within the Wyoming Department of Transportation (WYDOT). On May 10, 2019, Governor Gordon, designated The State 9-1-1 Coordinator shall be a qualified elector of the state and whose duties may be removed by the Governor. The coordinator is responsible for coordinating with 9-1-1 local and state stakeholders to develop a statewide 9-1-1 plan and ensuring compliance with federal grant regulations.

In 2019, Wyoming PSAPs answered 285,349 9-1-1 calls. As of July 1, 2020, Wyoming had 29 primary and five secondary PSAPs, staffed by 342 full-time and 29 part-time dispatchers.[1]

Text to 9-1-1 is available in several counties, as of December 31, 2019, there were ten counties with the capability to accept text to 9-1-1, with another six that were scheduled to be implemented during 2020.

Wyoming Statutes, Title 16, Chapter 9, Article 1, also known as the Emergency Telephone Service Act, is the guiding legislation that authorizes the board of county commissioners of a county, city council or other governing body of a city, town, or county to manage and administrate 9-1-1 and emergency telephone services. Because control over 9-1-1 is at the local level, 9-1-1 is handled differently from county-to-county and city-to-city. There is mandatory statewide training for dispatchers, but there is a lack of standardization between PSAPs/dispatch centers. [2]

While the State of Wyoming does not currently have its own Enhanced 9-1-1 legislation, federal Enhanced 9-1-1 legislation has been signed affecting all U.S. companies. The President signed Bill H.R. 1625 that instructed the FCC to set the rules to ensure that the dispatchable location is conveyed with a 9-1-1 call, regardless of the technological platform used and including calls from multi-line telephone systems. This means every 9-1-1 call will require adequate location information, which typically means the street address of the calling party, and room and floor numbers.[3]

3. CURRENT 9-1-1 ENVIRONMENT

3.1 Current Legislative and Regulatory Environment and Program Structure

As stated above, substantially all control over 9-1-1 operations rests at the local or county level. As the transition to NG9-1-1 moves forward, the State will be responsible for overall coordination, however, control will be retained locally. To reduce the potential

for inefficiencies, certain enhancements to overall governance will be required and have been outlined later in this document.

The following are some of the other overall aspects related 9-1-1 in Wyoming and the transition to NG9-1-1:

- In late 2019, representation from WYDOT was appointed to the new position of Statewide 9-1-1 Coordinator
- There is limited support staff and no funding available for the 9-1-1 planning and the transition to NG9-1-1.
- By law, 9-1-1 user fee surcharges cannot exceed 75 cents per line (wired, wireless, and VoIP).[1] County Commissioners have the option to charge less. All 23 counties are reportedly charging the .75 cents per line.

3.2 Current 9-1-1 Technology

3.2.1 Overview

- Currently the local government is maintaining the equipment and software used inside an emergency communications center. The demarcation point is at the switch leading into the center.
- The current system is designed whereby those counties that are geographically the farthest away from selective routers pay higher charges. If costs continue to rise, there is a concern that migration to NG9-1-1 will be unaffordable to some of those counties.

3.2.2 Landline E9-1-1 Infrastructure

Currently, landline telephone service in Wyoming is provided by Lumen, (formerly Century Link), Chugwater Telephone Company, Silver Star Communications, Dubois Telephone Exchange, Embarq Corporation, Golden West Telecommunications, Project Telephone Company, Lumen QC, Range Telephone Coop, RT Communications, Tri County Telephone Association and World Network International Services. Lumen QC is the largest of those, and the largest wireless service provider in the state.

- The telephone service providers are depicted in Figure 1 provided by the Wyoming Public Service Commission below.
- Lumen (formerly Century Link) is the 9-1-1 service provider for the state.

[1] Wyoming Statutes 16-9-103(b)

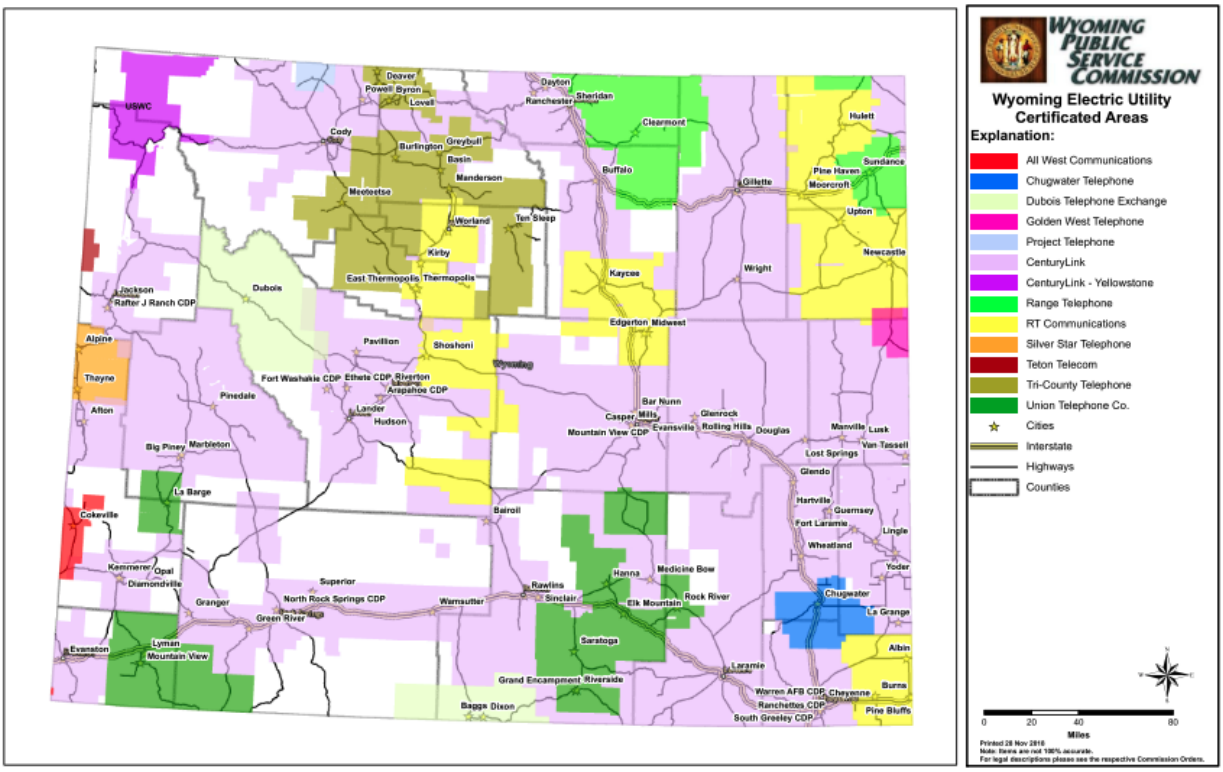

Figure 1 - Wyoming Landline Telephone Company Coverage

3.2.3 PSAPs (Public Safety Answering Points)

In the most recent FCC annual report (2020), Wyoming stated that there are 29 Primary and five Secondary PSAPs operational in the State. Based on the results of the PSAP Manager survey, conducted in 2020, a total of 912,791 calls (266,615 9-1-1 calls and 646,176 Admin calls) were handled by all PSAPs annually.

Per the 2020 survey of PSAP managers, all subscribers are served by PSAPs capable of receiving Enhanced 9-1-1 calls. E9-1-1 identifies the location of the caller and routes the call to the appropriate local PSAP. It also provides the PSAP with the caller's location information to speed the response. PSAPS have identified the following:

- 9-1-1 Call Handling vendors:
    - Intrado Viper
    - Motorola Call Works
    - Motorola Vesta
- Computer Aided Dispatch (CAD) vendors:
    - Sun Ridge
    - Spillman

- Central Square
- Intellichoice
- Tyler
- Hexagon
- Logisys
- RIMS

- Local Exchange Carrier (LEC) 9-1-1 Selective Routers - PSAPs in Wyoming are connected to Lumen E9-1-1 Selective Router located in Cheyenne. The National Parks Service PSAP, located in Teton County, states that they are the only exception.

3.2.4 ALI Database

Lumen provides Automatic Location Information (ALI) to Wyoming PSAPs through their agreement with Intrado (formerly West Safety Services). Competitive Local Exchange Carriers (CLECs) in Wyoming (both facilities based and resellers) can enter into a formal agreement with Lumen.

