Public Safety Communications Subcommittee

Annual Report

State of and Potential Funding Sources for Public Safety Communications in the State of Colorado

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Submitted By:

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Executive Summary

Mission critical voice and interoperable communications are essential for safe and effective public safety response from daily calls for service as well as for large-scale natural or man-made incidents. The State of Colorado and local governmental entities deploy numerous two-way land mobile radio (LMR) systems that serve state, local, federal, and tribal public safety and first responder agencies. Colorado's diverse land mass ranging from high mountain peaks to low valleys and open plains all pose unique coverage requirements. Colorado has many systems and many system owners ranging from small local to large State wide systems that make up the public safety communications network.

The 2016 Annual Report of the Public Safety Communications Subcommittee (PSCS) will give a **brief history** of where Colorado has been in the past few years in attempting to solve issues surrounding the large and complex matrix of what is referred to as the Statewide Public Safety Radio System, talk about **recent accomplishments** of this statutorily formed group, and **make recommendations** based on the extensive knowledge and expertise of the directors on the PSCS, working groups, along with other partners and experts from around the State of Colorado. Our recommendations will not only take into consideration the results of *Needs Assessment* and *Business Plan* study funded by the C.R.S. §24-33.5-716 but also the *State of Colorado Public Safety Interoperable Communications Governance Assessment* completed in 2016, and the annually updated Colorado Statewide Communications Interoperability Plan (SCIP), a living document kept current by the Statewide Interoperability Coordinator (SWIC) and the PSCS. Additionally, we will list goals to work toward in 2017.

History

In 2012 the Consolidated Communications Systems Authority (CCSA) was formed by HB 12-1224 to create a funding and sustainment mechanism that would meet the needs of the users of the Colorado Digital Trunked Radio System (DTRS). The CCSA's original focus was only with the DTRS, but early on, recognized the need for sustainment and interoperability with all radio systems operating in the state. In the 2013 annual report submitted to the Joint Budget Committee, it was the CCSA's recommendation that the HB 12-1224 be amended to include ALL Public Safety communications systems so that a true statewide public safety, interoperable and mission critical communication would be supported through a statewide funding mechanism. In 2014 the CCSA was replaced by the Public Safety Communications Subcommittee (PSCS) through SB 14-127. The Executive Director of Public Safety is now the lead State employee as a champion for all of public safety interoperable communications. The PSCS' membership is statutorily designated and has representation from across Colorado, from the leading public safety organizations, and State agencies. The common goal is operable and interoperable communications at all levels of government and across all jurisdictional boundaries.

In 2015, the PSCS also reviewed the prepared Business Plan and the Needs Assessment as outlined in legislation[1], then accepted the prepared documents as presented by the consultants that prepared them. However, the subcommittee did take exception to several portions of the documents. One main exception was that both documents were to be an account of current and future **public safety needs**. Both documents only addressed one large system in Colorado; the DTRS and did not fully address **ALL** of the public safety radio systems in Colorado. The PSCS has worked diligently in its short existence to work on the prescribed duties and responsibilities. We will continue to work on all aspects of the legislation for the benefit of public safety, the visitors and citizens across Colorado. **It is the position of the PSCS that completion of the Needs Assessment and Business Plan to include ALL systems in Colorado is required, and warranted in order to obtain a full and complete picture of the state of public safety**

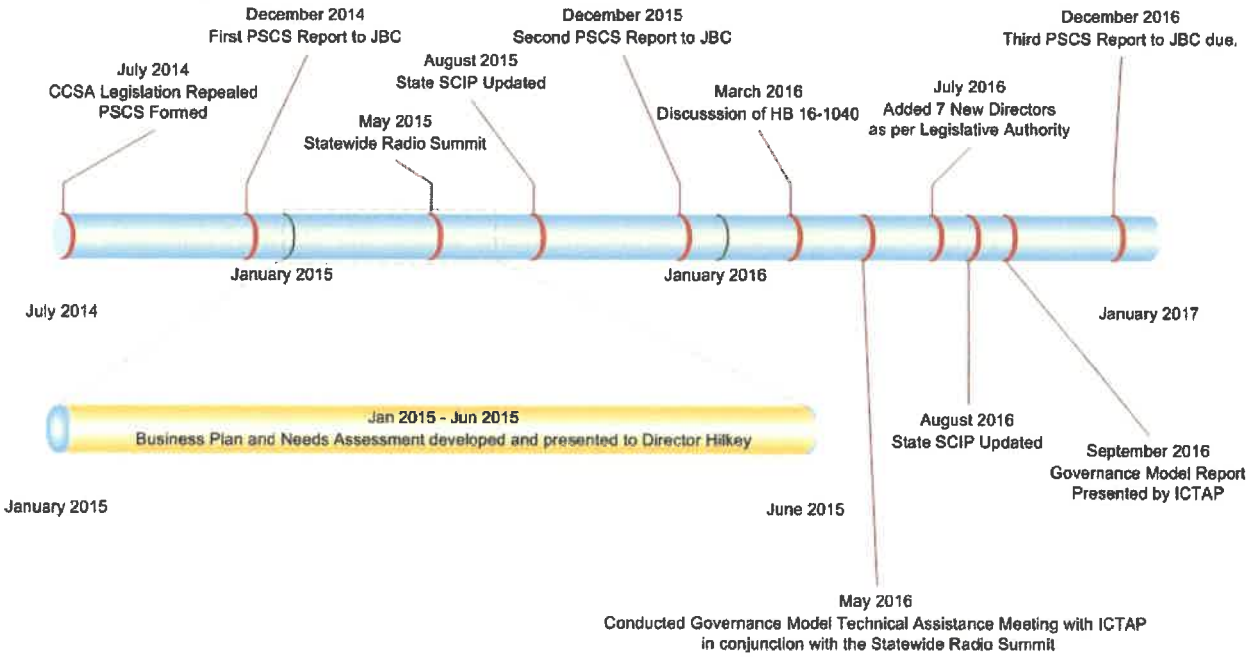
[1] CRS § 24-33.5-716, as amended

communications in Colorado to assist with the goal of governance and to meet the initial goals of Senate Bill 14-127.

Though there are the varying shapes and sizes of systems across the State of Colorado, they **all** face similar issues and priorities:

- Regular LMR equipment maintenance and replacement (Hardware)
- System Upgrade Assurance (SUA) program (Software)
- Acquisition of additional interoperability resources (e.g. Inter Subsystem Interface [ISSI])
- Repair and replacement of an aging microwave backhaul system
- Repair and replacement of aging radio tower sites
- Hardware and software upgrades necessitated by improvements in technology (e.g. repeaters and consoles)
- Shortage of trained Radio Technicians and Support Staff
- Training of constantly changing technology

Timeline



Accomplishments

During 2016 the PSCS continued its work that begun in 2014. Under C.R.S. § 24-37.5-506 (2.5) (a) (I) that was enacted in 2014, funding has been set aside from fiscal year 2013-2014 and each fiscal year thereafter until 2024-2025 fiscal year in the amount of $3.5 million to be placed into the Public Safety Trust Fund for use by the Governor's Office of Information Technology (OIT) to replace legacy DTRS equipment and hardware. In addition, beginning in the 2017-2018 fiscal years and continuing until the 2024-2025 fiscal year and additional $3.7 million is to be appropriated and placed in the Public Safety Trust Fund for DTRS System Upgrade Assurance. The Public Safety Communications Subcommittee now has an identified funding stream, through the Executive Director of Public Safety, to support its operations (e.g. outreach and educational materials, postage, etc.). Since this is an appointed volunteer group of dedicated public safety professionals that is tasked with specific duties in support of public safety communications; the continual funding of an operational budget through the Department of Public Safety to include a full time employee (FTE) will be needed in order to continue the work that has been initiated.

It must be noted that $7.2 million funding, discussed above, was **only to upgrade and maintain the DTRS portion** of Public Safety Communications in Colorado. **It does not address any other system, equipment belonging to other users, or interoperability interface equipment in the State.**

The PSCS has several specific purposes and duties as specified in legislation[2]. This report is intended to summarize the progress made on those duties and purpose.

The PSCS continues to promote interoperable communications across the State of Colorado by the following:

- Continue to create partnerships with those other organizations and entities that represent a wide array of users.

[2] CRS § 24-33.5.1614, as amended

- Maintain Outreach and Educational subcommittee to provide interoperability information to others.
- The committee receives regular updates to Next Generation 911 deployment and,
- The First Responder Network Authority (FirstNet), the Nationwide Public Safety Wireless Broadband intuitive, although this is a separate system that **will not** replace Mission Critical LMR for many years if at all.
- Promote cooperation between Local, Tribal, State, Federal and nongovernmental public safety agencies through an annual Statewide Public Safety Radio Summit put on by members of the PSCS to increase training and agency networking opportunities.
- Members of the PSCS participate in other communications oversight groups (i.e. FCC Region 7 Regional Planning Committees CCNC, RMHUG, PRCC, MARCS, NCRCN, Evergreen Fire, etc.).
- Continued to review and address recommendations in the Business Plan and a Needs Assessment. **These two documents will be living documents and will need updated on a continual basis.**
- Continued work on ISSI interoperability by forming a specific working group to facilitate the ongoing discussion and planning of implementation between various sovereign systems now and in the future.
- The PSCS assisted the Statewide Interoperability Coordinator (SWIC) in the preparation of the updated Statewide Communications Interoperability Plan (SCIP). The plan is the framework for interoperable communications across Colorado.
- Added additional Directors to include a more diverse system representation.

In 2016, the PSCS continued it's educational and outreach task by holding the third annual *Statewide Public Safety Radio Summit.* The Summit is a day and a half training session that is focused on bringing public safety practitioners for both the public and private sectors to learn, network and share information.

This year's Summit was attended by approximately 200 people from Federal, State, Local, Military and Private Sector representatives. The Summit consisted of presentations from experts from across the

country as well as panel discussions from local practitioners on various experiences related to operable and interoperable communications.

The Summit is coordinated by the PSCS Education and Outreach working group and is fully paid for by sponsor donations from major competing radio manufacturers and a non-profit organization.

2016 also saw the PSCS obtaining the services of the *U.S. Department of Homeland Security – Office of Emergency Communications/Interoperable Communications Technology Assistance Program (OEC/ICTAP)* in conducting a governance assessment of public safety interoperable communications.

At the Summit, OEC/ICTAP conducted focus group interviews with attendees garnering information from across the broad spectrum of practitioners. OEC/ICTAP also conducted one-on-one interviews with specific volunteer individuals. OEC/ICTAP reviewed governance documents and legislation as well as conducting an on-line governance survey.

The completed report identified several governance success as well several governance challenges.

Successes[3]

- Legislative authority and by-laws/Charter for the Public Safety Communications Subcommittee (PSCS), in concert with the recommendations of the Emergency Communications Governance Guide for State, Local, Tribal, and Territorial Officials.
- Flexible governance language allowing for rapid changes in group responsibility/focus as the need arises.
- A highly dedicated group of public safety representatives who work diligently on statewide interoperable communications issues and planning.

[3] The State of Colorado Public Safety Interoperable Communications Governance Assessment; DHS-OEC/ICTAP; September 2016; pg.11.

- A long history of interoperable communications planning within the state leading to functional mutual aid channels throughout the state.
- Active and regular meetings of the PSCS and subcommittees, as well as the CCNC.
- A full-time, dedicated Statewide Interoperability Coordinator (SWIC) position recently filled.
- Annual Statewide Public Safety Radio Summit event which is well attended by stakeholders from across the state.
- Formal representation of many radio system owners/users groups throughout the state on the PSCS.
- Balanced representation on PSCS of agencies, disciplines, and levels of government.
- Detailed and formal policies governing membership in the identified groups, allowing membership to be large enough to be representative while still being small enough to meet quorum requirements consistently.

Challenges[4]

- Structure
    - PSCS Position Within Government Organizational Structure
    - Sparse and Disconnected Structure
    - Communication Pathways Between PSCS, 9-1-1, and FirstNet
    - Continuity
    - Representation of Radio Systems
    - Clarity of Responsibilities
- Stakeholder Outreach
    - Stakeholder Identification
    - Stakeholder Engagement and Awareness
    - Perceived Lack of Trust
- Regionalization

[4] Ibid; pp 12-18

- Regional Structure Disconnected from PSCS

Under each of the challenges, OEC/ICTAP provided a description of the challenge and recommendations to address the challenge.

OEC/ICTAP concluded the report with four overall recommendations. The PSCS is still reviewing the recommendations along with the Needs Assessment and Business Plan to chart a course of action for years to come.

Recommendations

Public Safety interoperable communications is dependent on resolving some continuing key hurdles:

- Agreements or processes to establish agreements, regarding the responsibilities of, usage, maintenance, ownership, and a sustainable funding source, for interoperable communications for public safety no matter what system is used;
- Fragile trust relationships between the different system owners regarding governance;
- Lack of radio coverage;
- Usage and loading concerns among the different systems;
- Training of users;
- Resource allocations for interoperable communications; and
- Workable governance model

In 2015, the PSCS participated in developing the Public Safety Radio System-Wide Business Plan Report and the Public Safety Radio System-Wide Needs Assessment Report. A consultant was retained through the Department of Homeland Security/Office of Emergency Management to prepare the documents. The PSCS took exception to several aspects of the resulting plan and assessment, but presented it on face value as directed by the Legislature. There were several items that either generated discussion about possible future governance which result in the following initial recommendations by the PSCS Directors.

Financial

Technology, even in LMR and communications is ever evolving and therefore there exists a need for a replacement and upkeep cycle (sustainment). How do we, as a State, fund or set aside funding for the sustainment cycle keeping public safety communications current so that the best possible service is provided to our citizens? Here are some recommendations that were presented in the CCSA 2013 and in the 2014 PSCS Annual Reports and are still viable options:

- **Reallocation of an existing tax set to sunset**

The State of Colorado has some ongoing as well as some "sun-setting" funds that could be made available and repurposed for capital improvements to, and ongoing maintenance of, the DTRS. The repurposing of such a fund, or combination of funds, may be among the most viable of options to provide for the ongoing maintenance and sustainment of the DTRS and all public safety systems, however, to be considered viable, such a fund would need to align with the goals of the PSCS and to the benefits it provides to public safety agencies and ultimately the citizens and industries that consume public safety services.

