

# **State of Wyoming**

Mark Harshman Chairman

# **Public Safety Communications Commission**

### ~ 2016 Annual Report to the Governor of the State of Wyoming ~

#### Mission Statement and Statutory Responsibilities

The mission of the Wyoming Public Safety Communications Commission (PSCC) is to develop recommendations for policy and guidelines, identify technology and standards, and coordinate intergovernmental resources to facilitate statewide wireless communications interoperability with emphasis on public safety.

Wyoming Statute 9-2-1104 states the commission shall:

(ii) Report in writing each year in October to the governor concerning any problems related to the installation, operation and maintenance of the system and shall make any recommendations it deems appropriate as part of the report.

#### **Achievements for 2016**

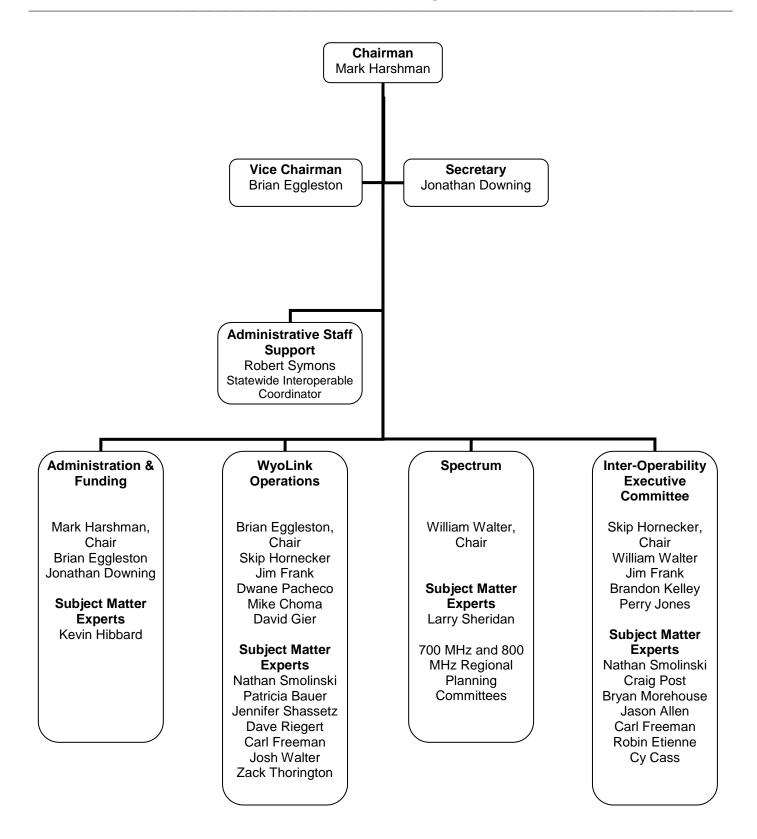
The Public Safety Communications Commission (PSCC) and the WyoLink program have achieved many accomplishments and goals this past year:

- > 75 total WyoLink sites operational
- ➤ Seven local government owned 800 MHz sites are operational in Casper, Cheyenne, Gillette and Glenrock. These sites provide seamless interoperability between the WyoLink VHF users and 800 MHz users
- ➤ WyoLink operating software was updated to Version 7.16
- ➤ Dispatch Center Grant developed, application process defined, grant applications processed and five grant awards for a total of \$756,998. Grants were awarded to: Riverton Police Department \$156,371, Sheridan Police Department \$149,153, Niobrara County \$132,960, Crook County \$123,248 and Teton County \$195,269
- Quarterly PSCC meetings were held in Cheyenne (December 2015), Casper (March 2016), Riverton (June 2016) and Gillette (September 2016).
- > Approved the revised WyoLink Handbook
- ➤ Completed and approved the Statewide Interoperable Communication Plan (SCIP) and forwarded to Department of Homeland Security, Office of Emergency Communications
- Public Safety Communications Commission Administrative Staff Support moved from Wyoming Office of Homeland Security to Wyoming Department of Transportation