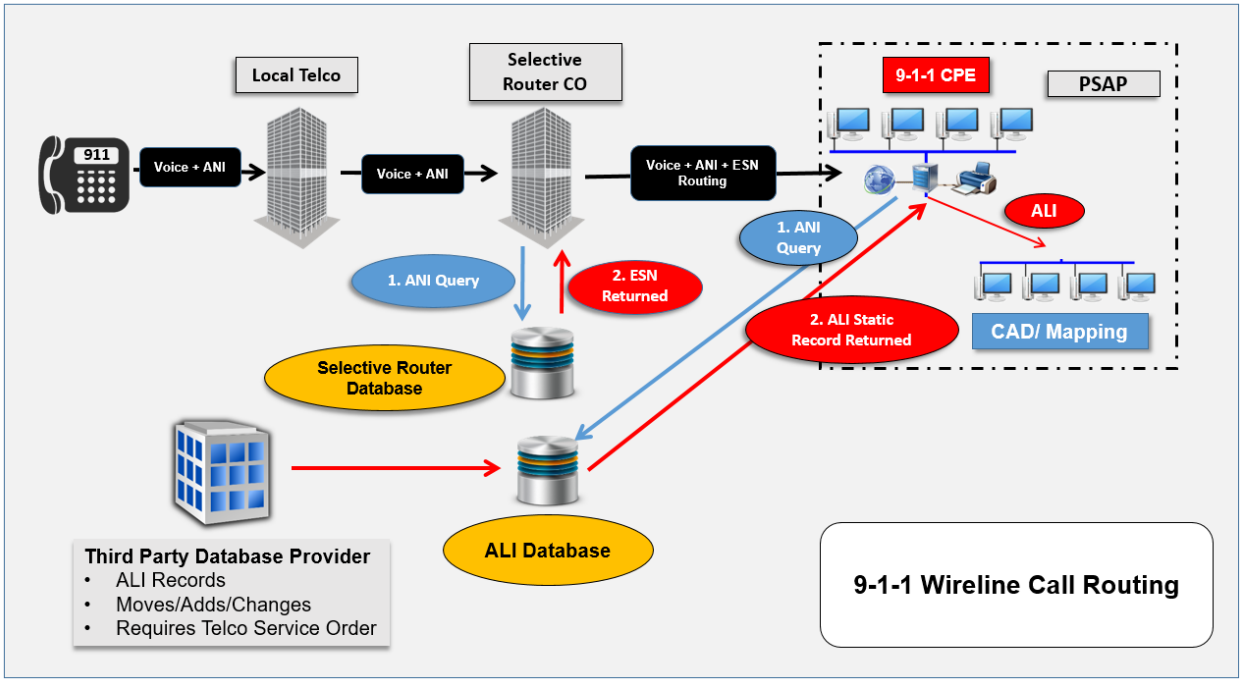

Figure 2 – 9-1-1 Wireline Call Routing Diagram

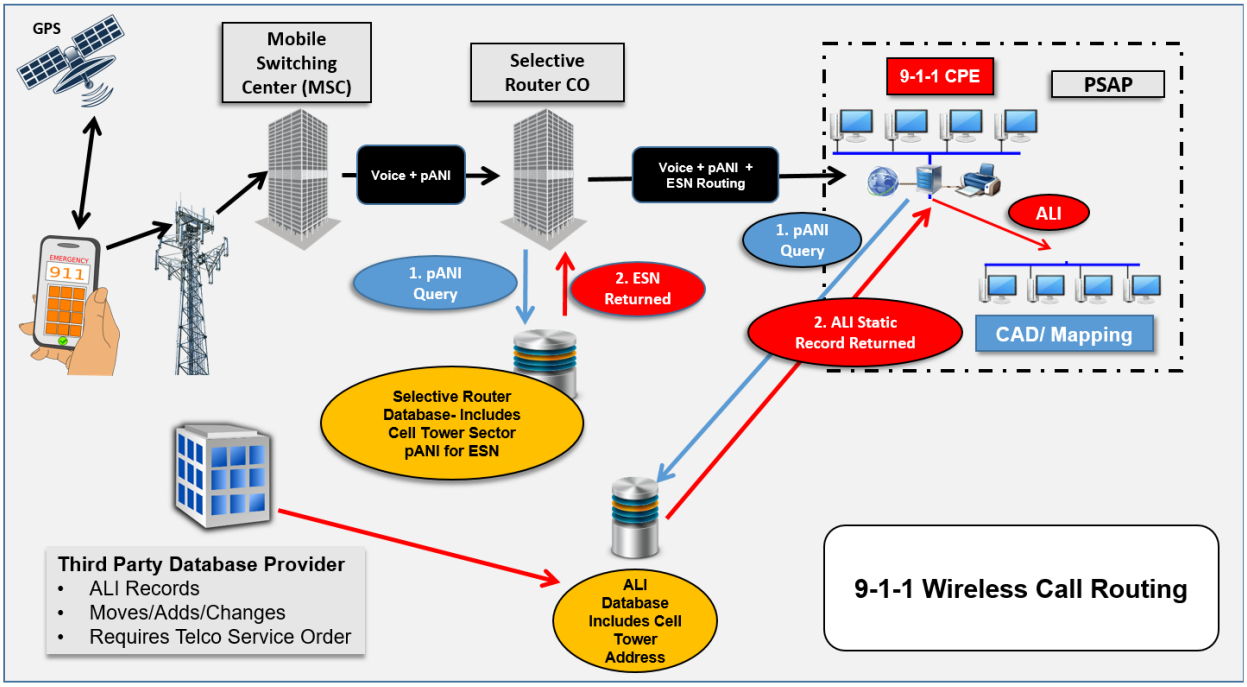

Figure 3 – 9-1-1 Wireless Call Routing Diagram

Detailed plans, applications, and pricing available to CLECs are available here:

https://www.centurylink.com/wholesale/pcat/911.html

3.3 Economics - Current Funding Mechanisms

The Goals and Objectives outlined in this Strategic Plan will provide for the efficient and effective transition to and implementation of NG9-1-1. However, their implementation will require a substantial level of financial investment.

Recognizing the need for comprehensive 9-1-1 system funding reform to help 9-1-1 evolve to support the technology needs of both the public and first responders, Congress directed National Highway Traffic Safety Administration (NHTSA) and National Telecommunications and Information Administration (NTIA) to complete a study to assess the costs, service requirements and specifications needed to implement NG9-1-1 across the country. The study team used publicly available data and sought input from vendors, associations and PSAPs to develop accurate estimates of the costs to implement and sustain NG9-1-1 throughout the country. The final report was submitted to Congress in October of 2018.[1]

As an indication of the importance of adequate funding, Goal 1.1 states the need to "Identify sustainable funding mechanism(s)." Using cost estimates, decisions can be made as to what funds will come from what sources, what changes in funding might be needed, etc.

The funding for the implementation and maintenance of the Wyoming NG9-1-1 system is expected to come from two (2) primary sources; the collection of 9-1-1 surcharge fees on

telephone service, and federal grants. In this section, we will identify the nature and extent of each funding source.

- **9-1-1 Surcharge Fees** – Counties and other local jurisdictions have the authority to set the amounts of fees with a maximum of up to $0.75 per month per wireless, wired or VoIP telephone line and 1.5% of the point-of-sale pricing of prepaid wireless services. The disbursement of those costs is also controlled by the local jurisdictions as authorized by Wyoming State Statute 16-9-105.
  The 9-1-1 surcharges collected and/or amount paid annually to maintain the 9-1-1 systems throughout the state are collected by the governing body at the local level. Each is required to file with the Wyoming Public Service Commission a statement of its gross receipts and expenditures for the prior fiscal year per Wyoming State Statute 16-9-103 to 105. As a result, research will have to be undertaken to first identify the fees collected by each jurisdiction and a mechanism for auditing the process that the fees are identified by the telecommunications companies. Until such time as that happens, it will be impossible to determine how much funding is available from this source, the potential for any increases in 9-1-1 surcharge fees and the amount of funding that is needed from outside sources such as federal grants.
- **Federal Grants** – The 9-1-1 Grant Program provides grant funding to support state and local jurisdictions, which may be used for the implementation and operation of 9-1-1 services, E9-1-1 services, migration to an IP-enabled emergency network, and adoption and operation of NG9-1-1 services and applications. The 9-1-1 Grant Program is authorized by the NG9-1-1 Advancement Act of 2012 (Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. 112-96, Title VI, Subtitle E (codified at 47 U.S.C. 942)).
  In the October 2019 grant awards, there were a total of 33 states and territories that applied for and received funding. The average grant award per state was $3.3 million, however, Wyoming was unable to apply for a grant at that time. One of the reasons that this Strategic Plan is being developed is to accompany a 9-1-1 Grant Program application in the near future.

The sources listed above are expected to provide primary funding for the transition from the Wyoming legacy 9-1-1 systems to NG9-1-1. Until such time as the surcharge revenues and legacy 9-1-1 system spending are summarized and the costs of NG9-1-1 implementation and operating costs are estimated, it is impossible to determine how much additional funding will have to come from increased 9-1-1 surcharges, the Wyoming General Fund, or other sources.

4. FUTURE NG9-1-1 ENVIRONMENT & STATE VISION

4.1 Future Environment

Public expectations and technology advancements necessitate the replacement of existing 9-1-1 networks. The public expects to communicate with 9-1-1 in the same way it communicates with others, using voice, video, text, and pictures. Nationwide, current

9-1-1 networks use equipment that is in some cases over 50 years old, limiting the ability to support anything beyond voice calls and TTY over the voice network.