- **Redirection of Existing, or New, Lottery Funds**
- **Redirection of Marijuana Tax Funds**
- **Statewide Retail Sales Tax**
- **Fee on In-State Vehicle Registrations**
- **Traffic Ticket Surcharge or Additional Criminal Fines**
- **Gasoline Tax**

Other funding options recommended in the business plan include:

- Grant programs, such as the Colorado Wireless Interoperability Network (CWIN) or reuse of the Mining Trust Fund

PSCS will leverage grant funded facilitation sessions by National Partners to work through some of those governance issues. Additionally, the PSCS can continue to build relationships, trust and partners which in turn will facilitate future accomplishments along these lines.

The PSCS will assess the funding recommendations made in the business plan and determine how they align with the goals of the PSCS. The PSCS will work closely with OIT/PSCN/CCNC and provide the level of coverage, capacity and interoperability for Public Safety to meet an agreed upon level of service. Additionally, the PSCS will seek the input of all system owners to determine their level of coverage,

capacity, and interoperability needs so that the cost assessment can be revised to more accurately reflect the needs for everyone.

The process for establishing any additional revenue generating taxes or fees may be difficult and politically challenging, however the PSCS recommends that the Colorado Legislature begin work to establish a dedicated and reliable funding source that will generate sufficient funds to sustain, maintain, and upgrade ALL public safety communications systems, as needed. **The current Public Safety Trust Fund established under C.R.S. §24-37.5-506, as amended, only addresses one governmental entity and only one system. We recommend that this fund usage be reviewed by the PSCS to ensure that the funds are being used for the purposes designated under the statute with oversight by the HSAC.**

The PSCS will continue to work with all its partners and all levels of government to develop strategies that meet the needs of the public safety communications system owners.

Governance

The governance of communications systems takes several approaches. Some are governed by individual governmental entities, such as a municipality or county. Others form partnerships where the various owners of infrastructure come together to manage their respective system(s), work with other surrounding agencies and systems to promote interoperability. Many of these partnerships have been identified previously in this report, but as is demonstrated here, there is no one guiding path yet established. Through the assistance of the OEC/ICTAP, we now have recommendations on ways to proceed with creating a workable governance structure.

Overall Governance Challenges and Recommendations

PSCS Position within the Government Organizational Structure[5]

One glaring aspect of the governance recommendation is that the PSCS is buried deep within the overall state structure as a subcommittee, under an advisory committee under a state department. With that,

[5] Ibid; pp 11-12

there is an issue with communications barriers that tend to lead to communications failures through the various levels of government in order for the PSCS to be productive. OEC/ICTAP recommends that the PSCS should be elevated directly subordinate to the Colorado Department of Public Safety or the Department of Homeland Security/Emergency Management. Since the PSCS is tasked with public safety communication matters, we would support the move to DPS instead of DHSEM, with the ability to report directly to the Executive Director of the Department of Public Safety. We would recommend that the SWIC also be elevated directly under the DPS to work closely with the PSCS.

Should this recommendation be adopted, then the current legislation will need to be modified to reflect the position of the PSCS within the overall governance structure.

Sparse and Disconnected Structure[6] and Communications Pathways between PSCS, 9-1-1 and FirstNet Colorado[7]

In Colorado, there are three distinct public safety communications groups in three separate state departments. These groups are:

- PSCS – Department of Public Safety/Department of Homeland Security-Office of Emergency Management
- FirstNet Colorado – Governor's Office of Information Technology
- 9-1-1 Task Force – Department of Revenue – Public Utilities Commission

The OEC/ICTAP recommends that the three be placed under one umbrella. At this time the PSCS does not see that as a viable option due to the time it would take for each state department to weigh in on relinquishing the groups.

The PSCS recognizes the need for better coordination, communications between the three groups and will make it a priority for 2017 to facilitate a coordinated effort of communication between the three.

[6] Ibid; p12

[7] Ibid; p. 12

One step will be to create a partnership with each group, very similar to the partnerships that have been created with those large system owners not specifically represented on the PSCS.

Continuity[8]

The PSCS supports the recommendation to maintain the existence of the PSCS for as long as the need is there; amend the legislation as needed rather than dismantling the group and recreating it.

The main issue here is the Sunset Clause within the current legislation, the sunset date for the PSCS is **September 1, 2019.** Public Safety communications is a constantly evolving issue which cannot be adequately addressed across the diverse landscape and ownership that exists in Colorado today. The committee needs to be perpetual for as long as there is public safety communications in Colorado.

Thus the recommendation is to amend the current legislation in 2017 to remove the sunset provision, as three years is insufficient to accomplish the tasks specified in the legislation.

Representation of Radio Systems[9]

The PSCS is intended to represent **ALL** public safety communications within Colorado, and not just those on specific systems. The perception across Colorado is that the PSCS is too focused on the Digital Trunked Radio System (DTRS) and not enough on issues facing other systems. The PSCS recognizes this and has taken steps even before the Governance Technical Assistance document was prepared to integrate representation from other systems.

One main issue still present was that when the Business Plan and Needs Assessment was conducted as a part of legislation, **it only focused on the DTRS** and only identified the owners and needs of that one system. Due to time constraints imposed by the legislature and the overall complexity of the project, all that could be addressed was the DTRS and not what was intended in the legislation.

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[8] Ibid; p.13

[9] Ibid; pp. 13 -14

The Business Plan and the Needs Assessment needs to be funded and completed for **ALL SYSTEMS** across Colorado so that there is an entire snapshot of the status of public safety communications across the state.

The PSCS recommends funding the completion of the Business Plan and Needs Assessment to include the remaining systems and owners in Colorado.

Clarity of Responsibilities[10]

In Colorado, responsibility for public safety communications varies from small –self owned (cities/towns/counties) systems to large multi-jurisdictional systems. This can be a challenge to clearly define responsibilities.

The PSCS recognizes that:

- The PSCS has several statutorily named responsibilities.
- That the Public Safety Communications Network within OIT has responsibilities.
- That numerous user groups and multi-system groups (CCNC, FRCC, MARC, etc) have their responsibilities.
- That the individual system owners have their responsibilities.

With that, the PSCS will, in 2017 take the lead to make headway in addressing the clarity of responsibilities and how they all intertwine across the state.

Stakeholder Identification[11]

Defining all of the stakeholders across Colorado is a daunting task, but not an insurmountable one. Identifying interoperable communications governance bodies; developing a master list throughout the state, starting at the regional level; and then maintaining the list to ensure the dissemination of information are goals that can be obtained.

[10] Ibid; p.14

[11] Ibid; pp 14-15

As previously mentioned, the Business Plan and Needs Assessment were intended to accomplish this, **but failed to complete it** by not including ALL systems across Colorado. In order to fully identify the stakeholders, the PSCS recommends that funding to complete the Business Plan and Needs Assessment be set aside to identify all stakeholders.

Stakeholder Engagement and Awareness[12]

Based upon a survey conducted by OEC/ICTAP, there is a significant number of respondents are not engaged in any of the various groups affiliated with interoperability in Colorado. The PSCS since its inception as well as prior to has been actively dissemination information to stakeholders through various means, but apparently it may not be reaching the intended audience.

The PSCS maintains a website where the committee's documents are readily accessible. Through a partnership with CCNC, notifications are sent via the CCNC mail server that reaches approximately 825 recipients. Attempts have been made to engage stakeholders from across Colorado. However, without participation from stakeholders, the PSCS can only do so much.

The PSCS recognizes this and will work on making the following items a priority in 2017:

- Drafting documents to clarify responsibilities of the identified interoperable communications groups.
- Actively disseminate materials to as many stakeholders as possible.
- Consider creating training that includes detailed information on the governance structure of interoperable communications in Colorado.

Perceived Lack of Trust[13]

There still is a perceived lack of trust across all levels of government across Colorado. There are bridges that need to be mended due to historical information that has influenced these feelings.

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[12] Ibid; pp15-16

[13] Ibid; p. 16

Cooperation and trust are key to governance, especially when there is a lack of written agreements. Trust takes time to build and headway has been made in a short period of time. There still is a considerable amount of work to be done.

Thus the PSCS recommends that:

- We leverage the regionalized structure to have representation from across Colorado for information dissemination and information gathering.
- We perform more and widespread outreach across Colorado, utilizing key representatives (possibly the SWIC) of PSCS to have face-to-face contact to assist in the trust building.

Regional Structure Disconnected from PSCS[14]

The HSAC, for which the PSCS is a subcommittee of, is based upon a structure of nine (9) All Hazard Regions across Colorado. The PSCS, by statute has a different structure, but includes portions of each of the All Hazard regions.

The PSCS welcomes and encourages participation from each of the All Hazard regions as well as any other interested organization. Under the current legislation, the PSCS can increase or decrease its membership as needed (except for those specified in legislation). Should an All Hazard Region designate a representative that actively will participate to represent their region, they may be considered for the Board.

The PSCS recommends that the All Hazard Regions actively participate in the PSCS so that each region is represented.

The PSCS will continue to review and discuss the recommendations of the business plan; the needs assessment and the governance assessment make the following comments:

[14] Ibid; pp. 16-17

- It is imperative the governance and membership structure is well suited for the PSCS. The PSCS will look at ways to implement the regionalization of interoperable communications as recommended in the governance assessment and the business plan.
- The PSCS recommends that at this time, the CCNC not be absorbed by the PSCS. Rather, the PSCS will continue its partnership with CCNC and discuss how the two entities can complement each other.
- The PSCS has taken ownership of the SCIP and will work directly with the SWIC to update it annually.
- Discussion has taken place regarding the organizational structure of Office of Information Technology and the Public Safety Communications Network (PSCN) team and their relationship with the SWIC. The PSCS recommends that the Public Safety Communications Network should reside somewhere else within State Government. Since it is a public safety network, it might be better suited within the Department of Public Safety or at least the Office of Personnel Administration, but located at a level that reports directly to an executive director. This will ensure an accountability to and communication with the many agencies and elected officials that use the system, but especially those that rely on this system for mission critical operations in the area of first responders for public safety It should be noted that this was a recommendation of the Public Safety Radio System-Wide Business Plan and the PSCS Directors. Also noteworthy is the fact that the Department of Personnel and Administration administers most of the agreements for the PSCN team. This would follow a national trend to move radio systems out of Information Technology so that they receive the attention their criticality requires.
- Optimally, the PSCS should be removed as subcommittee of the HSAC and codified as a separate board with reporting responsibility directly to the State's Homeland Security Advisor and to the Joint Budget Committee.
- The sunset clause of the current legislation should be totally eliminated as public safety communications across the state should remain perpetual and sustainable to ensure the safety of our citizens and responders.
- Representatives from the All Hazard Regions should actively participate in the PSCS.

- Colorado needs to maintain a dedicated SWIC position as a full-time staff member and leverage the position to build relations not only outside of Colorado, but within all of the regions in Colorado.

Conclusion

Though there has been some progress made from 2013 to present day to begin to solve some of the issues facing public safety communications in Colorado, it has only just begun. Public Safety/First Responders need to be able to communicate with each other no matter what system they use, what manufacturer they select, or what frequency band they operate on. This is the true bottom line facing the complex system of systems we have here in Colorado.

Without a governance model that can be accepted by ALL of the sovereign systems across Colorado and an adequate funding stream, the life of public safety communication systems for both daily operability and critical situation interoperability will be jeopardized and public safety will not be able to provide the best service for the safety of the citizens of Colorado and for first responders. To that end the PSCS believes that a working Governance model for Public Safety Radio Systems in Colorado is still its number one priority. However; recognizes the need to find out all of the system owners and their designated representatives, continue to develop a formal inclusive contact list, and establish an effective method of communicating with those designated representatives.

Appendix

Appendix A

Technical Background and Definitions

Infrastructure

The infrastructure of Public Safety communications is comprised of:

- Radio sites (aka radio towers) that are spread out across the state and that house radio repeater equipment,
- Master sites which control the operations of the radio sites,
- Dispatch centers that interface to allow radio console positions to directly connect to the network, and
- Backhaul links ("transport links") that interconnect the sites to each other and to the master sites and dispatch centers.
- Interfacing equipment that connects disparate radio systems.

Technology

The technology used in public safety communications involves VHF, UHF, 700 megahertz (MHz) and 800 MHz analog and digital voice trunking as defined by the APCO/TIA[1] Project 25 standards for public safety voice communications. One key note to this is that not all public safety communications are up-to-date with the Project 25 (P25) standard. The standard is a **recommended** set of standards that provide for interoperability between different systems and different manufacturers.

Major Manufacturers

The major manufacturers for the public safety communications across Colorado include, but are not limited to:

- Motorola Solutions

[1] APCO is the Association of Public Safety Communications Officials, International and TIA is the Telecommunications Industry Association that adopted P25 in its Suite 102 of standards.

- Harris Corporation
- EF Johnson Technologies
- Tait Communications
- Kenwood Communications
- Airbus DS Communications (Formerly Cassidian Communications)

Most if not all of these manufacturers supply P25 capable equipment. The need as well as the expense is the issue for many agencies to transition to the P25 standard.

Backhaul and Interconnections

The backhaul links that provide the interconnections primarily use point-to-point microwave technology, fiber optic cable and even telephone line (T-1) for some links. During a typical month, one system alone facilitates approximately 8.3M calls between public safety users that operate in 95%[2] of the state that it serves.