## **Commission Members and Operating Structure**

The PSCC is comprised of representatives appointed by the Governor from the following public safety agencies, professional associations, and state departments:

| Representing  | Name  | Location       |
|---|---|----------------|
| Wyoming Police Chief's Association                                    | Dwane Pacheco, Police Chief                             | Rock Springs   |
| Wyoming Sheriff's Association   | Skip Hornecker, Sheriff                                 | Fremont County |
| Division of Criminal Investigation, Office of<br>the Attorney General | Brian Eggleston, DCI                                    | Riverton       |
| Wyoming Game and Fish Department                                      | Mike Choma, Wildlife Law<br>Enforcement Supervisor      | Casper         |
| Wyoming Department of Transportation                                  | Major Perry Jones, Wyoming<br>Highway Patrol            | Cheyenne       |
| Wyoming Livestock Board   | Jimmy Siler, Law Enforcement<br>Administrator           | Cheyenne       |
| Department of State Parks and Cultural Resources                      | Dennis Cease, Law Enforcement<br>Supervisor             | Laramie        |
| Wyoming Fire Chief's Association                                      | Mark Harshman, Division Chief<br>Casper Fire Department | Casper         |
| Wyoming State Fire Marshal  | Mark Young, Assistant State Fire<br>Marshal             | Cheyenne       |
| Wyoming Office of Homeland Security                                   | Jim Frank, Senior<br>Communications Officer             | Cheyenne       |
| The Public at Large   | Jonathan Downing  | Cheyenne       |
| Ambulance and Emergency Medical Services<br>Organization              | David Gier  | Rawlins        |
| Municipal Government or a municipal government association            | William (Doug) Frank, Glenrock<br>Mayor                 | Glenrock       |
| County Government or county government association                    | Lindy Glode, Carbon County<br>Commissioner              | Saratoga       |
| Wyoming Department of Health  | Brandon Kelley, EMS Education & Compliance Supervisor   | Cheyenne       |
| Tribal Government or tribal government association                    | Leslie Shakespeare, Eastern<br>Shoshone Tribal Liaison  | Fort Washakie  |
| Federal Government or federal government association                  | William Walter  | Cheyenne       |



#### **Activities**

#### Ongoing projects include:

- ➤ WyoLink Usage Audit
- > PSCC Recommendations for WyoLink
- > PSCC and WyoLink website updates at http://WyoLink.wyoming.gov
- WyoLink coverage testing and mapping
- Update Wyoming Communication Field Operating Guide
- ➤ Nationwide Public Safety Broadband Network and FirstNet planning

#### **Priorities for 2017**

- Continue the emphasis on increasing utilization and partnerships
- ➤ Communication and collaboration with potential user agencies on WyoLink membership
- ➤ Collaboration with the Governor's Office, Homeland Security, and WYDOT reviewing PSCC governance structure and developing legislation for potential modifications
- ➤ Work with the Wyoming Office of the Chief Information Officer (CIO) and Department of Enterprise Technology Services on public safety broadband usage and needs through the State and Local Improvement Grant Program (SLIGP)

### **Challenges**

#### WyoLink Funding

The Public Safety Communications Commission (PSCC), with the assistance of the Department Administration and Information, Budget and Economic Analysis Divisions, developed their recommendations for fiscal years 2017/2018 and 2019/2020. This process used a survey of all current WyoLink members to develop the list of recommendations and budgetary costs. The survey resulted in 179 responses from the 297 WyoLink members, a 60% response rate. The questions within the survey requested information about usage, coverage, dependability, training, system maintenance, consoles and end users equipment purchases.

The PSCC reviewed the WyoLink survey results and identified recommendations for: mobile radio coverage, portable radio coverage, replacement of WyoLink Site base radios, ongoing hardware and software maintenance costs, improvements to training and radio frequency challenges. Six (6) additional core towers were identified with a one-time funding of \$6 million and nine (9) portable radio enhancement sites with a one-time funding of \$9 million.

The vendor has stated the Quantar Base radio will be obsoleted in 2020 and must be replaced before WyoLink can be upgraded to version 7.18. The 346 Quantar base radios will need to be replaced with GTR8000 base radios with an estimated cost of \$6,700,000. Hardware and software maintenance costs are estimated at \$4,895,654 for biennial fiscal years 2017/2018, which includes an approximate savings of \$1,066,824 with a conversion of leased T1 lines to the Broadband Unified Network. The estimated biennial fiscal years 2019/2020 maintenance costs are \$5,073,104.