For the 9-1-1 networks, upgrading to NG9-1-1 enables multimedia interaction between an emergency caller and the PSAP telecommunicators. The technology to be implemented for the NG9-1-1 network is built on the i3 Standard developed by NENA. The i3 architecture is Internet Protocol (IP) based, with gateways for transition. The i3 standard includes a defined set of software and hardware functional elements, as well as protocols and interfaces. This architecture is a network of networks that cities, counties, and states are deploying as the needs arise and as funding becomes available.[11]

The future 9-1-1 environment in Wyoming will look much different than the current environment. As you will see in Figure 4 below, the key system components required for an effective NG9-1-1 system in Wyoming will include:

- Originating Service Providers
- PSAPs
- GIS systems
- Extended Emergency Services
- Radio Networks

The most vital components, which unite the ESInet and the NG9-1-1 Core Services include:

- Emergency Services Routing Proxy (ESRP)
- Location Validation Function (LVF)
- Legacy Network Gateway (LNG)/Legacy Selective Router (LSRG)
- Legacy PSAP gateway (LPG)
- Emergency Call Routing Function (ECRF) & PSAP boundaries
- Security Functions

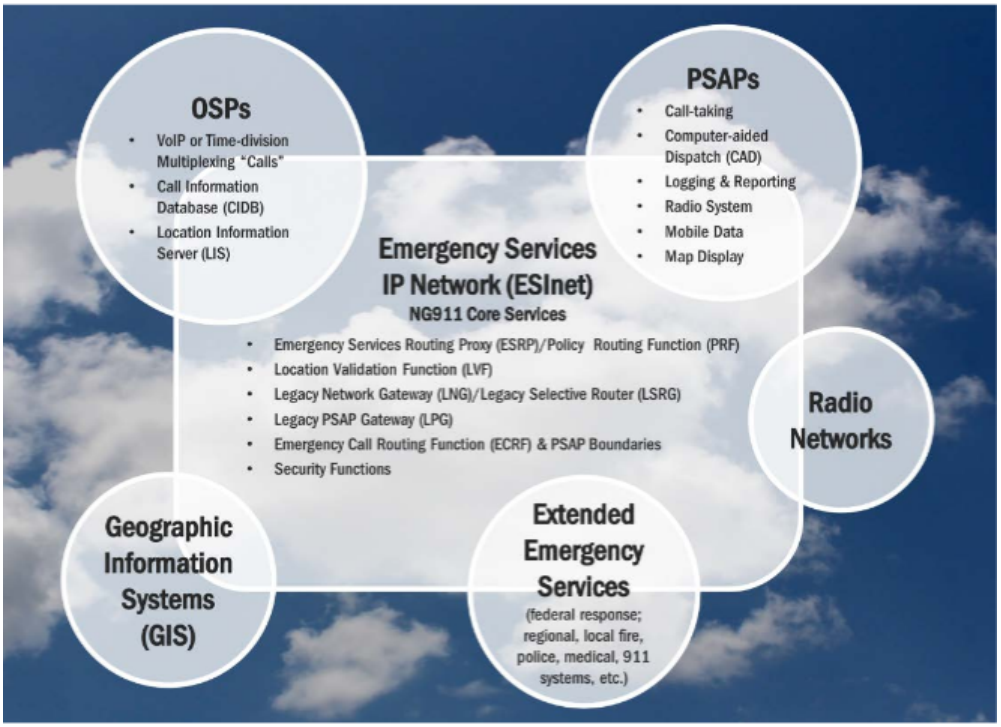

Figure 4 – NG9-1-1 System Components

4.2 Vision Statement

The vision for the Wyoming Next Generation 9-1-1 involves, by nature, services and stakeholders working together to achieve its full implementation. Wyoming NG9-1-1 is expected to be an extension of the interconnected system of local and regional emergency services networks across the US and Canada. The boundaries of emergency service networks may vary, depending on the local requirement and organizational frameworks. However, at the core, each local NG9-1-1 network would include one or more PSAPS and the corresponding public safety dispatching capabilities.

Wyoming shall utilize evolving technology to enable all PSAPs to receive, process, and dispatch 9-1-1 requests for emergency services effectively and efficiently to meet the needs of the citizens, public safety, and the service providers.

This vision was developed to help define what a successful implementation of a statewide NG9-1-1 network would look like. NG9-1-1 offers great promise in accomplishing each facet of the vision, while providing a platform to grow and expand as environmental factors change over time.

4.3 Services and Capabilities

Wyoming PSAPs will maintain their current excellent standard of 9-1-1 service delivery as they migrate to NG9-1-1. Historically, governance and control of 9-1-1 at the County level of government has proven effective in Wyoming, as County Boards of

Commissioners are in the best position to understand the needs and operations of the local emergency services providers and citizens. With migration to NG9-1-1, the ESInet will enable the public access to emergency services using communication devices and will enhance response by providing access to video, photographs, automatic crash notification data, and other data files.

The ESInet will also enable service arrangements by minimizing the need for some PSAPs to be in one physical location, promoting flexibility in the form of virtual PSAPs and virtual back-up PSAPs. While physical consolidation of PSAPs is often cost prohibitive, the flexibility to share services, equipment, and functions on an interconnected network will lead to more effective and efficient call processing.

4.4 Infrastructure, Equipment and Technology

The National Emergency Number Association (NENA) defines NG9-1-1 as “A system comprising Emergency Services IP networks (ESInet): IP-based Software Services and Applications, Databases and Data Management processes that are interconnected to Public Safety Answering Point premise equipment. The system provides location-based routing to the appropriate emergency entity. The system uses additionally available data elements and business policies to augment PSAP routing.

The system delivers geodetic and/or civic location information and the call back number. The system supports the transfer of calls to other NG9-1-1 capable PSAPs or other authorized entities based on and including accumulated data. NG9-1-1 provides standardized interfaces for call and message services, processes all types of emergency calls including non-voice (multi-media) messages, acquires and integrates additional data useful to call routing and handling for appropriate emergency entities. NG9-1-1 supports all E9-1-1 features, functions, and meets current and emerging needs for emergency communication from caller to Public Safety entities.

Wyoming PSAPs can best achieve NG9-1-1 through a phased approach, including the development of local and regional intranets capable of supporting an IP-Based 9-1-1 system; the development of public and/or private networks capable of transferring IP data between and among local networks; the development of appropriate Interlocal agreements and supporting legislation; the development and maintenance of seamless, statewide GIS data that meets national data standards, the technology to interconnect multiple networks seamlessly; and the replacement of PSAP Customer Premises Equipment (CPE) with equipment capable of receiving and processing IP data, resulting in a statewide interconnected and interoperable system of local, regional, and national emergency services networks.

Other considerations include:

- Infrastructure must be scalable and extendable.
- Infrastructure must be public safety grade, i.e., it must meet a higher level of availability, resiliency, reliability, security, and survivability than non-mission critical enterprise network infrastructure.
- Not all PSAPs/counties/regions will migrate at the same time. The legacy network and selective routers supporting the circuit switched network must continue to function. In concept, the legacy system would eventually connect to an ESInet gateway and convert legacy wireline/wireless 9-1-1 calls from

analog into Session Initiation Protocol (SIP), attaching the caller's location information and presenting the call to the ESInet.

- Local, regional, and state ESInets must avoid potential single points of failure. Lack of redundancy and diversity in the 9-1-1 network can impact the reliability of 9-1-1 systems.
- There must be sufficient bandwidth and speed for data sharing between PSAPs.
- A GIS plan must be created to develop processes and procedures to establish and maintain the required 98% data accuracy. Review the "Geographic Information System Lifecycle Best Practices Guide for Next Generation 911" for guidance.

4.5 GIS

Geographic Information System (GIS) technology is the cornerstone of a NG9-1-1 system. GIS data produced at the local level forms the foundation upon which emergency call processing and call routing are successfully executed within Emergency Call Centers (ECC). Numerous aspects of the NG9-1-1 GIS ecosystem need to be planned, implemented, and managed in synchronicity to ensure program success. The data ecosystem begins with local data creation and maintenance, and migrates to standards and regulations development and implementation, outreach and training, statewide GIS database aggregation, and ongoing maintenance, implementation planning, and support for spatial data components, and long-term financial planning.

Two of the core service components listed above are wholly supported by GIS data, those being the Location Validation Function (LVF) and Emergency Call Routing Function (ECRF). These contain the spatial data for PSAP boundaries, road centerlines, and address points (at a minimum). To enable geolocation services and geospatial routing through a fully functional LVF/ECRF, it will be necessary for the State and local PSAPs to begin working toward reconciling the legacy location validation and routing databases (the MSAG and ALI) with the GIS-based database. Governance and processes must also be in place to coordinate timely updates to future statewide aggregated GIS datasets. There are five primary steps the State should work through to reach the end goal of establishing and maintaining fully compliant and functional GIS data for provisioning into a fully functioning LVF/ECRF call-routing system.

1. GIS data GAP analysis
2. Establish Wyoming NG9-1-1 GIS Standards and Best Practices
3. GIS Stakeholder Education, Outreach, and Training
4. GIS Data Aggregation
5. Regular maintenance and updates to required GIS datasets

4.5.1 GIS Data GAP Analysis

Conducting a GAP analysis assessment provides a valuable baseline of incomplete and/or missing data, and it can also gauge the relative accuracy of existing GIS data throughout the State required for fully functional NG9-1-1 call routing.