Ownership

The ownership of public safety communications systems is extremely diverse and made up of the owners of systems, infrastructure and joint partnerships. (See Appendix C)

For the most part, regardless of ownership, usage of the network for interoperability is ubiquitously open to all authorized users[3], and statewide access is available to all user agencies independent of their jurisdiction[4].

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[2] The State of Colorado's advertised "baseline" coverage criteria for DTRS are 95% coverage reliability to a mobile (vehicle-mounted) radio on state highways. Local governments have provided many enhancements to these criteria and many have their own "baseline" criteria.

[3] Authorized users must be: i) from a public safety and public service agency from a State, Tribal, County, and Local government; federal agencies; special districts; and EMS provider; and ii) eligible under Title 47 of the Code of Federal Regulations (CFR) Part 90 Private Land Mobile Radio Services §90.20 Public Safety Pool. Access to an individual system is dependent upon approval of the manager/owner of the system.

Interoperability verses Operability

Interoperability and operability often become intertwined with each other and at times misconstrued. This then tends to lead to a misconception that there are system issues and we cannot communicate with another public safety agency.

Operability, as it relates to public safety communications, means the equipment that is used by a particular entity functions on a **day-to-day basis without failing** or losing communications with those on the same system.

Interoperability, again as it relates to public safety communications, means can the equipment **interconnect or be used to communicate with an entity on another system** or in another area of the state.

Public safety communications must first be **operable** before they can be interoperable. They have to have adequate equipment which is maintained and serviceable. An ongoing sustainment plan must be developed to fund the required maintenance, replacement and upgrades to equipment to ensure operability. They must not have coverage gaps in communications, but if they do it is to be extremely minimal. Operability must be the starting point for any entity that provides services to the public. They must be able to communicate within their respective jurisdictions, regardless of size or terrain.

Once the operability is obtained, then entities are able to look at **interoperability**. Interoperability needs to be obtained so that we, as public safety providers of all disciplines, (Law Enforcement, Fire, Emergency Medical Services, etc) can communicate with one another in times of crisis and in a mutual, coordinated effort to protect the public we serve.

Interoperability may be obtained by interconnecting the various systems, forming partnerships, sharing resources and infrastructure. Sounds easy, but it is not. Agreements need to be formed, ground rules

[4] Exceptions to this statement do exist wherein, by explicit agreement; certain owners allow visiting, out-of-jurisdiction users to access selected statewide mutual aid channels and talkgroups instead of those users' home talkgroup.

on usage need to be established, equipment needs to be sustained, and training of personnel needs to be on-going and up-to-date.

The basic key elements as outlined by NPSTC (What is this?) in the following:

Direct or Talk Around: This mode of communications provides public safety with the ability to communicate unit-to-unit when out of range of a wireless network OR when working in a confined area where direct unit-to-unit communications is required.

Push-to-Talk (PTT): This is the standard form of public safety voice communications today - the speaker pushes a button on the radio and transmits the voice message to other units. When they are done speaking they release the Push-to-Talk switch and return to the listen mode of operation.

Full Duplex Voice Systems: This form of voice communications mimics that in use today on cellular or commercial wireless networks where the networks are interconnected to the Public Switched Telephone Network (PSTN).

Group Call: This method of voice communications provides communications from one-to-many members of a group and is of vital importance to the public safety community.

Talker Identification: This provides the ability for a user to identify who is speaking at any given time and could be equated to caller ID available on most commercial cellular systems today.

Emergency Alerting: This indicates that a user has encountered a life-threatening condition and requires access to the system immediately and is, therefore, given the highest level or priority.

Audio Quality: This is a vital ingredient for mission critical voice. The listener MUST be able to understand without repetition, and can identify the speaker, can detect stress in a speaker's voice, and be able to hear background sounds as well without interfering with the **prime voice communications.**[5]

[5] Mission Critical Voice Communications Requirements for Public Safety, National Public Safety Telecommunications Council, Broadband Working Group

Appendix B

Acronym List

APCO	Association of Public Safety Communications Officials
CCNC	Consolidated Communications Network of Colorado
CCSA	Consolidated Communications System Authority
C.R.S.	Colorado Revised Statues
DHS	Department of Homeland Security
DTRS	Digital Trunked Radio System
FCC	Federal Communications Commission
FirstNet	First Responder Network Authority
FRCC	Front Range Communications Consortium
ICTAP	Interoperable Communications Technical Assistance Program
ISSI	Inter Subsystem Interface
JBC	Joint Budget Committee
LMR	Land Mobile Radio
MCV	Mission Critical Voice
MHz	Megahertz
NCRCN	Northern Colorado Regional Communications Network
NG-911	Next Generation 911
NPSTC	National Public Safety Telecommunications Council
OEC	Office of Emergency Communications
OIT	Governor's Office of Information Technology
P25	APCO's Project 25 Standards
PPRCN	Pikes Peak Regional Communications Network
PSCN	Public Safety Communications Network
PSCS	Public Safety Communication Subcommittee

RMHUG	Rocky Mountain Harris Users Group
SUA	System Upgrade Assurance
SWIC	Statewide Interoperability Coordinator
TIA	Telecommunications Industry Association
UHF	Ultra High Frequency
VHF	Very High Frequency

Appendix C

Public Safety Communications Subcommittee (PSCS) Directors

Public Safety Communications Subcommittee (PSCS) 23 - SB14-127, 24-33.5-1613, (3.3) (e)

	Director	Representation Notes
1	Gary Pasicznyk	(I)(A) Representing non-DTRS Systems (Executive Director)
2	Brian Zoril	(I)(A) Representing non-DTRS Systems (Executive Director)
3	Randy Lesher	(I)(B) Representing license Ambulance, EMS, Trauma (SEMTAC)
4	Bob Ricketts	(I)(C) Representing 9 All Hazards Regions (Executive Director)
5	Dave Hayes	(I)(C) Representing 9 All Hazards Regions (Executive Director)
6	Kurt Schlegel	(I)(D) Representing Metropolitan Fire (Colorado State Fire Chiefs' Association)
7	Tad Rowan	(I)(D) Representing Rural Fire (Colorado State Fire Chiefs' Association)
8	Vacant	(I)(E) Representing Labor Organization (Colorado Professional Fire Fighters)
9	Rodger Partridge	(I)(F) Representative of Colorado Counties (Colorado Counties, INC.)
10	(SE) Jeff Reynolds	(I)(G) Representative of Colorado DTRS (CCNC, Inc.)
11	(SW) Steve Schroder	(I)(G) Representative of Colorado DTRS (CCNC, Inc.)
12	(M) Mark Wolf	(I)(G) Representative of Colorado DTRS (CCNC, Inc.)
13	(NE) Dave Rowe	(I)(G) Representative of Colorado DTRS (CCNC, Inc.)
14	(NW) Todd Holzwarth	(I)(G) Representative of Colorado DTRS (CCNC, Inc.)
15	Paula Creasy	(I)(H) Representative of Law (Colorado Association of Chiefs of Police)
16	Holly Nicholson-Kluth	(I)(H) Representative of Law (County Sheriff's of Colorado)
17	Peter Bangas	(II)(A) CIO or designee (Governors Office of Information Technology)
17	Pam Monsees - Proxy	(II)(A) CIO or designee (Governors Office of Information Technology)
18	Don Naccarato	(II)(B) Chief of CSP or designee (CSP)
19	James Moore	(II)(C) ED of DOC or designee (Executive Director of DOC)
20	Daryll Lingst	(II)(D) ED of DOT or designee (Executive Director of DOT)
20	Elbert Hunt - Proxy	(II)(D) ED of DOT or designee (Executive Director of DOT)
21	Eric Harper	(II)(E) ED of DNR or designee (Executive Director of DNR)
21	Heather Dugan - Proxy	(II)(E) ED of DNR or designee (Executive Director of DNR)
22	Kathi Gurule	(III) Representative of Tribal Nation (Ute Tribe)
23	Vacant	(III) Representative of Tribal Nation (Ute Mountain Ute Tribe)
24	Matt Mueller	(g) Representing the City and County of Denver
25	Erin Green	(g) Representing the City of Arvada

26	Wade Williams	(g) Representing the City of Aurora
27	Steve Kabelis	(g) Representing the City of Lakewood
28	William Malone	(g) Representing the Front Range Communications Consortium
29	Dean Scott	(g) Representing Boulder County

Appendix D

Statewide Communication Interoperability Plan (SCIP)

Continued on next page

Colorado

Statewide Communication Interoperability Plan (SCIP)

August 2016

OMB Control Number: 1670-0017
Date of Approval: August 1, 2016
Date of Expiration: September 31, 2017

Annual Report | 2016

EXECUTIVE SUMMARY

The Colorado Statewide Communication Interoperability Plan (SCIP) is a stakeholder-driven, multi-jurisdictional, and multi-disciplinary statewide strategic plan to enhance interoperable and emergency communications. The SCIP is a critical mid-range (three to five years) strategic planning tool to help Colorado prioritize resources, strengthen governance, identify future investments, and address interoperability gaps.

The purpose of the Colorado SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, local, and tribal levels.
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.
- Promote operability and interoperability by encouraging routine use of interoperable and deployable assets, comprehensive communications training and exercises.

The following are Colorado's Vision and Mission for improving emergency communications operability, interoperability, and continuity of communications statewide.

Vision: Statewide, interoperable, mission critical, public safety communications.

Mission: Create and maintain an environment where emergency responders and public safety agencies communicate by engaging stakeholders to support the highest level of interoperability across jurisdictions and disciplines through effective leadership, proper planning, training/exercises, and technology implementation, to achieve life safety, incident stabilization, and property conservation.

The following strategic goals represent the priorities for delivering Colorado's vision for interoperable and emergency communications.

- Governance –
  - Statewide collaboration and participation for interoperable communications
  - Active participation in regional communications committees
- Standard Operating Procedures (SOPs) –
  - Routine use of Inter RF subsystem interface (ISSI), mutual aid channels, patching, gateways, and encryption for all disciplines and jurisdictions where appropriate

- Technology –
  - Effective interoperability solutions are identified and promoted
  - interstate/cross-border communications
  - Prepare Colorado for implementation of emerging technologies
  - Build out of public safety system-of-systems communications networks and backhaul
- Training and Exercises –
  - Regional communications training and exercises
  - Training materials, Tactical Interoperable Communications Plans (TICP), and After Action Reports (AAR) are updated, published, and distributed
- Usage –
  - Deployable and interoperable communications assets
- Outreach and Information Sharing –
  - Outreach, education and information to stakeholders
  - Public safety broadband network
- Life Cycle Funding –
  - Sustainable funding for continued operation, enhancement, and replacement for communications systems

The Colorado Statewide Interoperability Coordinator (SWIC), in coordination with the Public Safety Communications Subcommittee (PSCS) of the Homeland Security & All-Hazards Senior Advisory Committee (HSAC) and other stakeholders are responsible for implementing the goals and initiatives outlined in the SCIP.

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1. INTRODUCTION

The Colorado Statewide Communication Interoperability Plan (SCIP) is a stakeholder-driven, multi-jurisdictional, and multi-disciplinary statewide strategic plan to enhance interoperable and emergency communications. It is created and maintained by the Public Safety Communications Subcommittee (PSCS) of Colorado's Homeland Security & All-Hazards Senior Advisory Committee (HSAC). The SCIP is a critical mid-range (three to five years) strategic planning tool to help Colorado prioritize resources, strengthen governance, identify future investments, and address interoperability gaps. This document contains the following planning components:

- Introduction – Provides the context necessary to understand what the SCIP is and how it was developed.
- Purpose – Explains the purpose/function(s) of the SCIP in Colorado.
- State's Interoperable and Emergency Communications Overview – Provides an overview of the State's current and future emergency communications environment and defines responsibility for the SCIP initiatives.
- Vision and Mission – Articulates the State's three- to five-year vision and mission for improving emergency communications operability, interoperability, and continuity of communications at all levels of government.
- Strategic Goals and Initiatives – Outlines the strategic goals and initiatives aligned with the three- to five-year vision and mission of the SCIP and pertains to the following critical components: Governance, Standard Operating Procedures (SOPs), Technology, Training and Exercises, Usage, Outreach and Information Sharing, and Life Cycle Funding.
- Implementation – Describes the process to evaluate the success of the SCIP and to conduct SCIP reviews to ensure it is up-to-date and aligned with the changing internal and external environment.
- Reference Materials – Includes resources that provide additional background information on the SCIP or interoperable and emergency communications in Colorado or directly support the SCIP.

Figure 1 provides additional information about how these components of the SCIP interrelate to develop a comprehensive plan for improving interoperable and emergency communications.

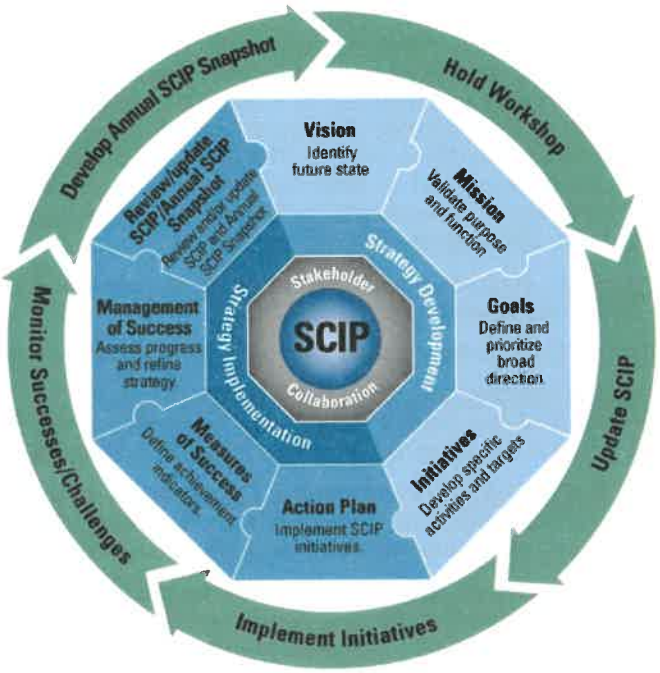

Figure 1: SCIP Strategic Plan and Implementation Components

The Colorado SCIP is based on an understanding of the current and mid-range interoperable and emergency communications environment. Colorado has taken significant steps towards enhancing interoperable and emergency communications, including implementing Inter-RF subsystem interface (ISSI) technology, hosting a Public Safety Radio Summit annually for stakeholders to collaborate and address interoperability, and increasing the Public Safety Communications Subcommittee (PSCS) membership.