The Public Safety Communications Commission will work with the Governor's Office, Wyoming Department of Transportation, and Administration and Information Budget Division to review the WyoLink recommendations and development of funding mechanisms.

#### WyoLink Coverage

The WyoLink users survey and mobile radio coverage testing has identified areas with poor or no WyoLink coverage. The PSCC identified the following priorities for improved WyoLink coverage and based their recommendations on those areas which would improve mobile radio coverage (core) and community based portable radio coverage.

The core areas recommended include: Alcova Reservoir area, Natrona County has added a 800 MHz site and a VHF addition to this site would improve coverage for all WyoLink users. The Bondurant area in north western Sublette County, Northern Goshen County, southern portion of Big Horn Mountains between Buffalo and Worland – Ten Sleep area, northern Big Horn County and Orin Junction area. The portable enhancement areas include Rock Springs, Evanston, Jackson, Buffalo, Newcastle, Sundance, Greybull, Lusk and Wright. Potential construction savings could be realized by adding to existing sites, Alcova, or through placement of core sites which could also improve portable radio coverage, northern Goshen County and Lusk. The PSCC, WYDOT and WyoLink will review all potential new sites for sharing opportunities and locations which could improve both core and portable radio coverage needs.

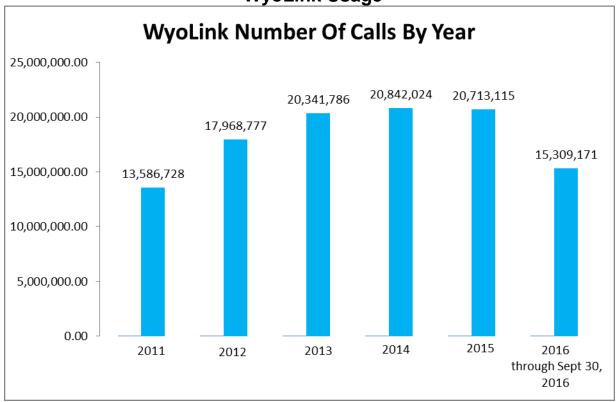
#### <u>FirstNet - National Public Safety Broadband Network (NPSBN)</u>

The National Public Safety Broadband Network (NPSBN) will be a public safety data communication system and **FirstNet will not replace WyoLink for public safety voice communications**. The State of Wyoming has designated Troy Babbitt as the state point of contact (SPOC) and the PSCC has created a Broadband Work Group to assist with the governance of the public safety broadband effort in Wyoming.

FirstNet has stated it will award the private partnership according to the Request for Proposal for the development and operation of the National Public Safety Broadband Network (NPSBN) in November or December 2016. Upon the naming of the private partner, members of the FirstNet outreach and design teams will work closely with the designated state point of contact to develop and deliver a network deployment plan. FirstNet will then provide the Governor a notice of completion of the request for proposal process, the details of the proposed plan and the funding level for the state. FirstNet's goal is to present the Wyoming NPSBN plan to the Governor in the third quarter of 2017. The Governor will have 90 days to review the plan and then determine if Wyoming will Opt-In or Opt-Out of the NPSBN plan. If the Governor decides to Opt-In to the FirstNet Wyoming plan, FirstNet and their partner will build and operate the Radio Access Network (RAN) in Wyoming with no funding from the state of Wyoming. The user fees from agencies participating in the NPSBN will be used to expand and operate the network.

If the governor decides to Opt-Out, the Governor is required to notify FirstNet, National Telecommunications and Information Administration (NTIA) and Federal Communications Commission (FCC). After providing the Opt-Out notification, the Governor has 180 days to develop and complete requests for proposals for the construction, maintenance and operations of the Radio Access Network (RAN) within the state. Wyoming is then required to submit an alternative plan to the FCC that is interoperable with the NPSBN and complies with the minimum technical interoperability requires under the Act.