Best practices call for the standardization and synchronization of GIS road centerlines, site structure/address points, and other data association with MSAG and ALI data. This synchronization process improves the accuracy of the locally sourced GIS, MSAG and ALI data as well as aids in the accuracy and preparation of the data for NG9-1-1.

4.5.2 Establish Wyoming NG9-1-1 GIS Standards and Best Practices

NENA's specialty is in setting standards focused on the creation, implementation, and management of GIS data for NG9-1-1 systems. The NG9-1-1 GIS Data Model standard as developed by NENA, provides the foundation for the establishment of any state level Best Practices document.

It is essential that the State and local PSAP stakeholders begin working together to coordinate the development of a Wyoming NG91-1 GIS Standards and Best Practices guidelines based on the NENA Standard for NG9-1-1 GIS Data Model.

Ongoing maintenance and quality control policies and procedures related to maintaining, updating, and continual improvements to the NG9-1-1 GIS data should be included in the standards and best practices developed in collaboration with stakeholders.

4.5.3 GIS Stakeholder Education, Outreach and Training

Upon the adoption of NG9-1-1 GIS Standards and Best Practices for Wyoming, it is incumbent to develop an education, outreach, and training program to ensure all stakeholders are well versed on the standards and the critical role they play in the transition to creating NG9-1-1 ready GIS data.

4.5.4 GIS Data Aggregation

A fully functioning LVF/ECRF call routing service in a NG9-1-1 system is dependent on accurate, seamless GIS data at its foundation. The GIS data is sourced and maintained at the local authoritative level, but it is ideally aggregated at a state level to provide interoperability for all PSAPs within the State.

Close cooperation and coordination between the local entities and the State of Wyoming is required to ensure the statewide aggregation process is consistent and accurate. A number of steps will create the framework for successful aggregation of the GIS datasets required for NG9-1-1 call routing functionality, including developing the initial Wyoming NG9-1-1 GIS Standards and Best Practices policies, creating and implementing a thorough outreach, education, and training program, and facilitating the baseline GIS GAP analysis effort.

4.5.5 Regular maintenance and updates to required GIS datasets

The NG9-1-1 system will require the aggregated GIS data as a core component used to validate address data and route 9-1-1 calls to the correct PSAP. The maintenance and upkeep of this seamless statewide GIS dataset is of critical importance.

The GIS data representing service area boundaries (PSAP and Emergency Service Boundaries) and address information (road centerlines and address points) will need to be up-to-date, accurate, and seamless across the state. It cannot be overstated how important data quality is (including accuracy, consistency, timeliness, and completeness). Sustainable data maintenance standards, processes and workflows are necessary and should not be overlooked in the development of a NG9-1-1 system.

The GIS data for NG9-1-1 will continue to be maintained by local entities, who will submit their data to the State (i.e., Wyoming Department of Enterprise Technology Services) or third-party vendor.

Local entities will upload their data using a managed process yet to be determined at the State level. Through this service, local entities will 'map' their data so it can be transformed into the State's established NG9-1-1 GIS standardized schema. The process will also report back to the local entity any data discrepancies identified during the data validation process prior to acceptance into the primary statewide dataset. The local entities would then be responsible for correcting any identified discrepancies, errors, or data validity issues.

It is incumbent upon the State and local entities to have a clear understanding of the critical nature and use of GIS data in an NG9-1-1 system and that they are prepared to identify the resources needed to meet the rigorous data creation and maintenance required for NG9-1-1 implementation.

4.6 Operations, Staff and Training

4.6.1 Operations

Wyoming citizens and visitors depend on 9-1-1 calls to be answered quickly and professionally so that fire, law enforcement, and medical emergency responders can be dispatched in a competent and expeditious manner. This requires not only modern, state-of-the-art public safety technology systems, but also well trained PSAP personnel who are available when needed. The public expects that PSAPs provide a superior level of service, regardless of the geographic location of the PSAP or the fiscal resources of the local community, and the public deserves this level of service.

Wyoming will adhere to nationally accepted standards and best practices as identified by the Association of Public-Safety Communications Officials (APCO), National Emergency Number Association (NENA), Alliance for Telecommunications Industry Standards (ATIS), FCC, National 9-1-1 Program, and the National Fire Protection Association (NFPA). Other applicable standards and best practices will also be adopted as the most effective way to ensure successful NG9-1-1 implementation and excellent PSAP performance. Specific standards and best practices for Wyoming's NG9-1-1 system will be determined at a later date. Once adopted, PSAP's, counties and Emergency Telephone Supervisory Boards (ETSBs), shall follow the recommendations and standards, and utilize the same when procuring NG9-1-1 components, PSAP

call-handling equipment, NG9-1-1 GIS components, and cybersecurity systems to ensure secure, integrated, interconnected, and interoperable systems.

4.6.2 Training

9-1-1 Telecommunicators provide the critical link for the public to access or request emergency services; these essential employees are the true first responders. It is well-established that training 9-1-1 Public Safety Telecommunicators is fundamental to the success of 9-1-1 service. The ability to maintain quality services for both the public and emergency responders is dependent upon the training provided, both at initial hire and on-going. According to APCO, NG9-1-1 will provide a more immersive environment for 9-1-1 call-takers and dispatchers, who may see much of what responders see while on scene. While this additional information will ultimately improve or enhance emergency response, telecommunicators will be exposed to even more stress than they currently face. Both APCO and NENA have reiterated the importance of establishing a comprehensive stress management program. In 2013, NENA issued NENA Standard on 9-1-1 Acute/Traumatic and Chronic Stress Management, NENA-STA-002.1-2013 to provide awareness of the serious risks posed by work-related stress on the mental and physical health of 9-1-1 Telecommunicators in their role as the nation's first first-responders.

The NENA standard also establishes best practices for PSAP comprehensive employee stress management programs. It is essential for the long-term success of NG9-1-1 that state and local elected and appointed officials and PSAP authorities view training as a necessary and required investment to provide a consistent level of 9-1-1 service across the state. Without adequate training of PSAP personnel, even the best technical solution will fail. NG9-1-1 will require additional training of all 9-1-1 Telecommunicators to learn how to process different types of requests for assistance, such as texting, videos, social media, and other applications yet to be invented. Regardless of PSAP size, training across PSAPs in the state should include minimum baseline training so that 9-1-1 call-takers and dispatchers can proficiently answer, process, and dispatch calls from other jurisdictions in the NG9-1-1 environment, as well as maintain proficiency with legacy technology. Finally, because of the nature of the NG9-1-1 service itself, all PSAP personnel must receive basic training in cybersecurity.

4.6.3 Executives and Support Staff

As the state moves toward implementation of NG9-1-1, it will be necessary to expand training curricula across the spectrum, including frontline responders, telecommunicators, and PSAP management, as well as municipal and Public Service Commission (PSC) executive and support staff. Introductory training, as well as continuing education and retraining for executive and support staff is recommended. To fully realize the capabilities that can be achieved in a true NG9-1-1 system, local and State IT staff would benefit from training in NextGen Core Services (NGCS), wireless location technologies and integrity testing, public safety GIS, and related IP-based systems and interfaces.

4.7 Governance

On March 25, 2022, Governor Mark Gordon signed SF0041 which amended the duties of the Public Safety Communications Commission (PSCC) as the NG911 governance board.

State Statute 9-2-1104 was modified to read:

Commission; powers and duties; advisory capacity to promote system development; public meetings; clerical and administrative support.

(a) The commission shall:

(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.

The following are activities that need to be completed around Governance:

- Include the requirements for provisioning 9-1-1 services by Wireless Carriers, LEC and CLECs that have received authorization by the PSC to do business in the State of Wyoming
- Definition of NexGen 9-1-1, ESInet and NGCS and the new services these technologies will enable
- Definition of a “communications service provider” as established by the Wyoming Public Service Commission
- All telecommunications service providers are subject to 9-1-1 rules and regulations. Internet of Things (IoT) manufacturers or service providers wishing to connect to 9-1-1 services will need to be addressed
- Establish GIS standards and best practices for Wyoming

5. GOALS, OBJECTIVES & MEASURES

5.1 State of Wyoming 9-1-1 Plan Objectives:

During 2019 & 2020, several planning sessions took place whereby a set of Goals and Objectives for the transition to NG9-1-1 were finalized and have been included in Figure 5 below. Most of these Goals and Objectives have been in development for over a year,

however, various factors have resulted in minimal headway being made on them. It is expected that the addition of the Statewide 9-1-1 Coordinator and establishment of the previously mentioned working groups will allow for progress to be made in their implementation.