However, more remains to be done to achieve Colorado's vision. It is also important to note that this work is part of a continuous cycle as Colorado will always need to adapt to evolving technologies, operational needs, and changes to key individuals (e.g., Nationwide Public Safety Broadband Network (NPSBN), the Governor, project champions). In the next three to five years, Colorado will encounter challenges relating to operability, interoperability training, network coverage issues, recommendations from the Digital Trunked Radio System (DTRS) and statewide communications assessment, implementing a strategic business plan for statewide interoperable communications, as well as other challenges.

Wireless voice and data technology is evolving rapidly and efforts are underway to determine how to leverage these new technologies to meet the needs of public safety.

For example, the enactment of the Middle Class Tax Relief and Job Creation Act of 2012 (the Act), specifically Title VI, related to Public Safety Communications, authorizes the deployment of the NPSBN. The NPSBN is intended to be a wireless, interoperable nationwide communications network that will allow members of the public safety community to securely and reliably access and share information with their counterparts in other locations and agencies. New policies and initiatives such as the NPSBN present additional changes and considerations for future planning efforts and require an informed strategic vision to properly account for these changes. Figure 2 illustrates a public safety communications evolution by describing the long-term transition toward a desired converged future.

Figure 2: Public Safety Communications Evolution

Integrating capabilities such as broadband provide an unparalleled opportunity for the future of interoperable communications in Colorado. It may result in a secure path for information-sharing initiatives, Public Safety Answering Points (PSAP), and Next Generation 911 (NG9-1-1) integration. Broadband will not replace existing Land Mobile Radio (LMR) voice systems in the foreseeable future due to implementation factors associated with planning, deployment, technology, and cost. A cautious approach to this investment is needed. Therefore, robust requirements and innovative business practices must be developed for broadband initiatives prior to any implementation.

Today, there is no defined timeline for the deployment of the NPSBN; however, Colorado, through the FirstNet Colorado (FNC) program, is actively participating in the planning of the NPSBN in the near and long term in coordination with the First Responder Network Authority (FirstNet). FirstNet is the independent authority within the National Telecommunications and Information Administration (NTIA) and is responsible for ensuring the building, deployment and operation of the NPSBN, which will be a single, nationwide, interoperable public safety broadband network. The network build-out will require continuing education and commitment at all levels of government and across public safety disciplines to document network requirements and identify existing resources and assets that could potentially be used in the build-out of the network. It will also be necessary to develop and maintain strategic partnerships with a variety of stakeholder agencies and organizations at the national, state, regional, local, and tribal levels and design effective policy and governance structures that address new and emerging interoperable and emergency communications technologies. During this process, investments in LMR will continue to be necessary and in the near term, wireless data systems or commercial broadband will complement LMR. More information on the role of these two technologies in interoperable and emergency communications is available in the Department of Homeland Security (DHS) Office of Emergency Communications (OEC) Public Safety Communications Evolution brochure.[2]

The Colorado Governor's Office of Information Technology (OIT) is the lead agency for broadband planning in the State, and oversees the FNC program. To prepare for the NPSBN, the Governor has designated a Single Point of Contact (SPOC) from OIT and OIT has three staff working on NPSBN planning: the broadband implementation

[2] OEC's Public Safety Communications Evolution brochure is available here: http://publicsafetytools.info/oec_guidance/docs/Public_Safety_Communications_Evolution_Brochure.pdf

manager, an outreach manager, and a project coordinator responsible for daily programmatic efforts around the state. To date, FNC has conducted over 300 meetings with local, tribal, state and federal agencies. The FirstNet Colorado Governing Body (FNCGB), representing members from multiple public safety organizations and levels of government, strategically guides the FirstNet State Consultation process and possible implementation of the FirstNet network or an alternative solution. It also provides oversight and direction of the State and Local Implementation Grant Program (SLIGP) activities in Colorado. The FNC program works with the SWIC and PSCS to promote communication and collaboration, related to public safety broadband planning, in Colorado.

FirstNet anticipates selecting a network partner in late 2016, and providing state plans to all 56 states and territories in 2017. Colorado's governor will have 90 days to make a decision once the state plan is presented. It is imperative that Colorado's public safety stakeholders actively follow and participate in this process.

Colorado is home to one of five Public Safety LTE Early Builder networks across the country - the Adams County Communications Center (ADCOM 911) Public Safety Long Term Evolution (LTE) Network. ADCOM 911 is operating a 19-site Band Class 14 public safety LTE data network covering 1,200 square miles with the county (and the Denver International Airport), which will eventually support over 2,000 users from 13 agencies. The ADCOM network core also hosts the state of New Mexico public safety broadband radio access network (RAN). The network is providing the following Key Learning Conditions to FirstNet: a Real World Test System, Device Testing, data from a live public safety LTE network, and core integration.

Additionally, sustainable funding in the current fiscal climate is a priority for Colorado. As State and Federal grant funding diminishes, alternative funding sources are needed to continue improving interoperable and emergency communications for voice and data systems. Key priorities for sustainable funding in Colorado are:

- Ensure that the SWIC has the resources necessary to support the PSCS while continuing to be an inter- and intra-State leader for interoperable and emergency communications.
- Ensure life cycle support for the continued operation, enhancement, and replacement of communications systems

More information on a typical emergency communications system life cycle, cost planning, and budgeting is available in OEC's System Life Cycle Planning Guide.[3]

The Interoperability Continuum, developed by SAFECOM and shown in Figure 3, serves as a framework to address all of these challenges and continue improving operable/interoperable and emergency communications. It is designed to assist emergency response agencies and policy makers with planning and implementing interoperability solutions for voice and data communications.

[3] OEC's System Life Cycle Planning Guide is available here: http://publicsafetytools.info/oec_guidance/docs/OEC_System_Life_Cycle_Planning_Guide_Final.pdf

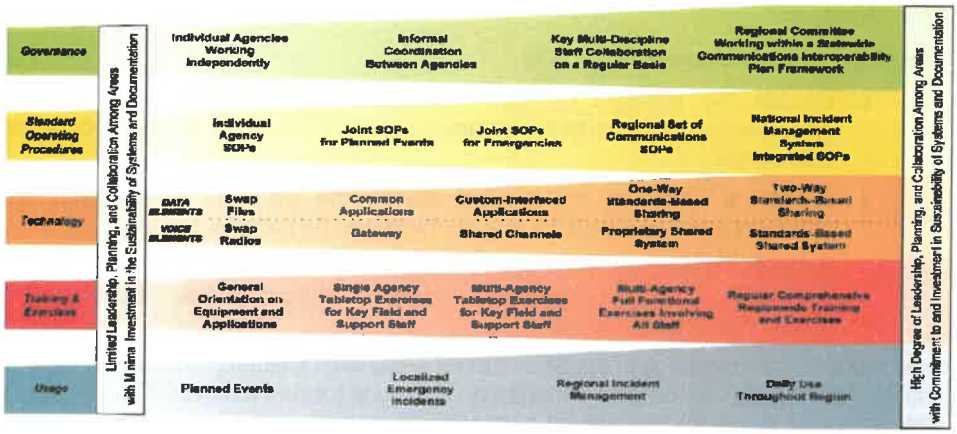

Figure 3: The Interoperability Continuum

The Continuum identifies five critical success elements that must be addressed to achieve a successful interoperable communications solution:

- Governance – Collaborative decision-making process that supports interoperability efforts to improve communication, coordination, and cooperation across disciplines and jurisdictions. Governance is the critical foundation of all of Colorado efforts to address communications interoperability.
- SOPs – Policies, replicated practices, and procedures that guide emergency responder interactions and the use of interoperable communications solutions.
- Technology – Systems and equipment that enable emergency responders to share voice and data information efficiently, reliably, and securely.
- Training and Exercises – Scenario-based practices used to enhance communications interoperability and familiarize the public safety community with equipment and procedures.
- Usage – Familiarity with interoperable communications technologies, systems, and operating procedures used by first responders to enhance interoperability.

More information on the Interoperability Continuum is available in OEC's Interoperability Continuum brochure.[4] The following sections will further describe how Colorado will enhance interoperable and emergency communications through development and implementation of the SCIP.

[4] OEC's Interoperability Continuum is available here:
http://www.safecomprogram.gov/oecguidancedocuments/continuum/Default.aspx

2. PURPOSE

The purpose of the Colorado SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, local, and tribal levels.
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.
- Promote operability and interoperability by encouraging routine use of interoperable and deployable assets, comprehensive training and communications exercises.

Development and execution of the SCIP further helps align Colorado efforts with national initiatives, including the National Emergency Communications Plan (NECP) and National Preparedness Goals for operational communications addressed in Presidential Policy Directive 8 (PPD-8).[7]

In addition to this SCIP, Colorado will develop an annual SCIP Snapshot that will be shared with OEC and other stakeholders to highlight recent accomplishments and demonstrate progress toward achieving the goals and initiatives identified in the SCIP. More information on the SCIP Snapshot is available in Section 6.4.

This SCIP is the strategic plan of the PSCS and will be the cornerstone of its annual reporting back to the Colorado legislature. The PSCS, in conjunction with the SWIC, has the authority to and is responsible for making decisions regarding this plan. The PSCS will keep the Homeland Security & All-Hazards Senior Advisory Committee (HSAC) informed of the plan and its progress. The SWIC is responsible for ensuring that this plan is implemented and maintained statewide and will coordinate with the regional communications chairs.

The Colorado SCIP is updated by engaging with key public safety agency stakeholders who have detailed knowledge and experience with interoperable communications requirements throughout the State. In 2016, the SCIP was updated after a workshop was held that brought together 30 public safety officials with knowledge of land mobile radio systems, 911 telecommunications, and broadband from local, regional, and state agencies representing law enforcement, fire services, all-hazards regions, communications partnerships, information technology, emergency management, dispatch and communications services, and the private sector.

[7] National Preparedness Goal – Mitigation and Response Mission Area Capabilities and Preliminary Targets – Operational Communications: Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.

1. Ensure the capacity to communicate with the emergency response community and the affected populations and establish interoperable voice and data communications between Federal, State, and local first responders.
2. Re-establish sufficient communications infrastructure within the affected areas to support ongoing life-sustaining activities, provide basic human needs, and transition to recovery.

3. STATE'S INTEROPERABLE AND EMERGENCY COMMUNICATIONS OVERVIEW

The Homeland Security & All-Hazards Senior Advisory Committee (HSAC), pursuant to Colorado Revised Statute 24-33.5-1614, is the governing body responsible for helping Colorado prevent, protect, mitigate, respond, and recover from those threats and hazards posing greatest risk to the State. The PSCS is a subcommittee of the HSAC that is charged with promoting interoperable communications among public safety organizations throughout the state; represent the wider HSAC on public safety communications matters; and inform the HSAC on matters pertaining to statewide public safety communications. The PSCS provides an annual report to the Joint Budget Committee (JBC) each year, which contains policy-level direction for the efficient and effective use of resources for matters relating to public safety communications and interoperability.

Public safety agencies in Colorado use a mix of very high frequency (VHF) and 800 megahertz (MHz) systems (e.g., DTRS, Denver Metropolitan Area Radio Cooperative [MARC]MARCs, and Pike's Peak Regional Communications Network [PPRCN]).). The DTRS, Colorado's statewide system, is a standards based Project 25 (P25) digital radio network that serves as the state's primary shared system. It is comprised of interconnected equipment owned and maintained by various user agencies, and is managed by the Consolidated Communications Network of Colorado, Inc. (CCNC) which is a non-profit organization comprised of participating user agencies. The CCNC is a partnership between local, county, State, federal and tribal agencies across the State of Colorado, and operates as the governing body for the DTRS. Colorado has employed P-25 Inter-RF Subsystem Interface (ISSI) technology to increase interoperability among disparate systems and is actively exploring the benefits and challenges associated with using ISSI connections.

The PSCS hosts a Radio Summit annually for public safety and support personnel that covers training, statewide updates, and other relevant topics. Colorado is also committed to pursuing communications-dedicated tasks and scenarios for multi-agency operability and interoperability exercises.

4. VISION AND MISSION

The Colorado Vision and Mission section describes improving all aspects of emergency communications statewide.

Colorado's Interoperable and Emergency Communications Vision:

Statewide, interoperable, mission critical, public safety communications.

Colorado's Interoperable and Emergency Communications Mission:

Create and maintain an environment where emergency responders and public safety agencies communicate by engaging stakeholders to support the highest level of interoperability across jurisdictions and disciplines through effective leadership, proper planning, training/exercises, and technology implementation, to achieve life safety, incident stabilization, and property.

5. STRATEGIC GOALS AND INITIATIVES

The Strategic Goals and Initiatives section describes the statewide goals and initiatives for delivering the vision for interoperable and emergency communications. The goals and initiatives are grouped into seven sections, including Governance, SOPs, Technology, Training and Exercises, Usage, Outreach and Information Sharing, and Life Cycle Funding.

5.1 Governance

Colorado embraces a regional planning approach to emergency management. Colorado is divided into nine All-Hazards Regions to foster planning, coordination, stakeholder engagement, and resource sharing throughout the State.

Interoperable communications is coordinated by the PSCS at the state level. Pursuant to Senate Bill 14-127, which amends and clarifies Colorado Revised Statute 24-33.5-1614 the PSCS promotes interoperable communications throughout the State, and advise the HSAC on matters regarding public safety and interoperable communications systems. The PSCS, which meets monthly, consists of members representing local government, State government, public safety radio systems, emergency medical services, the nine all-hazards regions, law enforcement, firefighters, and the two tribal nations within the State. The PSCS continues to add stakeholders to working groups to expand interoperability efforts and plans to identify new members.