WyoLink Usage by Time - Oct 2015 - Sept 2016: 38,334:47:30 (hours:minutes:seconds)

WyoLink Calls - Oct 2015 - Sept 2016: 20,731,134 Calls

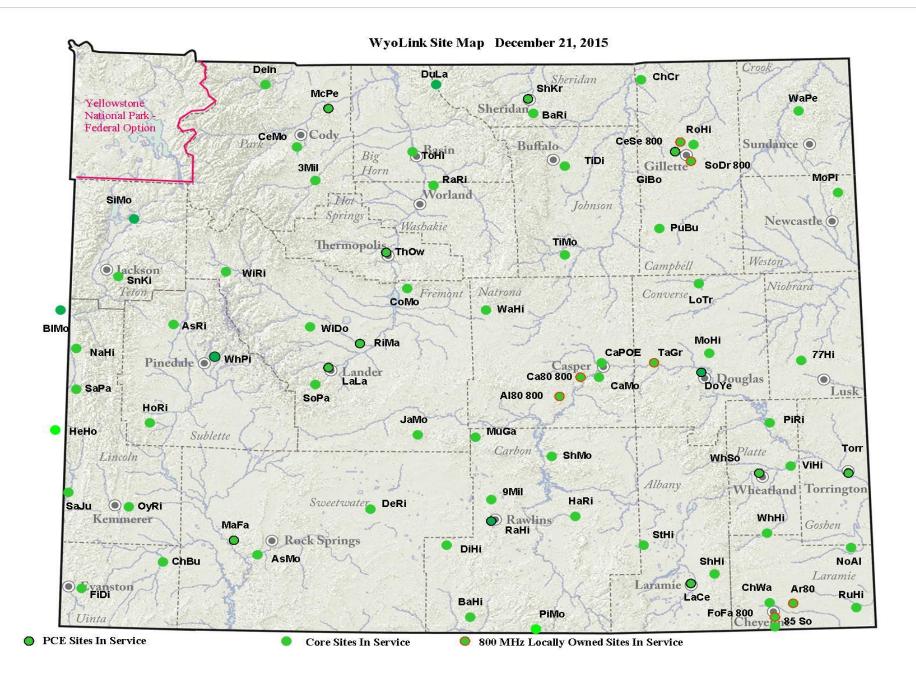
WyoLink Busies – Oct 2015 – Sept 2016: **8:47:46** (hours:minutes:seconds)

Average busy wait – 2 seconds Percentage of busies by time - 0.022%

WyoLink Availability: 99.939% of total possible time

# WyoLink Usage by all Users – October 1, 2015 through September 30, 2016

| Name               | Air Time in Hours:Minutes:Seconds | Percentage of System Usage by Time |  |
|--------------------|-----------------------------------|------------------------------------|--|
| Natrona County     | 5,330:28:42                       | 13.91%                             |  |
| Fremont County     | 3,956:39:30                       | 10.32%                             |  |
| Laramie County     | 3,889:30:00                       | 10.15%                             |  |
| Sweetwater County  | 2,635:48:42                       | 6.88%                              |  |
| Campbell County    | 2,625:03:36                       | 6.85%                              |  |
| Albany County      | 1,805:57:30                       | 4.71%                              |  |
| Platte County      | 1,562:56:18                       | 4.08%                              |  |
| Park County        | 1,235:43:00                       | 3.22%                              |  |
| Converse County    | 1,112:22:36                       | 2.90%                              |  |
| Sheridan County    | 945:13:18                         | 2.47%                              |  |
| Carbon County      | 747:40:12                         | 1.95%                              |  |
| Lincoln County     | 740:12:12                         | 1.93%                              |  |
| Goshen County      | 678:04:18                         | 1.77%                              |  |
| Washakie County    | 556:59:18                         | 1.45%                              |  |
| Sublette County    | 432:52:06                         | 1.13%                              |  |
| Crook County       | 311:12:54                         | 0.81%                              |  |
| Niobrara County    | 241:06:00                         | 0.63%                              |  |
| Hot Springs County | 186:00:54                         | 0.49%                              |  |
| Teton County       | 44:58:18                          | 0.12%                              |  |
| Johnson County     | 6:38:18                           | 0.02%                              |  |
| Big Horn County    | 6:24:48                           | 0.02%                              |  |
| Weston County      | 1:13:12                           | 0.00%                              |  |
| Uinta County       | 0:19:00                           | 0.00%                              |  |
| County Total       | 29,053:21:42 75.79%               |                                    |  |
| State Agencies     | 8,937:17:00                       | 23.31%                             |  |
| Federal Agencies   | 344:08:48                         | 0.90%                              |  |