Goal 1: Ensure NG9-1-1 capabilities are accessible statewide		
#	**Objectives**	**Estimated Completion Date**
1.1	Identify sustainable funding mechanism(s).	On Going
1.2	Conduct an inventory of existing equipment and infrastructure and determine future needs.	On Going
1.3	Identify the individual costs associated with upgrading to NG9-1-1.	TBD
Goal 2: Develop a conceptual network design		
#	**Objectives**	**Estimated Completion Date**
2.1	Develop an ESInet architecture e.g., 1-host, regional, etc.	TBD
2.2	Investigate the impact on existing networks.	TBD
2.3	Develop options for resiliency.	TBD
2.4	Conduct a cybersecurity and vulnerability assessment.	TBD
2.5	Determine PSAP connectivity to the unified network.	TBD
Goal 3: Develop an outreach and education plan		
#	**Objective**	**Estimated Completion Date**
3.1	Present and/or participate in panel discussions statewide to garner buy-in.	On Going
3.2	Identify champions.	1/20/2021
3.3	Conduct training and outreach from work groups to local entities.	On Going
3.4	Integrate Information Technology (IT).	10/1/2021
Goal 4: Apply for 9-1-1 Grant Program funds		

#	Objective	Estimated Completion Date
4.1	Submit Statewide NG9-1-1 Plan for certification.	11/1/2021
Goal 5: Utilize survey(s) to gather stakeholder input		
#	**Objective**	**Estimated Completion Date**
5.1	Conduct an initial survey.	8/1/2020
5.2	Conduct a follow-up survey.	5/1/2022
Goal 6: Identify technology standards		
#	**Objective**	**Estimated Completion Date**
6.1	Compile a list of lessons learned and best practices.	8/22/2021
6.2	Conduct meetings with vendors.	Ongoing
Goal 7: Update the membership of the PSCC to include 9-1-1 representation		
#	**Objective**	**Estimated Completion Date**
7.1	Review the existing statute and identify potential roadblocks.	8/1/2021
7.2	Propose a revision to the PSCC Legislation to include local 9-1-1 representation.	3/30/2022
Goal 8: Conduct an inventory of primary PSAPs and back-up centers throughout Wyoming		
#	**Objective**	**Estimated Completion Date**
8.1	Gather the following information:[1] • Hardware (e.g., CPE, servers, radio consoles, etc.) • Software • CAD/RMS • GIS • Vendor preference (Spillman/Motorola, RIMS/Sun Ridge, Tyler New World, or EFORCE)	On Going

	• Call logging • 9-1-1 phone systems - Are they NG9-1-1 capable? Approximate age? Admin integration capable? • Data storage • Number of employees versus authorized FTEs, workstations, and physical locations • Telco and state connectivity methods - Number and size of lines? Cost? Vendor? • Total PSAP operating budget compared to surcharge for wired and wireless lines. • Interest-bearing account - How are funds spent? • Are 9-1-1 consoles connected to the statewide system, Unified Network, WyoLink? Through RF/hardline? • Training - Number of EMD, EPD, and EFD certifications • Life cycle of equipment	
8.2	Educate public safety agencies on why this information needs to be gathered.	11/1/2022
Goal 9: Formally establish: 1) Outreach and Education; 2) Technology; 3) Strategic Planning; and 4) Governance Working Groups		
#	**Objective**	**Estimated Completion Date**
9.1	Working groups meet regularly and provide input to the Statewide NG9-1-1 Plan.	1/1/2021
9.2	Coordinate monthly and then quarterly meetings.	1/1/2021
9.3	Include tribal representation.	1/1/2021
Goal 10: Identify sustainable funding, future needs, and costs to upgrade to NG9-1-1		
#	**Objective**	**Estimated Completion Date**
10.1	Identify sustainable funding mechanism(s).	12/1/2022
10.2	Conduct an inventory of existing equipment and infrastructure and determine future needs.	12/1/2022
10.3	Identify the individual costs associated with upgrading to NG9-1-1.	1/1/2023

Goal 11: Establish statewide GIS standards		
#	**Objective**	**Estimated Completion Date**
11.1	Establish a Statewide GIS Coordinator position.	6/1/2020
11.2	Establish standards for required data layers.	6/1/2022
11.3	Build governance structure for GIS data.	1/1/2023
11.4	Create system architecture and secure software licensing to support GIS data management.	1/1/2023
11.5	Conduct GIS data QA/QC to get date to meet NENA standards.	1/1/2024
11.6	Implement system for statewide GIS data submission, QA/QC, aggregation, and dissemination.	11/2025

Figure 5 – NG9-1-1 Goals

6. PLAN MAINTENANCE / PROGRESS TRACKING

The purpose of this Plan is to establish a vision for statewide implementation of NG9-1-1 services. The Plan will provide directives with high-level goals and concise, specific, and measurable objectives. As goals and objectives are achieved, successes will also be documented.

The transition timeline to NG9-1-1 must include all aspects of the vision as outlined in this document. As expected, timing is highly dependent on NG9-1-1 standards maturation, the legislative process, and the available resources including both people and budget.

Because this document serves as a strategic planning guide, its implementation will be a dynamic and evolving process. As a result, the Plan is a living document that is intended to be updated periodically as more is learned in execution of this plan.

The PSCC and Statewide 9-1-1 Coordinator will monitor the individual components of this Plan to ensure that the objectives and overall goals are met. Stakeholders may propose changes through the Statewide 9-1-1 Coordinator for consideration. Changes will be adopted through an established monitoring and tracking process to achieve the desired end state of a NG9-1-1 network. Updates to this Plan should occur no less than semi-annually and/or at the direction of the PSCC. Any changes to this Plan will be documented in the form provided in Table 1.

Version	Publication Date	Description of Change(s)	Other Comments/ Information

Table 1 – Documentation of Plan Maintenance

7. CONCLUSION

The passion and desire of statewide stakeholders is to advance Next Generation 9-1-1 across the state of Wyoming to provide the highest level of 9-1-1 service to the State's residents and visitors through the information gathered and shared in this report. Given communications technology evolutions; the aging legacy 9-1-1 infrastructure; needed support for Wyoming's 9-1-1 professionals; and changing expectations of the residents; the time for change is here. This change will be impossible without the technology, cybersecurity, staffing, oversight, and funding recommendations identified throughout this report.

This 9-1-1 Plan provides a road map for the future direction of Wyoming NG9-1-1. As each section has outlined, the process is accountable, proactive, and designed to move the 9-1-1 system forward.

The State 9-1-1 Plan recognizes that NG9-1-1 architecture supports an interconnected system of local, regional, and state emergency services networks, and will expand to cover the entire nation. Effective interconnection requires effective statewide planning and coordination, as well as effective interstate planning and coordination.

Strategic plans are considered mid- to long range planning documents that normally cover a period of multiple years. The development of a strategic plan includes identifying and evaluating the background information, current status of the situation, a vision of the future and then the development of a roadmap of how to get to that desired future state.

Upon adoption of the strategic plan, the actions necessary to implement the plan are initiated. As the implementation process progresses and time passes, circumstances will change.

There are significant improvements in public safety effectiveness that can be achieved through the implementation of NG9-1-1. Those efficiency improvements should not only reduce response times, but they will also ultimately save lives. This document provides the overall path to get there through the development of a comprehensive plan.

While the planning is critical to a successful NG9-1-1 implementation, it is only one facet of successful implementation. Leadership must execute the plan with some level of flexibility because this plan will undoubtedly be modified as the implementation progresses.

Also, because the implementation process will take place over several years, there must be a communication plan. Communicating on a regular basis with the NG9-1-1 stakeholders is necessary to maintain momentum and stakeholder commitment. Without both of those, the success of the overall project will be jeopardized.

APPENDIX 1: 9-1-1 TERMS & DEFINITIONS

Term	Definition
9-1-1 (or 9-1-1)	A three-digit telephone number to facilitate the reporting of an emergency requiring a response by a public safety agency.
9-1-1 authority	A state, county, regional, or other governmental entity responsible for 9-1-1 service operations. For example, this could be a county/parish or city government, a special 9-1-1 or emergency communications district, a council of governments, or other similar body.
9-1-1 "call"	A generic term used to include any type of request for emergency assistance (RFEA) and is not limited to voice. This may include a session established by signaling with two-way, real-time media and involving a human making a request for help. We sometimes use "voice call," "video call" or "text call" when specific media is of primary importance. The term "non-human-initiated call" refers to a one-time notification or series of data exchanges established by signaling with, at most, one-way media, and typically does not involve a human at the "calling" end. The term "call" also can be used to refer to either a "voice call," "video call," "text call," or "data–only call" since they are handled the same way by most of NG9-1-1 systems.
9-1-1 fund	The fund established by a state statute that is specifically used to fund 9-1-1 activities and/or infrastructure.
9-1-1 service area	The geographic area that has been granted authority by a state or local governmental body to provide 9-1-1 services.
9-1-1 system	A coordinated system of technologies used by a collaborative group of people to operate an efficient and effective network for accepting, processing, and delivering emergency information to facilitate an emergency response—a set of networks, software applications, databases, customer premises equipment (CPE), and operations and management procedures required to provide 9-1-1 service. This may include commercial, governmental, and human resources.
Access provider	An access provider is any organization that arranges for an individual or an organization to have access to the internet.
Additional data	Information that further describes the nature of how a call was placed, the person(s) associated with the device placing the call, or the location from which the call was placed. There are three types of additional data: 1) additional data for the call, 2) additional data for the caller, and 3) additional data for the Location.
Agency	In NG9-1-1, an organization that is connected directly or indirectly to the Emergency Services Internet Protocol Network (ESInet). Public safety agencies are examples of an "agency." An entity such as a company