Colorado has made tremendous progress on public safety communications governance, but challenges remain. The PSCS is dedicated to furthering contacts with regional groups and local agencies to foster a closer working relationship, formalize inter-agency

agreements and other governance documents, and providing information on how the governance of mission critical systems and processes work for all relevant stakeholders.

Table 1 outlines Colorado's goals and initiatives related to governance.

Table 1: Governance Goals and Initiatives

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
1.	Statewide collaboration and participation for interoperable communications	1.1 Identify and recruit additional PSCS members and encourage participation with all communication technology stakeholders	PSCS, SWIC	December 2018, ongoing
		1.2 Collaborate with other communications groups (e.g., NG911, FNC/FirstNet, P25)	PSCS , SWIC	December 2018, ongoing
		1.3 Work together to develop use plans, recommendations, and procedures (e.g., Memoranda of Understanding [MOU] and Inter-governmental Agreements [IGA])	PSCS, SWIC, Regional Committees, local agencies, OIT	December 2018, ongoing
2.	Regional communications committees	2.1 Identify points of contact within each all-hazards regions to establish new committees/identify existing committees	SWIC, DPS, DHS	September 2018, ongoing
		2.2 Conduct initial/annual meeting in each region with local elected officials and public safety personnel to outline vision and mission and introduce SCIP and PSCS	PSCS , SWIC	December 2018, ongoing
		2.3 Ensure the Regional Committees are including and engaging local agencies and personnel in interoperable communications efforts (e.g., usage, training, SOPS)	Regional committees, local stakeholders	December 2019, ongoing

5.2 Standard Operating Procedures (SOPs)

Colorado employs a variety of SOPs depending on the agency user and equipment. However, there are no overarching SOPs for interoperable mutual aid communications applicable to all systems. Therefore, not all users have a comprehensive understanding of the available mutual aid channels, or patching, gateways, and encryption policies for all disciplines and jurisdictions. The CCNC has established and published policies and procedures for the DTRS, but the document has not been revised since 2010. The PSCS is responsible for providing the HSAC with recommendations regarding statewide interoperable communications SOPs.

Table 2 outlines Colorado's goals and initiatives for SOPs.

Table 2: Standard Operating Procedures Goals and Initiatives

Standard Operating Procedures Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
3.	Routine use of ISSI, mutual aid channels, patching, gateways, and encryption for all disciplines and jurisdictions where appropriate	3.1 Collect documentation (e.g., tactical interoperable communications plans [TICP], SOPs, MOUs, inter-governmental agreements, best practices, lessons learned)	SWIC, regional committees, PSCS	June 2017, ongoing
		3.2 Develop and process associated documents in a standardize format	SWIC, PSCS	December 2017, ongoing
		3.3 Distribute and publish SOPs to regional communications committees and stakeholders	PSCS, SWIC, regional committees	June 2018

5.3 Technology

Colorado public safety entities continue to enhance and increase the coverage and capacity of all public safety communications systems, as well as enhance backhaul and improve interoperability among those systems (i.e., through P25 ISSI technology or other gateways).

The DTRS is Colorado's statewide radio system infrastructure made up of interconnected equipment owned by various user agencies; the network currently consists of 215 sites and five zone controllers, and is used by more than 1,000 agencies.

Colorado has multiple ISSI connections operational between multiple disparate systems including connecting DTRS to the Denver MARC and to the Front Range Communications Consortium (FRCC), FRCC to Westminster, and MARC to Aurora with future expansion of ISSI connections in discussion. The state is working with local

governments in support of DTRS network growth The state has upgraded and/or replaced transmitter equipment at 102 state owned DTRS sites, with 18 more sites planned.

With respect to interstate interoperability, the SWIC and the Office of Information Technology (OIT) are advancing interstate interoperability with neighboring Kansas and Wyoming and limited interoperability capabilities currently exist through shared talk groups with Nebraska, Utah, and New Mexico.

Table 3 outlines Colorado's goals and initiatives for technology.

Table 3: Technology Goals and Initiatives

Technology Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
4.	Effective interoperability solutions are identified and promoted	4.1 Identify system needs	PSCS, system owners	September 2017, ongoing
		4.2 Identify interoperability solutions (e.g., 700 MHz interoperability frequencies, and systems, equipment, and processes used inside and outside of Colorado)	PSCS, technology working group, system owners	September 2017, ongoing
		4.3 Obtain stakeholder buy-in	SWIC, PSCS, regional committees, system owners	September 2017, ongoing
		4.4 Acquire funding to implement interoperability solutions	PSCS, system owners	September 2017, ongoing
5.	Interstate/cross-border communications	5.1 Build cross-border relationships	SWIC, PSCS, system owners	September 2017, ongoing
		5.2 Identify technology needs/solutions	System owners, OIT	September 2017
		5.3 Identify funding for technology needs	PSCS	September 2017

Technology Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		5.4 Implement technology with SOP and training solutions	SWIC, system owners	September 2018, ongoing
6.	Prepare Colorado for implementation of emerging technologies	6.1 IdentifyIdentifyIdentifyIdentifyPlan Identifyfor implementation of known technologies (e.g., ISSI, PSBN, NG 911)	PSCS, system owners	September 2022, ongoing
7.	GOAL	7.1 Research cost/benefit of known technologies; promote appropriate recommendation through bid process	PSCS, OIT	December 2019
8.	GOAL	8.1 Stay aware of emerging technologies	PSCS	December 2020
9.	Build out of public safety system-of-systems communications networks and backhaul	9.1 Identify and address coverage gaps	OIT, local owners, PSCS	July 2017, annually thereafter
		7.1 Identify and address zone and site capacity issues	PSCS OIT, local owners,	July 2017, annually thereafter
		7.2 Identify and address end of life equipment	OIT, local owners, PSCS	September 2017, annually thereafter
		7.3 Develop a sustainment plan or document	OIT, local owners, PSCS	December 2017, ongoing

5.4 Training and Exercises

Colorado's Division of Homeland Security and Emergency Management (DHSEM) of the Department of Public Safety is responsible for coordinating and managing training classes and disaster exercises statewide. A number of online, self-paced courses are available for public safety professionals on multiple platforms (e.g., CO.Train, FirstNet Colorado), similar to FEMA's Emergency Management Institute independent study program. The PSCS will work with its regional counterparts to include in the DHSEM training calendar and promote access to the resources available.

Colorado regularly holds homeland security and emergency management exercises. However, interoperable communications is not always included as a component of those exercises. Colorado plans to find small-scale opportunities to include communications as a component into existing exercises, and work to ensure consistency across the regions. In addition, the Colorado General Assembly passed a law creating the Auxiliary Emergency Communications (AUXCOMM) Unit within DHSEM under law to ensure a uniformly trained and credentialed unit of communication volunteers are available for disaster response.

Colorado plans to establish communications training committees in each of the State's nine All-Hazards Regions. Colorado also plans to conduct yearly communications-focused exercises and improve its COML training and certification program, including active identification of shadow opportunities for personnel during real-world events.

Table 4 outlines Colorado's goals and initiatives for training and exercises.

Table 4: Training and Exercises Goals and Initiatives

Training and Exercises Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
10.	Regional communications training and exercises	8.1 Provide input to the Training and Exercise Planning Workshop (TEPW) for training and exercise opportunities	SWIC, regional committees	November 2016
		8.2 Promote participation in regional committees	SWIC, regional committees, PSCS	July 2017, ongoing
		8.3 Coordinate closely with DHSEM Field Manager to promote reactivation and coordination among regional committees	SWIC, DHSEM	July 2017, ongoing
		8.4 Identify small-scale exercise (e.g., existing exercises) opportunities within the regions	Regional committees	September 2017
		8.5 Utilize existing resources to identify training opportunities (e.g., online content, TEPW outcomes)	PSCS	December 2017
11.	Training materials, TICPs, and AARs are updated, published, and distributed	9.1 Obtain training materials, example documents, TICPs, and AARs,	SWIC, regional committees, DHSEM	March 2017, ongoing
		9.2 Revise training curriculum to include dispatch center-specific training on the use of interoperability resources	SWIC, PSCS, DHSEM, regional committees	December 2017
		9.3 Leverage State emergency management website to publish training plans, provide information on the DHSEM 3-year training calendar, and related materials (e.g., lessons learned, provide links to relevant websites)	SWIC, regional committees, DHSEM, PSCS	March 2017

Training and Exercises Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
12.	Cadre of credentialed COMLs	10.1 Conduct education and outreach to demonstrate benefits and needs of COML training/deployment	SWIC, DHSEM, regional committees, training working group	June 2017, ongoing
		10.2 Conduct COML training as needed/requested	SWIC, DHSEM, regional committees, training working group	September 2017
		10.3 Identify process of certification and maintain list of certified COMLs statewide	SWIC, DHSEM, regional committees, PSCS training working group	September 2017

5.5 Usage

Regular usage ensures the maintenance and establishment of interoperability in case of an incident. Interoperability in Colorado is promoted daily at the local, regional, tribal, and State levels through the use of the DTRS, mutual aid channels, mutual aid resources, and other fixed and deployable interoperable communications assets.

Colorado plans to continue to support the use, maintenance, and upkeep of the DTRS, as well as other public safety radio systems throughout the State, once the needs assessment is completed and a business plan is developed, as described in Section 5.3.

Table 5 outlines Colorado's goals and initiatives for usage.

Table 5: Usage Goals and Initiatives

Usage Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
13.	Deployable and interoperable communications assets	11.1 Compile and maintain list of available deployable and interoperable communications assets across the State that includes deployment requirements	SWIC, DHSEM, regional communications committees, PSCS	December 2016, ongoing

Usage Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		11.2 Add assets and document and distribute results	SWIC, DHSEM, PSCS, All-Hazard Regions	June 2017, annually thereafter
		11.3 Develop recommendations and educate equipment owners and users regarding maintenance and upkeep of deployable and interoperable communications assets	SWIC, DHSEM, regional communications committees, PSCS	December 2018
		11.4 Encourage usage of deployable and interoperable assets in daily operations, planned and unplanned events, and exercises and other training opportunities	SWIC, DHSEM, regional communications committees, PSCS	December 2018, ongoing

5.6 Outreach and Information Sharing

Colorado plans to deploy a comprehensive outreach and information sharing strategy that educates personnel from all levels of government as well as elected and key decision makers on technical information, training opportunities, and current and emerging statewide trends and initiatives. Colorado recognizes the importance of ensuring that decision makers and front line personnel understand technical requirements for interoperability and mission-critical communications as well as the long term planning required to implement various system upgrades, exercises, and other important initiatives.

Table 6 outlines Colorado's goals and initiatives for outreach and information sharing.

Table 6: Outreach and Information Sharing Goals and Initiatives

Outreach and Information Sharing Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
14.	Outreach, education and information to key stakeholders	12.1 Continue annual PS Radio Summit	PSCS outreach and education, CCNC	April 2017, annually thereafter
		12.2 Include current status of PSCS systems (e.g., NG911, PSBN, LMR) in PSCS annual report	PSCS	September 2017, annually thereafter
15.	GOAL?	12.3 Provide guidance to agencies on benefits and challenges of using encryption	PSCS, SWIC, OIT, regional communications committees	September 2017, ongoing
		12.4 Provide guidance to agencies on benefits and challenges of using ISSI	PSCS, SWIC, OIT, regional communications committees	September 2017, ongoing
		12.5 Educate agencies on available training through National Interoperability and Information Exchange (NIIX), CO.TRAIN, and other sources	PSCS, SWIC, OIT, regional communications committees	September 2017, ongoing
		12.6 Educate agencies on capabilities of available deployable communications assets, including deployment requirements (information maintained in WebEOC)	PSCS, SWIC, OIT, regional communications committees	September 2017, ongoing
		12.7 Educate elected officials on current status and importance of public safety communications systems (including NG911, NPSBN, LMR)	PSCS, SWIC, OIT, 9-1-1 Task Force, FNC, NENA/APCO, FNCGB, regional communications committees	September 2017, ongoing
		12.8 Provide guidance to agencies on benefits and challenges of using ISSI	PSCS, SWIC, OIT, regional communications committees	September 2017, ongoing

Outreach and Information Sharing Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		12.9 Provide technical guidance to agencies on purchasing new communications equipment, including total lifecycle cost of ownership	OIT, system owners/POCs, PSCS, technical working group	December 2017, ongoing
		12.10 Encourage migration to open standards (P25) LMR systems	PSCS, SWIC, OIT, regional communications committees	September 2018, ongoing
16.	Public safety broadband network	13.1 Continue with stakeholder and outreach strategy	OIT, FNC, FNCGB	December 2017, ongoing
		13.2 Participate in consultation process resulting in a State plan	OIT, FNC, FNCGB	December 2017, ongoing
		13.3 Complete alternative plan to be presented to Governor at the time of state plan presentation by FirstNet	FNCGB, OIT, PSCS, SWIC, user agencies	Fall, 2017

5.7 Life Cycle Funding

Colorado has identified $3.5 million per year for the next 10 years to replace State-owned legacy radio equipment. Another $3.7 million per year has been identified to upgrade the DTRS, beginning in 2017 and lasting through 2024. It must be noted that sustainable funding for other public safety communications assets has not been discussed or identified at the State government level.

Table 7 outlines Colorado's goals and initiatives for life cycle funding.