| WyoLink Site Names   | Abbreviation | WyoLink Site Names | Abbreviation | Portable Coverage Site   | Abbreviation    |
|----------------------|--------------|--------------------|--------------|--------------------------|-----------------|
| 3 Mile               | 3Mil         | Narrows Hill       | NaHi         | Douglas Yellowstone Hwy  | DoYe            |
| 77 Hill              | 77Hi         | Nine Mile Hill     | 9Mil         | Gillette Boxelder Road   | GiBo            |
| 85 South             | 85So         | North Albin        | NoAl         | Laramie Cemetery         | LaCe            |
| Aspen Mountain       | AsMo         | Oyster Ridge       | OyRi         | Lander Landfill          | LaLa            |
| Aspen Ridge          | AsRi         | Pine Ridge         | PiRi         | Mans Face –Green River   | MaFa            |
| Baggs Hill           | BaHi         | Pinkham Mountain   | PiMo         | McCullough Peaks –       | McPe            |
|                      |              |                    |              | Powell                   |                 |
| Banner Ridge         | BaRi         | Pumpkin Buttes     | PuBu         | Rawlins Hill             | RaHi            |
| Black Mountain       | BIMo         | Rattlesnake Ridge  | RaRi         | Riverton Main Street     | RiMa            |
| Casper Mountain      | CaMo         | Rozet Hill         | RoHi         | Sheridan Kroe Lane       | ShKr            |
| Casper Port of Entry | CaPo         | Russell Hill       | RuHi         | Thermopolis Owl Creek Rd | ThOw            |
| Cedar Mountain       | СеМо         | Sage Junction      | SaJu         | Torrington               | Torr            |
| Cheyenne Water Tank  | ChWa         | Salt Pass          | SaPa         | Wheatland South Street   | WhSo            |
| Chicken Creek        | ChCr         | Sherman Hill       | ShHi         | White Pine - Pinedale    | WhPi            |
| Church Buttes        | ChBu         | Shirley Mountain   | ShMo         |                          |                 |
| Copper Mountain      | СоМо         | Signal Mountain    | SiMo         | Locally Owned Sites      |                 |
| Dead Indian          | Deln         | Snow King          | SnKi         | Casper Mountain 800      | Ca80 (Casper)   |
| Delaney Rim          | DeRi         | South Pass         | SoPa         | Cemetery Separation 800  | CeSe (Gillette) |
| Divide Hill          | DiHi         | Strouss Hill       | StHi         | Southern Drive 800       | SoDr (Gillette) |
| Duncan Lake          | DuLa         | Tisdale Divide     | TiDi         | Fox Farm 800             | FoFa (Cheyenne) |
| First Divide         | FiDi         | Tisdale Mountain   | TiMo         | Archer 800               | Ar80 (Cheyenne) |
| Halleck Ridge        | HaRi         | Torch Hill         | ToHi         | Alcova Reservoir 800     | Al80 (Casper)   |
| Hell Hole            | НеНо         | Virgin Hill        | ViHi         | Tall Grass 800           | TaGr (Glenrock) |
| Hogsback Ridge       | HoRi         | Waltman Hill       | WaHi         |                          |                 |
| Jade Mountain        | JaMo         | Warren Peak        | WaPe         | WyoLink Core Sites       | 55              |
| Lone Tree            | LoTr         | Whitcomb Hill      | WhHi         | Portable Coverage Sites  | 13              |
| Morton Hill          | MoHi         | Windy Ridge        | WiRi         | Locally Owned Sites      | 7               |
| Mount Pisgah         | MoPi         | Winkleman Dome     | WiDo         | Microwave Only           | 1               |
| Muddy Gap            | MuGa         | Rendezvous Peak    | RePe         | Total                    | 75              |
|                      |              | (Microwave Only)   |              |                          |                 |