	that provides a service in the ESInet can be an “agency.” Agencies have identifiers and credentials that allow them access to services and data.
Agent	In NG9-1-1, an “agent” is an authorized person—an employee, contractor, or volunteer—who has one or more roles in an agency. An “agent” also can be an automaton in some circumstances (e.g., an interactive media response [IMR] system answering a call).
Alternate routing	The capability of routing 9-1-1 calls to a designated alternate location(s) if all 9-1-1 trunks are busy or out of service. May be activated upon request or automatically, if detectable, when 9-1-1 equipment fails or the PSAP itself is disabled.
Automatic location Identification (ALI)	The automatic display at the PSAP of the address/location of the telephone used to make the 9-1-1 call, as well as supplementary emergency services information related to the location from which a call originates.
Automatic number identification (ANI)	The automatic display at the PSAP of the caller’s telephone number associated with the access line from which a 9-1-1 call originates.
Basic 9-1-1	An emergency telephone system that automatically connects 9-1-1 callers to a designated answering point. Call routing is determined by the originating telephone central office only. Basic 9-1-1 may or may not support ANI and/or ALI.
Call-taker	An agent of a PSAP who answers and processes emergency calls. Synonymous with the term, “telecommunicator.”
Call-taking	The act of processing a call for emergency assistance up to the point that the call is ready for dispatch, including equipment usage, call classification, caller location, and determination of the appropriate response level for emergency responders.
Call handling	Functional element concerned with the details of call management of calls. It handles all communication from the caller. It includes the interfaces, devices, and applications utilized by agents to handle the call.
Call routing	The capability to selectively route the 9-1-1 call to the appropriate PSAP.
Carrier	A business entity that provides a communications service to a customer base, typically for a fee. Examples of carriers and associated services are public switched telephone network (PSTN) service by a local exchange carrier, voice over Internet Protocol (VoIP) service by a VoIP provider, and e-mail service provided by an internet service provider.

Commercial Call Center	A privately-operated call center that answers emergency and/or nonemergency calls.
Commercial mobile radio service (CMRS)	An FCC designation for any carrier or licensee whose wireless network is connected to the PTSN.
CMRS connection	Each mobile handset telephone number assigned to a CMRS subscriber with a place of primary use in-state.
CMRS provider	An entity (facilities-based or non-facilities-based) that is licensed by the FCC to provide CMRS or that resells CMRS within a state.
Computer-aided dispatch (CAD)	A computer-based system that aids PSAP telecommunicators by automating selected dispatching and record-keeping activities.
Continuity of operations (COOP)	The ability to continue operations during and after a service-impacting event. This is done through a specific set of procedures designed to reduce the damaging consequences of unexpected events resulting in the loss of 9-1-1 capabilities.
Customer premise equipment (CPE)	Communications or terminal equipment located in the customer's facilities; terminal equipment at a PSAP.
Database	An organized collection of information, typically stored in computer systems, comprised of fields, records (data), and indexes. In 9-1-1, such databases include Master Street Address Guide (MSAG), telephone number/emergency service number (ESN), and telephone customer records.
Data exchange	The process of exchanging 9-1-1 data between service providers and the database management system provider.
Dispatch system	The functional element used to assign appropriate resources (emergency responders) to an incident, monitor the response, and relay relevant information. It tracks and logs all transactions associated with the emergency response.
Enhanced 9-1-1 (E9-1-1)	A telephone system that includes network switching, database, and PSAP-premise elements capable of providing ALI data, selective routing, selective transfer, fixed transfer, and a call-back number. The term also includes any enhanced 9-1-1 service as designated by the FCC in its Report and Order in WC Docket Nos. 04-26 and 05-196, or any successor proceeding.
Emergency medical services	A service ranging from out-of-hospital acute care and transport to definitive care to patients with illnesses and injuries that the patient believes constitutes a medical emergency.

Emergency services IP network (ESInet)	An ESInet is a managed IP network that is used for emergency services communications, and which can be shared by all public safety agencies. It provides the IP transport infrastructure upon which independent application platforms and core services can be deployed, including, but not limited to, those necessary for providing NG9-1-1 services. ESInets may be constructed from a mix of dedicated and shared facilities. ESInets may be interconnected at local, regional, state, federal, national, and international levels to form an IP-based inter-network (network of networks). The term ESInet designates the network, not the services that ride on the network.
First Responder Network Authority (FirstNet)	Signed into law on February 22, 2012, the Middle-Class Tax Relief and Job Creation Act created the FirstNet. The law gives FirstNet the mission to build, operate, and maintain the first nationwide wireless broadband network dedicated to public safety. FirstNet will provide a single interoperable platform for emergency and daily public safety communications. http://www.firstnet.gov/
Geographic information systems (GIS)	A system for capturing, storing, displaying, analyzing, and managing data and associated attributes that are spatially referenced.
i3 solution	The National Emergency Number Association (NENA) i3 (third iteration) standards introduced the concept of an ESInet, which is designed as an IP-based inter-network (network of networks) shared by all agencies that may be involved in any emergency.
Interlocal services agreement	An agreement among governmental jurisdictions or privately-owned systems (or both) within a specified area to share 9-1-1 system costs, maintenance responsibilities, and other considerations.
Internet Protocol (IP)	The method by which digital data is sent from one computer to another over the internet or other networks.
Interoperability	The ability of disparate communications systems to seamlessly interconnect and work together as a collective system.
Landline	Colloquial term for PSTN access via an actual copper or fiber-optic transmission line that travels underground or on telephone poles. Used to differentiate the “wireless” connectivity of a cellular or personal communications system.
Legacy network gateway (LNG)	An NG9-1-1 functional element that provides an interface between a non-IP originating network and a Next Generation Core Services (NGCS)-enabled network.
Legacy PSAP gateway (LPG)	A signaling and media interconnection point between an ESInet and a legacy PSAP. It plays a role in the delivery of emergency calls that traverse an i3 ESInet to get to a legacy PSAP, as well as in the transfer

	and alternate routing of emergency calls between legacy PSAPs and NG9-1-1 PSAPs. The LPG supports an IP (i.e., Session Initiation Protocol [SIP]) interface towards the ESInet on one side, and a traditional multi-function (MF) or enhanced MF interface (comparable to the interface between a traditional selective router and a legacy PSAP) on the other.
Competitive Local exchange carrier (CLEC)	A telecommunications provider company (sometimes called a carrier) competing with other, already established carriers, generally the incumbent local exchange carrier.
Local exchange carrier (LEC)	A telecommunications carrier under the state/local public utilities act that provides local exchange telecommunications services. Also known as incumbent local exchange carriers, alternate local exchange carriers, competitive local exchange carriers, competitive access providers, certified local exchange carriers, and local service providers.
Location information server (LIS)	A functional element in an IP-capable originating network that provides locations of endpoints (i.e., calling devices). LIS can provide location by-reference, or location-by-value, and, if the latter, in geographic or civic forms. An LIS can be queried by an endpoint for its own location or by another entity for the location of an endpoint. In either case, the LIS receives a unique identifier that represents the endpoint (for example, an IP address, circuit identification, or media access control [MAC] address) and returns the location (value or reference) associated with that identifier. The LIS is also the entity that provides a dereferencing service, exchanging a location reference for a location value.
Master Street Address Guide (MSAG)	A database of street names and house number ranges within their associated communities defining emergency service zones (ESZs) and their associated emergency service numbers (ESNs) to enable proper routing of 9-1-1 calls.
Memorandum of agreement (MOA)	A document written between parties to cooperatively work together on an agreed upon project or meet an agreed-upon objective.
Memorandum of understanding (MOU)	A document that expresses mutual accord on an issue between two or more parties
Mutual-aid agreement	There is a written agreement between agencies and/or jurisdictions in which they agree to assist one another, upon request, by furnishing personnel and equipment.
National Information Exchange Model (NIEM)	A community-driven, standards-based, national model for structured information sharing. www.niem.gov