Table 7: Life Cycle Funding Goals and Initiatives

Life Cycle Funding Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
17.	Sustainable funding for continued operation, enhancement, and replacement for communications systems	14.1 Conduct outreach and education to public safety communications stakeholders about benefits and challenges of funding operable and interoperable communications	PSCS, SWIC, OIT, regional communications committees	May 2016, ongoing
		14.2 Explore and promote methodologies for sustainable communications funding	PSCS	January 2017
		14.3 Identify and prioritize unfunded needs of operable and interoperable communications	OIT, system owners, PSCS technical working group	December 2022

6 IMPLEMENTATION

6.1 Action Plan

Fourteen strategic goals, corresponding initiatives, and measures of success were developed through the SCIP Update process. The PSCS held a formal meeting to finalize the SCIP and incorporated any member or regional communications group chairs edits. The SWIC then submitted the updated SCIP to key stakeholders. Before the PSCS formally approved the updated SCIP the HSAC was provided with an opportunity to review and comment. Concurrently members of the PSCS socialized the plan with the members of the organizations or associations that they represent. After this dissemination, the PSCS finalized the SCIP at a formal meeting. The SCIP will be updated on a regular basis, or as needed, as determined by the PSCS. The SCIP will also serve as the corner stone of the annual report that the PSCS submits to the JBC of the Colorado Legislature.

6.2 Measures of Success

Measures of success are used to meaningfully assess the outcomes and impacts of program functions and processes in meeting strategic goals. Table 8 outlines these measures for Colorado. More information on how these measures are managed is included in Section 6.3.

Table 8: SCIP Measures of Success

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
1.	Statewide collaboration and participation for interoperable communications	Subcommittee established in law and routinely meeting, SCIP not finalized	PSCS is routinely meeting, supporting goals contained in SCIP, and actively pursuing interoperability sustainment and enhancements statewide	July 2016	PSCS /SWIC
2.	Active participation in regional communications committees	Some all-hazards regional committees exist and meet regularly	100% of all-hazards regional committees have active and engaged communications committee representing all key stakeholders; regional committee POCs are actively engaged with PSCS	July 2016	PSCS, SWIC, regional POCs
3.	Routine use of ISSI, mutual aid channels, patching, gateways, and encryption for all disciplines and jurisdictions	Some public safety users routinely misuse mutual aid channels, and lack clear understanding of SOPs for patching, gateways, and encryption	85% of public safety users correctly and routinely use MACs and have clear understanding of SOPs for patching, gateways, and encryption	December 2016	PSCS, SWIC, regional communication committees

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
4.	Effective interoperability solutions are identified and promoted.	Sporadic and inconsistent use of varied technologies between systems; lack of comprehensive understanding of existing interoperability solutions	All disparate systems are linked together and enhance interoperable communications statewide. Agencies are educated, trained, and have understanding of gateway usage.	December 2018, ongoing	SWIC, PSCS (Technology Working Group) (technology, regional communication committees)
5.	Seamless interstate/cross-border communications				
6.	Prepare Colorado for implementation of emerging technologies	Robust planning and information sharing is occurring. Initial FirstNet outreach has been accomplished in 100% of Colorado's counties and tribes.	Information sharing process has been established statewide to facilitate decision making regarding emerging technologies. PSCS has developed partnerships with other technology groups.	December 2017	OIT, PSCS, technology working groups, regional communication committees, SWIC

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
7.	Build out of public safety system-of-systems communications networks and backhaul	215 existing sites providing 95% mobile radio highway coverage. System lacks coverage in some rural areas, in some buildings, and has aging backhaul network and some zone and channel capacity issues.	Statewide interoperable communications capability available across 95% of the State	December 2019	OIT, local owners. PSCS
8.	Regional communications training and exercises	Some regional training committees exist and meet regularly	100% of training committees are active and engaged and represent all key stakeholders; regional committee POCs are actively engaged with PSCS	December 2017	SWIC, regional communication committees, DHSEM, PSCS
9.	Training materials, TICPs, and AARs are updated, published, and distributed	AARs are inconsistently submitted, reviewed, and maintained by the regions. AARs submitted to DHSEM are not evaluated for feedback. Training materials are not regularly created or updated.	Training plans are posted on State training calendar. Repository for training plans exists. SWIC collects, reviews, and provides feedback on communications components of AARs. SWIC compiles yearly report of strengths and weaknesses statewide.	December 2017	SWIC, regional communication committees, DHSEM, PSCS

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
10.	Cadre of credentialed COMLs	Some COMLs are trained, but a comprehensive list of certified COMLs does not exist.	Annual COML training is provided. Comprehensive list of certified COMLs is established and published. COML is used in all regional exercises and deployed to all major incidents as requested. Opportunities for completing COML task books is published.	December 2017, ongoing	PSCS, SWIC, DHSEM, regional communication committees
11.	Deployable and interoperable communications assets	Comprehensive list of deployable communications assets does not exist. Maintenance, upkeep, and usage of deployable assets vary statewide.	Comprehensive list of deployable communications assets exists. Deployable assets are maintained and used at regional exercises and as requested on incidents.	July 2016	SWIC, regional communication committees, PSCS

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
12.	Outreach, education and information to stakeholders	Key stakeholders lack knowledge and understanding of benefits, capabilities, and requirements for interoperable communications systems.	Key stakeholders have working knowledge and comprehensive understanding of benefits, capabilities, and requirements for interoperable communications systems. Comprehensive interoperability initiatives are adopted and supported by all emergency response agencies statewide.	October 2016	PSCS, SWIC, OIT, regional communication committees
13.	Public safety broadband network	Significant planning and initial information sharing has occurred. Initial FirstNet outreach has been accomplished in 100% of Colorado's counties and tribes.	FirstNet consultation process resulted in presentation of a State Plan to the Governor and Colorado's stakeholders.	December 2017	OIT, FNC, FNCGB

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target Measurement	Measure Completion Date	Owner or Source
14.	Sustainable funding for continued operation, enhancement, and replacement for communications systems	$3.5 million per year for the next 10 years has been identified to replace State-owned legacy radio equipment. An additional $3.7 million per year has been identified to upgrade DTRS, beginning 2017 and lasting through 2024. Sustainable funding for local communications assets has not been identified.	Sustainable funding for all capital expenditures and operational expenditures (State and local) for public safety communications systems and emerging technologies.	July 2018	PSCS, SWIC, OIT, regional communication committees

6.3 Management of Success

The PSCS and the SWIC will be the responsible parties for tracking the progress made on the SCIP goals and corresponding initiatives. The PSCS will regularly update the approved SCIP as needed to account for new and emerging trends and technologies.

6.4 Strategic Plan Review

During the annual review process, the PSCS will identify completed goals, and revise existing goals and initiatives based on the new environment. This annual review will be included in the PSCS's annual report to the legislature. As needed, the PSCS will formally convene and host a workshop to update the SCIP in the future.

7 REFERENCE MATERIALS

Table 9 includes the links to these reference materials.

Table 9: SCIP Reference Materials-

Title	Description	Source/Location
Senate Bill 14-127	Recent legislation regarding interoperable communications in Colorado	Senate Bill 14-127

APPENDIX A: MAJOR SYSTEMS

Table A-1: Major Systems, Updates, and New Systems

System Type / Coverage Area	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
Regional system	*Aurora Simulcast*	*City of Aurora*	800MHz P25 Compliant Non-P25 Motorola Choose make Digital Choose digital/analog Trunked Choose trunked/conventional Encryption used Choose encryption level *Choose Primary Usage:* Voice Motorola Astro simulcast P25 Phase 2 Number of Sites:4	*4,000*	-Regional -Local	-New System 2016
Shared statewide system	DTRS	Various	700/800MHz P25 Compliant Chose make Other Digital Trunked	72,000 subscriber units 1,000+ agencies	-Federal -State -Regional -Local -Tribal	-No change

System Type / Coverage Area	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
			Choose encryption level *Choose Primary Usage:* Voice Other: Number of Sites: 215			
Regional system	Denver Metro EDACS	City of Denver	800MHz P25 Compliant Chose make Harris Digital Trunked Choose encryption level *Choose Primary Usage:* Voice Other: Number of Sites: 16	18,500 radios 94 agencies	-Regional -Local	-No change
Regional system	Pike's Peak Regional Communications Network	PPRCN	800MHz P25 Compliant Chose make Harris Digital Trunked Choose encryption level	5,200 radios 100 agencies	-Regional -Local	-No change

System Type / Coverage Area	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
			Choose encryption level *Choose Primary Usage:* Voice Other: Number of Sites: 215			
Regional system	Denver Metro EDACS	City of Denver	800MHz P25 Compliant Chose make Harris Digital Trunked Choose encryption level *Choose Primary Usage:* Voice Other: Number of Sites: 16	18,500 radios 94 agencies	-Regional -Local	-No change
Regional system	Pike's Peak Regional Communications Network	PPRCN	800MHz P25 Compliant Chose make Harris Digital Trunked Choose encryption level	5,200 radios 100 agencies	-Regional -Local	-No change

APPENDIX B: LIST OF ACRONYMS

This section compiles a list of acronyms used throughout the document for reference.

AAR	After Action Report
AUXCOMM	Auxiliary Communications
CCNC	Consolidated Communications Network of Colorado
COML	Communications Unit Leader
DHS	U.S. Department of Homeland Security
DHSEM	Division of Homeland Security and Emergency Management
DPS	Department of Public Safety
DTRS	Digital Trunked Radio System
EMI	Emergency Management Institute
FCC	Federal Communications Commission
FirstNet	First Responder Network Authority
FNC	FirstNet Colorado
FNCGB	FirstNet Colorado Governing Body
FRCC	Front Range Communications Consortium
HSAC	Homeland Security & All-Hazards Senior Advisory Committee
IGA	Inter-governmental Agreement
IP	Internet Protocol
ISSI	Inter-RF Subsystem Interface
JBC	Joint Budget Committee
MAC	Mutual Aid Channels
MARC	MetropolitanMetro Area Radio Cooperative
MHz	Megahertz
MOU	Memorandum of Understating
LMR	Land Mobile Radio
NCSWIC	National Council of Statewide Interoperability Coordinators
NECP	National Emergency Communications Plan
NG9-1-1	Next Generation 911
NPSBN	Nationwide Public Safety Broadband Network
NTIA	National Telecommunications and Information Administration

OEC	Office of Emergency Communications
OIT	Office of Information Technology
P25	Project 25
PPD	Presidential Policy Directive
POC	Point of Contact
PPRCN	Pikes Peak Regional Communication Network
PSAP	Public Safety Answering Point
PSBN	Public Safety Broadband Network
PSCS	Public Safety Communications Subcommittee
SCIP	Statewide Communication Interoperability Plan
SIEC	Statewide Interoperability Executive Committee
SOP	Standard Operating Procedure
SPOC	State Point of Contact
SWIC	Statewide Interoperability Coordinator
TEPW	Training and Exercise Planning Workshop
TICP	Tactical Interoperable Communications Plan
UHF	Ultra High Frequency
VHF	Very High Frequency

Appendix E

Public Safety Interoperable Communications Governance Assessment

Continued on next page

U.S. Department of Homeland Security
Homeland Security

Prepared for the State of Colorado

OEC/ICTAP

Office of Emergency Communications / Interoperable Communications Technical Assistance Program

OEC/ICTAP-CO-GOVASSESS-002-R0

Colorado Governance Assessment
September 2016

The State of Colorado Public Safety Interoperable Communications Governance Assessment

For More Information about OEC / ICTAP's Technical Assistance (TA) Offerings and Tools Visit: www.publicsafetytools.info

EXECUTIVE SUMMARY

The Public Safety Communications Subcommittee (PSCS) for the State of Colorado requested assistance from the Department of Homeland Security (DHS) Office of Emergency Communications (OEC) Interoperable Communications Technical Assistance Program (ICTAP) to conduct an assessment of the current governance structure supporting statewide public safety interoperable communications.

Overview

At the request of the State of Colorado, OEC/ICTAP personnel conducted an assessment of the current governance structures supporting public safety interoperable communications statewide. The State of Colorado asked OEC/ICTAP personnel to use four methods to review specifically how well the current state governance structures are accomplishing their tasks and supporting communications stakeholders statewide:

- Personal interviews with specific volunteer individuals from the April 2016 PSCS meeting. ICTAP personnel conducted some of these interviews in-person, and some via telephone.
- Facilitated focus group discussions with attendees of the Statewide Public Safety Radio Summit in Denver, Colorado.
- An on-line survey disseminated to communications stakeholders statewide.
- Reviews of governance documents and legislation provided by the State of Colorado.

The content of this assessment is based directly on the information gathered via the survey, focus groups, and during personal interviews, as augmented by data obtained through follow-up conversations and the reviewed documents provided by the State of Colorado or available through public sources.

The suggested actions in this report should be viewed as recommendations only. In some cases, agencies may determine the benefits of implementation are insufficient to outweigh the costs. In other cases, agencies may identify alternative solutions that are more effective or efficient. Each agency should review the recommendations and determine the most appropriate action and the resources needed (i.e., time, staff, and funding) for implementation.

Key Findings

This assessment documents some of the statewide successes and challenges Colorado faces when working to improve its communications governance. With this knowledge, local, state, and federal agencies operating in Colorado can refocus their efforts on achieving a representative and actionable governance structure.

This assessment highlights several key successes associated with public safety communications governance in Colorado including:

- Legislative authority and By-laws/Charter for the Public Safety Communications Subcommittee (PSCS), in concert with the recommendations of the Emergency

Communications Governance Guide for State, Local, Tribal, and Territorial Officials.[1]

- A highly dedicated group of public safety representatives who work diligently on statewide interoperable communications issues and planning.
- A long history of interoperable communications planning within the state, leading to functional mutual aid channels across all frequencies throughout the state.
- A full-time, dedicated Statewide Interoperability Coordinator (SWIC) position recently filled.
- Balanced representation on PSCS of agencies, disciplines, and levels of government.
- Detailed and formal policies governing membership in the identified groups, allowing membership to be large enough to be representative while still being small enough to meet quorum requirements consistently.