National Incident Management System (NIMS)	A standardized approach to incident management developed by the Department of Homeland Security (DHS). It is intended to facilitate coordination between all responders (including all levels of government with public, private, and non-governmental organizations). https://www.fema.gov/national-incident-management-system
Next Generation 9-1-1 (NG9-1-1) services	A secure, IP-based, open standards system comprised of hardware, software, data, and operational policies and procedures that: a) Provides standardized interfaces from emergency call and message services to support emergency communications. b) Processes all types of emergency calls, including voice, text, data, and multimedia information. c) Acquires and integrates additional emergency call data useful to call routing and handling. d) Delivers the emergency calls, messages, and data to the appropriate public safety answering point (PSAP) and other appropriate emergency entities based on the location of the caller. e) Supports data, video, and other communications needs for coordinated incident response and management. f) Interoperates with services and networks used by first responders to facilitate emergency responses. REF: Agreed to by NENA, NASNA, and the Industry Council for Emergency Response Technologies (iCERT) as the NG9-1-1 NOW Coalition; and the National 9-1-1 Program on 01/12/2018.
Order of authority	A formal order by the state or local authority which authorizes public agencies or public safety agencies to provide 9-1-1 service in a geographical area.
Public Service Commission (PSC)	A state agency that regulates public utilities that provide services to consumers in the state. The three main industries it regulates are electricity, natural gas, and telephone.
Prepaid wireless telephone service	Telephone service authorized by the purchase of CMRS, either exclusively or in conjunction with other services. This service must be paid for in advance and is sold in units or dollars whose number or dollar value declines with use and is known on a continuous basis.
Private 9**-1-1 emergency answering point**	An answering point operated by nonpublic safety entities with functional alternative and adequate means of signaling and directing response to emergencies. Includes training individuals intercepting calls for assistance that aligns with applicable local emergency telecommunications requirements. Private 9-1-1 emergency answering points are an adjunct to public safety response and, as such, must

	provide incident reporting to the public safety emergency response centers per local requirements.
Proprietary information	Subscriber lists, technology descriptions, technical information, or trade secrets that are developed, produced, or received internally by a voice communications service provider or by a voice communications service provider's employees, directors, officers, or agents.
Public safety agency	A functional division of a public agency that provides firefighting, police, medical, or other services to respond to and manage emergency incidents.
Public safety answering point (PSAP)	An entity responsible for receiving 9-1-1 calls and processing those calls according to a specific operational policy. • Primary PSAP: A PSAP to which 9-1-1 calls are routed directly from the 9-1-1 control office • Secondary PSAP: A PSAP to which 9-1-1 calls are transferred from a primary PSAP • Alternate PSAP: A PSAP designated to receive calls when the primary PSAP is unable to do so • Consolidated PSAP: A facility where multiple public safety agencies choose to operate as a single 9-1-1 entity • Legacy PSAP: A PSAP that cannot process calls received via i3-defined call interfaces (IP-based calls) and still requires the use of Centralized Automatic Message Accounting (CAMA) or Integrated Services Digital Network (ISDN) trunk technology for delivery of 9-1-1 emergency calls • Serving PSAP: The PSAP to which a call normally would be routed. • NG9-1-1 PSAP: This term is used to denote a PSAP capable of processing calls and accessing data services as defined in NENA's i3 specification, NENA-STA-010, and referred to therein as an "i3 PSAP"
Service provider	An entity providing one or more of the following 9-1-1 elements: network, CPE, or database service.
Standards development organization (SDO)	An entity whose primary activities are developing, coordinating, promulgating, revising, amending, reissuing, interpreting, or otherwise maintaining standards that address the interests of a wide base of users outside the SDO.
State NG9-1-1 Plan	A document prepared, maintained, implemented, and updated by a state that provides a comprehensive plan for operating a statewide 9-1-1 system that communicates 9-1-1 call information across networks and among PSAPs, addresses all aspects of the statewide 9-1-1 system, and describes the allowable uses of revenue in the 9-1-1 Fund.

Subscriber	A person who purchases a communications service and can receive it or use it periodically over time.
Telecommunication	The transmission between and among points specified by the user (or information of the user's choosing) without change in the form of content of the information sent and received, regardless of the facilities, equipment, or technology used.
Telecommunicator	Person employed by a PSAP and/or an emergency medical dispatch (EMD) service provider qualified to answer incoming emergency telephone calls and/or provides for the appropriate emergency response, either directly or through communication with the appropriate PSAP.
Virtual PSAP	An operational model directly enabled through NG9-1-1 features and/or network hosted PSAP equipment in which telecommunicators are dispersed geographically, rather than working from the same physical location. Remote access to the PSAP applications by the dispersed telecommunicators requires appropriate network connections, security, and workstation equipment at the remote location. Unified communications applications supporting voice, data, instant messaging, and video communications between telecommunicators may be used to enable the telecommunicators to work cooperatively from diverse locations. The virtual workplace may be a logical combination of physical PSAPs or an alternate work environment such as a satellite facility (or any combination of the above). Workers are connected and interoperate via IP connectivity.
Voice communications service	The transmission, conveyance, or routing of real-time, two-way voice communications to a point, between/among points, or through any electronic, radio, satellite, cable, optical, microwave, wireline, wireless, or other medium or method regardless of the protocol used, including interconnected VoIP service.
Voice over Internet Protocol (VoIP)	Technology that permits delivery of voice calls and other real-time multimedia sessions over IP networks.

APPENDIX 2: ASSOCIATIONS, ORGANIZATIONS & OTHER STAKEHOLDER ENTITIES RELEVANT TO 9-1-1

Name/Acronym	Description	Website
American National	Entity that coordinates the development and use of voluntary consensus standards in the U.S. and represents	www.ansi.org

Standards Institute (ANSI)	the needs and views of U.S. stakeholders in standardization forums around the globe.	
Association of Public-Safety Communications Officials (APCO)	The world's oldest and largest not-for-profit professional organization dedicated to the enhancement of public safety communications.	http://www.apcointl.org/
American Registry for Internet Numbers (ARIN)	An organization that provides services related to the technical coordination and management of internet number resources.	https://www.arin.net/
Alliance for Telecommunications Industry Solutions (ATIS)	A U.S.-based organization that is committed to rapidly developing and promoting technical and operational standards for communications and related information technologies industry worldwide.	www.atis.org
Commission on Accreditation for Law Enforcement Agencies (CALEA)	A credentialing authority created in 1979 through the joint efforts of the following law enforcement's major executive associations. • International Association of Chiefs of Police (IACP) • National Organization of Black Law Enforcement Executives (NOBLE) • National Sheriffs' Association (NSA) • Police Executive Research Forum (PERF) CALEA's accreditation programs improve the delivery of public safety services, primarily by maintaining a body of standards developed by public safety practitioners.	http://www.calea.org/

Communications Security, Reliability, and Interoperability Council (CSRIC) (formerly known as the Network Reliability and Interoperability Council [NRIC])	An advisory body of the FCC that provides recommendations to the FCC to ensure optimal security and reliability of communications systems, including telecommunications, media, and public safety.	https://www.fcc.gov/aboutfcc/advisory- committees/communications-securityreliability-and-interoperabilitycouncil-0
Emergency Services Interconnection Forum (ESIF)	An open, technical/operational forum, under the auspices of ATIS, with the voluntary participation of interested parties to identify and resolve recognized 9-1-1 interconnection issues.	www.atis.org/esif
Federal Communications Commission (FCC)	An independent U.S. government agency overseen by Congress, the FCC regulates interstate and international communications by radio, television, wire, satellite, and cable in all 50 states, the District of Columbia, and U.S. territories.	https://www.fcc.gov/
Federal Geographic Data Committee (FGDC)	The FGDC is an interagency committee that promotes the coordinated development, use, sharing, and dissemination of geospatial data on a national basis.	https://www.fgdc.gov/
First Responder Network Authority (FirstNet)	Signed into law on February 22, 2012, the *Middle Class Tax Relief and Job Creation Act* created FirstNet, giving it the mission to build, operate, and maintain the first nationwide wireless broadband network dedicated to public safety. FirstNet will provide a single interoperable platform for emergency and daily public safety communications.	http://www.firstnet.gov/
Industry Council for Emergency Response Technologies (iCERT)	iCERT plays a vital role as the voice of companies on issues impacting the emergency response system. iCERT members believe that business leaders' expertise can assist public	https://www.theindustrycouncil.org/

	policymakers and government emergency communications professionals as they address complex choices regarding advanced communications technology alternatives in the years ahead. Through advocacy, research, and in coordination with the public sector, iCERT plays a vital role in the development and deployment of emergency response technologies.	
Internet Architecture Board (IAB)	The committee charged with oversight of the technical and engineering development of the Internet by the Internet Society (ISOC). It oversees numerous task forces including the Internet Engineering Task Force (IETF) and the Internet Research Task Force (IRTF). The body that eventually became the IAB originally was formed in 1979 by the Department of Defense Advanced Research Projects Agency (DARPA) under the name Internet Configuration Control Board.	https://www.iab.org/
International Academies of Emergency Dispatch (IAED)	A non-profit standard-setting organization, formerly known as the National Academies of Emergency Dispatch (NAED), promoting safe and effective emergency dispatch services worldwide.	http://www.emergencydispatch.org/
Internet Assigned Numbers Authority (IANA) Internet Corporation for Assigned Names and Numbers (ICANN)	IANA is the entity that oversees global IP address allocation; Domain Name System (DNS) root zone management, and other IP assignments. Authority for public domain addresses and uniform resource locators (URLs), including related policies and databases.	www.iana.org https://www.icann.org/
Institute of Electrical and Electronic Engineers (IEEE)	A publishing and standards-making body responsible for many telecommunications and computing standards.	https://www.ieee.org/