This assessment also identifies several opportunities for improving the way that agencies and entities within the State of Colorado relate to one another to address interoperable communications. Gaps identified through this assessment are detailed in section 3.2, below. They include:

Structure

- Informal or missing communication pathways between Land Mobile Radio (LMR), 9-1-1/Next Generation 9-1-1 (NG9-1-1), and FirstNet groups.
- PSCS is buried deeply within the organizational structure of the state government, creating issues of voice and influence directed at higher level government entities.

Stakeholder outreach

- Identification of relevant stakeholders across the state is informal and may not be inclusive of all intended stakeholders.
- Perceived lack of trust between local and state agencies.

Regionalization

- PSCS does not have a regionalized structure. There is a regionalized structure for communications issues located under the umbrella of the Homeland Security & All Hazards Senior Advisory Committee, but this structure is not formally connected to the PSCS.
- Lack of inclusive representation from more rural areas of the state, likely as a result of reduced participation in some regions.

[1] Emergency Communications Governance Guide for State, Local, Tribal, and Territorial Officials published by SAFECOM, September 2015. https://www.dhs.gov/sites/default/files/publications/2015%20Governance%20Guide_Master_508c%20Final.pdf

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1 Introduction

1.1 Background

This report was prepared by the Department of Homeland Security (DHS) Office of Emergency Communications Interoperable Communications Technical Assistance Program (OEC/ICTAP) in response to a request from the Public Safety Communications Subcommittee (PSCS) for the State of Colorado to conduct an assessment of the current governance structures supporting interoperable public safety communications statewide. The State of Colorado PSCS asked OEC/ICTAP personnel to review specifically how well the current state governance structures are accomplishing their tasks and supporting communications stakeholders.

The mission of OEC is to support and promote the ability of emergency responders and government officials to continue to communicate in the event of natural disasters, acts of terrorism, or other man-made disasters, and work to ensure, accelerate, and attain interoperable and operable emergency communications nationwide. To support this mission, OEC provides tools, guidance documents, publications, and technical assistance to local, state, and tribal governments. For more information about OEC / ICTAP's technical assistance offerings and tools, visit www.publicsafetytools.info.

1.2 Methodology

To compile the information in this report, OEC/ICTAP collected data via four discrete means:

- Personal interviews with specific volunteer individuals from the April 2016 PSCS meeting. ICTAP personnel conducted some of these interviews in-person, and some via telephone.
- Facilitated focus group discussions with attendees of the Statewide Public Safety Radio Summit in Denver, Colorado.
- The Colorado Governance Assessment On-line Stakeholder Survey disseminated to communications stakeholders statewide.
- Reviews of governance documents and legislation provided by the State of Colorado.

1.2.1 Personal Interviews

The State of Colorado requested that ICTAP conduct ten personal interviews (conducted either in-person or via telephone) with highly involved volunteers in order to assess the effectiveness and relevance of the State's current interoperability governance structures. Interviewees represented local, county, and state interests.

In collaboration with the State of Colorado, OEC/ICTAP personnel formulated a series of seventeen questions to ask each interviewee. Each item was created to identify the respondent's role in interoperable communications, their involvement with governance, to measure specific aspects of the various governance groups, or to address recommendations from the Colorado Public Safety Radio System-Wide Business Plan

Report.[2] At the conclusion of each interview, each interviewee had the opportunity to add any comments that were not covered by other questions. The questions are listed in Appendix A.

1.2.2 Facilitated Focus Group Discussions

The State of Colorado requested that ICTAP conduct facilitated focus group discussions with attendees of the Statewide Public Safety Radio Summit, held in May 2016, to assess the effectiveness and relevance of the State's current interoperability governance structures. A total of 41 attendees participated in three facilitated focus group discussions, representing local, county, and state interests. Focus group participants included representatives from law enforcement, fire, communications, transportation, emergency management, and general government entities. Focus group participant agencies are identified in Appendix A.

In collaboration with the State of Colorado, OEC/ICTAP personnel formulated a series of seven questions to ask focus group discussion participants. Each item was created to identify the participants' perception of specific aspects of the various governance groups or to address recommendations from the Colorado Public Safety Radio System-Wide Business Plan Report. The questions are listed in Appendix A.

1.2.3 The Colorado Governance Assessment On-line Stakeholder Survey

OEC/ICTAP collaborated with leadership personnel in Colorado to develop and refine a list of questions included in The Colorado Governance Assessment On-line Stakeholder Survey designed to reach a large number of stakeholders throughout the state. These survey items are listed in Appendix A.

The Colorado Chair of the PSCS sent an email invitation to approximately 70 stakeholders on June 28, 2016, with instructions to forward the link to other relevant stakeholders and post the link on relevant communications websites (a snowball technique for reaching stakeholders). Respondents followed the link to The Colorado Governance Assessment On-line Stakeholder Survey. Responses were collected electronically and stored until the close of the survey, which occurred on July 15, 2016. Because the actual number of invitations was not captured, due to the snowball technique used to reach stakeholders, response rates cannot be calculated. Response statistics are listed in Table 1.

OEC/ICTAP personnel formatted the survey such that only individuals who reported at least indirect interaction with a group would be asked to respond to the engagement, knowledge, and perception items for that group. Consequently, individuals who answered demographic questions for the survey but who did not self-report affiliation or interaction with any governance entity successfully "completed" the survey without responding to any engagement, knowledge, or perception questions. 126 respondents identified themselves as having at least indirect interaction with one or more of the governance group(s) and thus were presented at least one set of engagement,

[2] The State of Colorado Public Safety Radio System-Wide Business Plan Report presented to the State of Colorado by Federal Engineering, June 2015.

knowledge, or perception questions. Those 126 surveys form the basis for the analyses beyond demographics presented in this assessment.

Table 1: Online Survey: Response Statistics

Participant description	Number	Percentage
Navigated to the survey link	199	
Provided some information in survey[3]	195	98%
At least indirect interaction with at least one group	126	65%[4]

Demographic Results

The overwhelming majority (163) of survey respondents identified themselves as members of the public safety community. The other respondents who at least started the survey represented public service entities, private enterprise, and non-governmental organizations (NGOs) (see Table 2).

Table 2: Online Survey: Respondent Professional Affiliation

Professional Affiliation	Count	Percent of Total
Public Safety	163	84%
Public Service	20	10%
Private Enterprise	7	4%
Non-governmental	5	3%

Detailed disciplines for the 133 public safety respondents appear in Table 3.

Table 3: Online Survey: Respondent Discipline (Public Safety or Public Service only)

Discipline within Public Safety or Public Service	Count	Percent of Total
Fire	53	32%
Communications	45	27%
Law Enforcement	34	20%
Emergency Management	10	6%
Government / Administration	5	3%
Emergency Medical Services	4	2%
Public Health	3	2%
Schools	3	2%
Utilities	3	2%
Search and Rescue	2	1%
Hospital	1	1%
Other*	4	2%
Grand Total[5]	**167**	

*Other entries include individuals with multiple discipline affiliations & Department of Corrections

[3] This number is considered the number of survey participants, even without complete data.

[4] Percentage of participants who indicated at least some interaction with groups are based on the number of survey participants defined above.

[5] Some participants navigated away from the survey before answering this question.

Approximately one-third of survey respondents represented the North Central region (see Table 4), which includes the Denver metropolitan area. There were responses from all nine of the Colorado All-Hazards regions.

Table 4: Online Survey: Respondent Region

Colorado All-Hazards Region	Count	Percent of Total
North Central	67	39%
Northwest	34	20%
Northeast	26	15%
South	16	9%
West	10	6%
South Central	8	5%
Southwest	6	3%
San Luis Valley	4	2%
Southeast	3	2%
Grand Total	**174**	

The respondent sample represents all surveyed jurisdictions (see Table 5).

Table 5: Online Survey: Respondent Jurisdiction

	Count	Percent
Local	68	40%
County	60	36%
State	21	12%
Regional	12	7%
Non-Governmental	5	3%
Federal	3	2%
Total	**169**	

About two-thirds (64%) of survey respondents identified themselves as administrators, with only 15% of respondents indicating their role as "first line" responders. These results suggest that the surveyed stakeholder community may underrepresent operational response personnel (see Table 6).

Table 6: Online Survey: Respondent Role

	Count	Percent
Administration	111	64%
Supervisory	28	16%
First Line	26	15%
Other	9	5%
Total	**174**	

Finally, demographic information related to respondent tenure in their position, in their organization, in Colorado public safety, and in public safety in general, is presented in

Table 7. These results indicate that most respondents are reasonably mature in their positions and have substantial experience in their fields overall.

Table 7: Online Survey: Respondent Tenure

	Average
Years in current position	11.9
Years in current organization	17.2
Years in CO public safety (All positions)	21.2
Years in public safety (All positions & locations)	23.1

1.2.4 Additional Research References

OEC/ICTAP personnel also referenced several documents describing public safety interoperable communications, communications governance, and strategic visions for communications across the State of Colorado to compile the information and recommendations contained in this report. These references include:

- The State of Colorado State Communications Interoperability Plan (SCIP)
- Colorado Senate Bill 14-127[6]
- PSCS By-Laws, July 2014
- Executive Order (EO) B 005 09[7]
- Colorado House Bill 12-1224[8]
- Emergency Communications Governance Guide for State, Local, Tribal, and Territorial Officials.[9]
- Public Safety Communications Network website[10]
- Consolidated Communications Network of Colorado website[11]
- Colorado Homeland Security & All-Hazards Senior Advisory Committee (HSAC) website[12]

Each document was compared with its companion documents for consistency and accuracy as well as any other pertinent documents relative to each group or entity. Each document was reviewed for accuracy and relevance based on the current operation of the various groups as per information obtained during the personal interviews and facilitated focus group discussions.

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[6] Signed 6/6/14, this bill establishes the PSCS and provides the purpose of the group, as well as the location within the Colorado State Government organizational structure. This bill replaced House Bill 12-1224

[7] Signed 9/16/09, this executive order established the Statewide Interoperability Executive Council within Colorado

[8] Signed 5/9/12, this bill established the Consolidated Communications System Authority (CCSA). This bill replaced EO B 005 09

[9] Published by SAFECOM in September 2015

[10] http://www.oit.state.co.us/cto/dtrs

[11] https://ccncinc.org/

[12] http://dhsem.state.co.us/division/committees/homeland-security-all-hazards-senior-advisory-committee

2 Current State of Governance

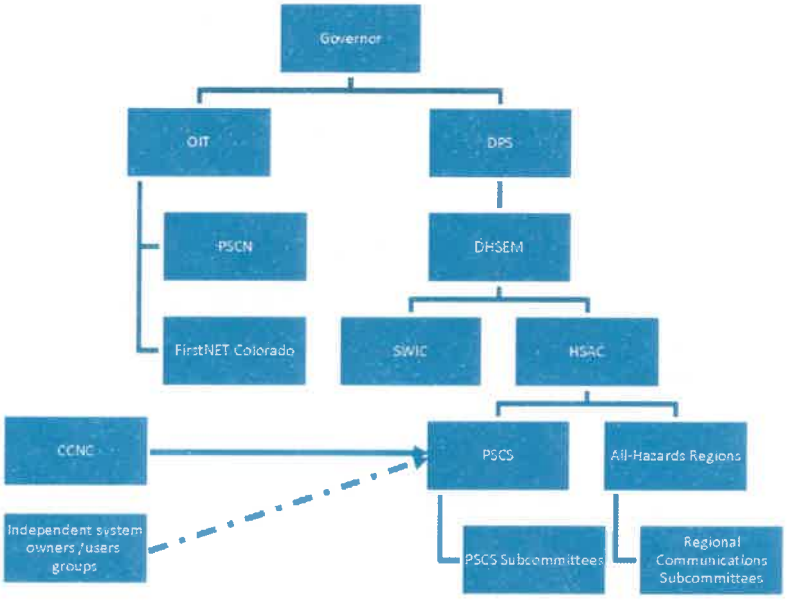

Figure 1: Current Colorado Communications Governance Structure

Per Colorado Senate Bill 14-127, the Public Safety Communications Subcommittee (PSCS) has been established as the governance group for interoperable communications in Colorado. The PSCS replaced the Consolidated Communication System Authority (CCSA) in 2014, which in turn replaced the Colorado Statewide Interoperability Executive Council (SIEC) in 2012. The Senate Bill defines the purpose of the PSCS, the required membership of the group, and the location of the group within the organizational structure of the Colorado State Government. The PSCS is a subcommittee of the Homeland Security & All-Hazards Advisory Committee (HSAC), which is housed under the Division of Homeland Security and Emergency Management (DHSEM), which is part of the Department of Public Safety (DPS).

Several other groups are also relevant for statewide interoperability governance, including the HSAC regional communications subcommittees, the Consolidated Communications Network of Colorado (CCNC), the Office of Information Technology (OIT) Public Safety Communications Network (PSCN), and many radio system owners/users' groups. While these groups are relevant to interoperable communications governance, they are tangentially so. Therefore, those groups will be described in this section. However, recommendations reference those groups will be limited to their direct interaction with the PSCS.

2.1 Public Safety Communications Subcommittee (PSCS)

The Senate Bill creating the PSCS includes a statement of purpose for the group, which is three-fold: "I) to promote interoperable communications among public safety organizations throughout the state, II) to represent the advisory committee in matters concerning public safety communications and interoperability of communication systems, III) to inform the advisory committee on the development, maintenance, upgrade, and operation of the statewide digital trunked radio system (DTRS)." Also declared by the Senate Bill is a requirement for an annual report to the Colorado Legislature's Joint Budget Committee.

Legislatively required membership in the PSCS is shown in Figure 1, below. There are 23 legislatively required members, but the legislation does allow the PSCS, in cooperation with the HSAC, to add other members as needed. Recently, seven system owners have been added as voting members to the PSCS in addition to the 23 required members. Two of the 23 legislatively required positions on the PSCS have gone unfilled, possibly due to lack of interest from the relevant entities or due to a need for outreach to those entities.