Internet Engineering Steering Group (IESG)	The IESG is a body composed of the IETF chair and area directors.	https://www.ietf.org/about/groups/ies g/
Internet Engineering Task Force (IETF)	Lead standards-setting authority for internet protocols.	https://www.ietf.org/
Integrated Justice Information Systems (IJIS) Institute	The IJIS Institute, a 501(c)(3) nonprofit corporation, represents industry's leading companies that collaborate with local, state, tribal, and federal agencies to provide technical assistance, training, and support services for information exchange and technology initiatives. The mission of the IJIS Institute is to unite private and public sectors to improve critical information sharing for those who provide public safety and administer justice in U.S. communities.	www.ijis.org
International Committee for Information Technology Standards (INCITS)	A U.S.-based standards development organization (SDO) dedicated to the creation of information technology (IT) standards.	www.incits.org
International Organization for Standardization (ISO)	An independent, non-governmental international organization with a membership of 161 national standards bodies.	www.iso.org
International Telecommunication Union (ITU)	The telecommunications agency of the United Nations established to provide worldwide standard communications practices and procedures. Formerly the Consultative Committee for International Telephony and Telegraphy (CCITT).	https://www.itu.int/en/Pages/default.aspx
National 9-1-1 Program	The National 9-1-1 Program's mission is to provide federal leadership and coordination in supporting and promoting optimal 9-1-1 services. This federal "home" for 9-1-1 plays a critical role by coordinating federal efforts that	https://www.9-1-1.gov/

	support 9-1-1 services across the nation.	
National Suicide Prevention Lifeline (LIFELINE)	A national network of local crisis centers that provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.	https://suicidepreventionlifeline.org/
North American Network Operators Group (NANOG)	A governing body that provides guidance and instructions for the design of an IP network. NANOG is typically involved in the best current operational practices for IPv6 planning.	https://www.nanog.org/about/home
North American Numbering Plan Administration (NANPA)	The organization that has overall administrative responsibility of the North American Numbering Plan (NANP), an integrated telephone numbering plan serving 20 North American countries that share its resources.	www.nationalnanpa.com
National Association of Search and Rescue (NASAR)	Non-profit association dedicated to the advancement of professional, literary, and scientific knowledge and training in the field of search and rescue.	http://www.nasar.org/
National Association of State 9-1-1 Administrators (NASNA)	An association that represents state 9-1-1 programs in the field of emergency communications.	www.nasna9-1-1.org
National Center for Missing and Exploited Children (NCMEC)	NCMEC opened in 1984 to serve as the nation's clearinghouse on issues related to missing and sexually exploited children.	www.missingkids.com
National Exchange Carrier Association (NECA)	A membership association of U.S.-based local telecommunications companies dedicated to keeping customers connected on state-of-the-art communications networks.	www.neca.org
National Emergency Number Association (NENA)	A not-for-profit corporation established in 1982 to further the goal of "One Nation-One Number." NENA promotes research, planning, and training, and strives to educate, set standards, and provide certification programs, legislative representation, and technical	www.nena.org

	assistance for implementing and managing 9-1-1 systems.	
National Fire Protection Association	A global nonprofit organization, established in 1896, devoted to eliminating death, injury, property, and economic loss due to fire, electrical, and related hazards.	www.nfpa.org
National Highway Traffic Safety Administration (NHTSA)	NHTSA is an agency of the Executive Branch of the U.S. government, part of the Department of Transportation (DOT). It describes its mission as, "Save lives, prevent injuries, reduce vehicle-related crashes." The National 9-1-1 Program is housed under NHTSA.	www.nhtsa.gov
National Integration Center (NIC)	A unit of the Department of Homeland Security (DHS), responsible for managing the implementation and administration of the National Incident Management System (NIMS).	https://www.fema.gov/fema technical-assistance-program
National Information Standards Organization (NISO)	A non-profit association accredited by the American National Standards Institute (ANSI), NISO identifies, develops, maintains, and publishes technical standards to manage information in a digital environment. NISO standards apply both traditional and modern technologies to the full range of information-related needs, including data retrieval, repurposing, storage, metadata, and preservation.	http://www.niso.org
National Institute of Standards and Technology (NIST)	Part of the Department of Commerce (DOC), NIST oversees the operation of the National Bureau of Standards. NIST works with industry and government to advance measurement science and to develop standards in support of industry, commerce, scientific institutions, and all branches of government. Its mission is to promote innovation and industrial competitiveness.	www.nist.gov
National Joint Telecommunicat	A partnership between APCO and NENA that has worked to develop the	www.njti-tert.org

or Emergency Response Taskforce (TERT) Initiative (NJTI)	many facets of a TERT program. TERT involves assistance to individual states in developing programs that would lead to the establishment of predetermined and selected trained teams of individuals who can be mobilized quickly and deployed to assist communications centers during disasters.	
National States Geographic Information Council (NSGIC)	NSGIC promotes the efficient development and management of location-based information resources, and advocates for innovative, strategic use of these assets to advance the interests of states, tribal communities, regions, local governments, and the nation.	http://www.nsgic.org/
National Telecommunications and Information Administration (NTIA)	NTIA is an Executive Branch agency that is principally responsible for advising the President on telecommunications and information policy issues. NTIA's programs and policymaking focus on expanding broadband Internet access and adoption in the U.S., expanding the use of spectrum by all users, and ensuring that the Internet remains an engine for continued innovation and economic growth.	https://www.ntia.doc.gov/
Organization for Advancement of Structured Information Standards (OASIS)	An SDO that promulgates standards for data interchange.	www.oasis-open.org
Open Geospatial Consortium (OGC)	An SDO that promulgates standards for the global geospatial community.	http://www.opengeospatial.org/
Open Mobile Alliance (OMA)	An SDO that develops standards for the mobile phone industry.	www.openmobilealliance.org
Packet Technologies and Services Committee (PTSC)	PTSC is an ATIS standards committee that develops standards related to services, architectures, signaling, network interfaces, next generation carrier interconnection, cybersecurity,	www.atis.org/PTSC

	and government emergency telecommunications service within next generation networks.	
Urban and Regional Information Systems Association (URISA)	A non-profit association of professionals using geographic information systems (GIS) and other information technologies to solve challenges in state and local government agencies.	http://www.urisa.org/

APPENDIX 3: USEFUL RESOURCES

Federal Rules, Regulations & Laws

- *Enhance 9-1-1 Service Act of 2004 (PL 108-494)*
- *Food, Conservation and Energy Act of 2008 ("Farm Bill") (PL 110-246)*
- *Implementing Recommendations of the 9/11 Commission Act of 2007 (PL 110-53)*
- *Middle Class Tax Relief and Job Creation Act of 2012*
- *New and Emerging Technologies 9-1-1 Improvement Act of 2008*
- *Wireless Communications and Public Safety Act of 1999 (PL 106-81)*

Reports

- FCC TFOPA *Adopted Final Report*
- TFOPA Working Group 1 Supplemental Report—*Optimal Cybersecurity Approach for PSAP's*
- TFOPA Working Group 2 Supplemental Report—*Phase II Supplemental Report: NG9-1-1 Readiness Scorecard*
- TFOPA Working Group 3 Supplemental Report—*Funding Sustainment Model*
- GAO Report to Congressional Committees: *9-1-1 Services Most States Used 9-1-1 Funds for Intended Purposes, but FCC Could Improve Its Reporting on States' Use of Funds*
- FCC Emergency Access Advisory Committee (EACC) Working Group 7 Report—*Recommendations on Timeline Alignment*
- Canadian Radio-television and Telecommunications Commission, *A Report on Matters Related to Emergency 9-1-1*
- Minnesota NG9-1-1 Strategic Plan, Updated 2017
- Next Generation 9-1-1 Guide for 9-1-1 Authorities, April 2020

Guidance & Research Documents

- *Guidelines for State NG9-1-1 Legislative Language**
- National 9-1-1 Program *State Assessment Handbook: A Guide for States Participating in the Statewide 9-1-1 System Assessment Process*
- National 9-1-1 Program *State Assessment Guidelines Synopsis Chart*
- National 9-1-1 Program *Next Generation 9-1-1 (NG9-1-1) Standards Identification and Review*
- *NG9-1-1 & FirstNet: Together Building the Future of Public Safety Communications (A Guide for State & Local Authorities)*
- *Guidelines for Minimum Training*
- National 9-1-1 Program *Next Generation 9-1-1 (NG9-1-1) Interstate Playbook, Chapter 1*
- National 9-1-1 Program *Next Generation 9-1-1 (NG9-1-1) Interstate Playbook, Chapter 2*

**Hyperlink will be added once resource is published and posted for public distribution.*

Databases & Resource Repositories

- APCO Standards to Download
- NASNA How to Start a State 9-1-1 Program
- NASNA State 9-1-1 Contacts
- NASNA 9-1-1 Regionalization—Tools and Information
- National 9-1-1 Program Documents & Tools
- National 9-1-1 Profile Database
- NCSL Key Enacted 9-1-1 Legislation Database
- NENA Company Identifier Program
- NENA Standards & Other Documents
- NENA website
- 911.gov website
- Wyoming Legislature website
- Wyoming Public Utilities Commission

Wyoming Department of Transportation

Public Safety Communications Commission

Business Meeting Packet

Thank You For Attending!