Figure 2: PSCS Legislatively Required Membership

As currently established, the PSCS by-laws do not mention any subcommittees, nor any process for standing up or dismantling subcommittees. In practice, the PSCS is

supported by the following ad hoc subcommittees, although these committees' work is standing and ongoing (see Figure 2):

- Education and Outreach Committee
- Technical Committee
- Financial Sustainment Committee

Also, the PSCS is supported by the Radio Summit Working Group, which is responsible for planning and administration for the annual Statewide Public Safety Radio Summit.

2.2 Consolidated Communication Network of Colorado (CCNC)

The CCNC is a 501(c)(3) not-for-profit organization made up of users and system owners of the Colorado Statewide Digital Trunked Radio System (DTRS). This group is responsible for managing the use and functioning of the DTRS. The State of Colorado, by statute, owns the master key to the DTRS and has allowed the CCNC leeway in approving access to the system. The CCNC has formal representation on the PSCS, with five directors (voting members) sitting on the board. Because the DTRS is a large scale system, designed to be functional statewide, interoperability with this system is relevant for virtually all radio systems across Colorado, and thus the CCNC allows agencies with interoperability interests to be non-voting members of the group. While the CCNC is an important group for Colorado communications, it is not formally part of the governance structure except for its representation on the PSCS and its agreements with other system owners for interoperability with the DTRS. The CCNC is supported by the following subcommittees:

- Training Subcommittee
- Policy and Procedure Subcommittee
- Aviation Subcommittee (inactive)
- Golf Tournament Subcommittee
- Others formed on an as-needed basis

2.3 Public Safety Communications Network (PSCN)

The PSCN is part of the State of Colorado Office of Information Technology (OIT). This office owns approximately half of the infrastructure supporting the DTRS. The PSCN manages access to the DTRS and ensures availability of the DTRS to State agencies and entities that have been permitted access to the system. The PSCN also manages the assignment and use of the state interoperability mutual aid talk groups, ensuring availability of the relevant mutual aid talk groups for events, planned and unplanned. The PSCN has historically reached out to facilitate interoperable communications between systems throughout the state and continue to facilitate interoperable communications between the DTRS and disparate systems. There is some overlap between the responsibilities that have historically belonged to the PSCN and the responsibilities taken on by the PSCS. Clarification of these responsibilities is called for to reduce duplicated efforts and assist stakeholders in understanding what is required.

The PSCN is an important entity in Colorado public safety communications, and their input is relevant for the PSCS. However, this entity is not formally part of the governance structure, as its responsibilities lie with the DTRS and connected systems. Because there are many non-DTRS radio systems within the state, it is important for there to be a system agnostic group available for system owners to collaborate, and that group is the

PSCS. Thus, recommendations about the PSCN will be limited to the PSCN's direct relationship with the PSCS.

2.4 Homeland Security & All-Hazards Senior Advisory Committee (HSAC) Regional Communication Subcommittees

The Colorado Homeland Security & All-Hazards Senior Advisory Committee (HSAC) has a nine-region structure within the state. Each All-Hazards region has a standing communications subcommittee, although said subcommittees are not all active. The original purpose of these committees, from the perspective of stakeholders, was the dissemination of grant funding across the state. As grant money has become more scarce, the regional subcommittees have become less active.

The regional communications subcommittees are currently part of the Division of Homeland Security and Emergency Management (DHSEM) structure, and leverage the HSAC regional structure. These regional subcommittees are not part of, or formally tied to, the interoperable communications governance structure.

2.5 Users' / System Owners' Groups

Within the borders of the State of Colorado are numerous radio systems. These systems, aside from the portion of the DTRS owned by the State, are independently held by various agencies and entities throughout the state. Thus, each system has its own governance or governance group. These groups include, but are not limited to:

- The Metro Area Radio Cooperative (MARC)
- Rocky Mountain Harris Users Group (RMA)
- Front Range Communications Consortium (FRCC)
- Northern Colorado Regional Communications Network (NCRCN)
- Pikes Peak Regional Communications Network (PPRCN)

In addition to these groups, many individual agencies have their own radio systems, including Arvada, Aurora, Denver, and Westminster. As previously stated, seven radio system owners were recently added to the group of voting members on the PSCS. However, other radio system owners and groups are not formally represented unless one of their representatives happens to have been appointed to the PSCS as a representative of one of the required member agencies.

3 Assessment Findings

The following sections report both successes and challenges for the overall interoperable communications governance structure statewide. Findings specific to individual groups are detailed in the following appendices:

- Appendix B - PSCS
- Appendix C - PSCN
- Appendix D - HSAC Regional Communications Subcommittees
- Appendix E - CCNC

3.1 Overall Governance Successes

OEC/ICTAP personnel documented several successes achieved within the current governance structure including:

- Legislative authority and By-laws/Charter for the Public Safety Communications Subcommittee (PSCS), in concert with the recommendations of the Emergency Communications Governance Guide for State, Local, Tribal, and Territorial Officials.[13]
- Flexible governance language allowing for rapid changes in group responsibility/ focus as the need arises.
- A highly dedicated group of public safety representatives who work diligently on statewide interoperable communications issues and planning.
- A long history of interoperable communications planning within the state, leading to functional mutual aid channels across all frequencies throughout the state.
- Active and regular meetings of the PSCS and subcommittees, as well as user groups throughout the state.
- A full-time, dedicated Statewide Interoperability Coordinator (SWIC) position recently filled.
- Annual Statewide Public Safety Radio Summit event which is well attended by stakeholders from across the state.
- Formal representation of many radio system owners/users groups throughout the state on the PSCS.
- Balanced representation on PSCS of agencies, disciplines, and levels of government.
- Detailed and formal policies governing membership in the identified groups, allowing membership to be large enough to be representative while still being small enough to meet quorum requirements consistently.

[13] Emergency Communications Governance Guide for State, Local, Tribal, and Territorial Officials published by SAFECOM, September 2015.
https://www.dhs.gov/sites/default/files/publications/2015%20Governance%20Guide_Master_508c%20Final.pdf

3.2 Overall Governance Challenges

The assessment identified several opportunities for improving the public safety communications governance structure for the State of Colorado. Noted challenges and gaps focus on revising the current governance roles within Colorado to promote a more influential process, a more formal integration of disparate regions, and more knowledge and buy-in from stakeholders. Gaps identified through this assessment are detailed below. Each gap has one or more corresponding recommendations followed by an overall recommendations summary for the State. OEC/ICTAP encourages public safety entities across the State of Colorado to review and consider each issue and its associated recommendations below with the intent of implementing desired improvements to the state's communications governance structure. The suggested actions in this report should be viewed as recommendations only. In some cases, agencies may determine the benefits of implementation are insufficient to outweigh the costs. In other cases, agencies may identify alternative solutions that are more effective or efficient. Each agency should review the recommendations and determine the most appropriate action and the resources needed (i.e., time, staff, and funding) for implementation.

Overall issues facing the communications governance process in Colorado fall into three general categories: Structure, Stakeholder Outreach, and Regionalization. Details about each category are provided below.

Structure

3.2.1 PSCS Position Within Government Organizational Structure

Description: The PSCS is buried deeply within the organizational structure of the state government (see Figure 2). The PSCS must, in most cases, communicate through a chain of command that includes at least three levels of state government in order to reach the executive level. Communicating through levels of organizational structure presents barriers to the influence and voice that this group has with higher levels of the state government and makes action more challenging for the group. The Emergency Communication Governance Guide for State, Local, Tribal, and Territorial Officials asserts that adequate authority and autonomy within the structure is most effective. Specifically, the Guide recommends that the SWIC "…be elevated within the state government, as close as possible to the Governor, to strengthen the statewide interoperability program through increased visibility and access to high-level decision makers…"[14] In the case of the State of Colorado, the SWIC position is related to the PSCS as a state employee that, in part, assists the PSCS in completing their work. The SWIC in Colorado is positioned within the DHSEM. Thus, neither the PSCS nor the SWIC occupy elevated positions within the state government.

[14] Emergency Communications Governance Guide for State, Local, Tribal, and Territorial Officials. Page 16. https://www.dhs.gov/sites/default/files/publications/2015%20Governance%20Guide_Master_508c%20Final.pdf

Recommendations:

1. **Elevate the PSCS from a subcommittee subordinate to an advisory committee to a committee in its own right, ideally directly subordinate to the Department of Public Safety (DPS).**
2. **Amend the legislation to reflect changes in the PSCS position and name.**

3.2.2 Sparse and Disconnected Structure

Description: The structure presented in Figure 2 includes the entire state government organizational structure above the PSCS. The components of the governance structure are limited to the PSCS, subcommittees to the PSCS, and formal and informal connections with disparate system owners/users' groups. Thus, there is one governance group within the state. The extent of the statewide governance structure is limited to only this group and the relationships this group has created with local and regional level system governance groups. Unfortunately, while many of the local and regional level governance groups are formally related to the PSCS, some are not. This situation has led to the perception that there is no real governance structure, but instead there are simply disconnected groups. When there is no governance structure, or when the structure is not clear, stakeholders may become confused about how to get help or information, about who is responsible for which tasks of interoperable communication, and what guidelines exist for interoperable communication throughout the state.

Recommendation:

1. Create a formal structure of interoperable communications governance, including subcommittees, working groups, and formal connections between peer groups. Figure 3 depicts a recommended structure for Colorado, based on Governance Model C from the Emergency Communications Governance Guide.

3.2.3 Communication Pathways Between PSCS, 9-1-1, and FirstNet Colorado

Description: With an eye on the future of public safety communications, it is imperative that disparate communication systems work effectively together. Land Mobile Radio (LMR), 9-1-1, and dedicated broadband for first responders (i.e., FirstNet Colorado) will be most effective if integrated in a way that allows responders and responding agencies to move seamlessly from one system to another. The structure of government as it stands today contains no formal communication pathways between these disparate communication systems. FirstNet Colorado has an informal presence at the PSCS meetings, with a representative from FirstNet Colorado providing briefings during PSCS meetings. There is no apparent presence of 9-1-1 or Next Generation 9-1-1 (NG9-1-1) in the PSCS space.

Recommendations:

1. **Determine the appropriate type, manner, and interval of information sharing across the three governance structures (LMR, 9-1-1, and FirstNet Colorado) that would benefit the overall statewide governance.**
2. **Formalize communication pathways between FirstNet Colorado, the PSCS, and 9-1-1 governance groups, inclusive of The Association of Public-Safety Communications Officials (APCO), National Emergency Number Association (NENA), the 911 Resource Center, and the Colorado Public Utilities**

2. Identify opportunities to integrate such groups and systems when appropriate, even if only through a formal communication pathway.

3.2.6 Clarity of Responsibilities

Description: PSCN, a part of the Colorado State OIT, is the owner of approximately half of the DTRS infrastructure, and the manager of the DTRS, a large-scale radio system that exists across the state. They also own the system key. Historically, the PSCN took on the responsibility of assisting agencies with interoperable communications issues, a responsibility that now belongs, legislatively, to the PSCS. This responsibility on the part of PSCN is still relevant as the DTRS is very important in the interoperable communications space across the State of Colorado. The legislation creating the PSCS uses flexible and broad language, which allows for rapid adjustment when the environment calls for it; however, flexible and broad language also leads to lack of clarity about responsibilities, and particularly the lack of clarity regarding differentiation between groups. A governance structure is most beneficial when groups avoid duplicated efforts and conflicting messages, a situation that is attributable to clearly defined responsibilities.

Recommendations:

1. Clearly define the responsibilities of each of the groups within the governance structure, as well as groups tangential to the structure. Include legal authority, roles and responsibilities, advisory authority, reporting structures (to whom does this group report), and coordination between the groups (how do they communication with one another).
2. Clarify the role of the PSCS as an advisory body, responsible for developing guidelines and assisting agencies with agreements designed to facilitate interoperable communications.
3. Specify the role of the PSCS as an information clearing house, responsible for outreach and education, training, and advising on issues relevant to interoperable communication.
4. Record and communicate the responsibilities such that all stakeholders have easy access to the information and know where the information can be obtained.
5. Create active information dissemination mechanisms that consistently reach out to stakeholders rather than relying on stakeholders to initiate information gathering.

Stakeholder Outreach

3.2.7 Stakeholder Identification

Description: As part of this governance assessment, The Colorado Governance Assessment On-line Stakeholder Survey was disseminated to stakeholders. The method was for the link to be emailed to approximately 60 individuals, and then forwarded or posted on websites by those initial recipients. Of the 195 respondents who entered at least some information into the survey, only 65% (126) reported that they had any interaction at all with any of the four groups included in the survey. This result highlights two possible issues with stakeholder outreach. One issue is a lack of engagement on the part of relevant stakeholders. That is, stakeholders who should

have some interaction with at least one of these groups may not be interacting (see section 3.2.8 for specific information about this issue). The other possibility is that the methodology used to contact stakeholders reached, at least in part, a group of people who were not the intended audience. While the snowball technique of reaching out to stakeholders has the benefit of saving time and effort, it also includes the risk of including individuals who are not stakeholders while leaving out intended recipients.

Recommendations:

1. Define all of the stakeholders of the interoperable communications governance bodies and structure across the state. Include criteria for decisions as to who is and who is not a stakeholder and specify different types/levels of stakeholders. Reach out to existing contacts to obtain input regarding definitions, specifications and criteria.
2. Develop a master list of stakeholders throughout the state. This task may be more easily accomplished by starting on a regional level and aggregating up to the state level.
3. Maintain the master list of stakeholders, ensuring that updates and amendments take place regularly. Free and easily accessible database software is likely available for this purpose.

3.2.8 Stakeholder Engagement and Awareness

Description: As previously stated, the significant percentage of survey respondents who indicated no affiliation nor interaction with any of the four groups included in the survey might be an issue of unintended recipients receiving the link to the survey. Alternatively, it may indicate that a significant proportion of the intended stakeholders are simply unengaged with interoperable communications governance. In addition to issues of engagement, there also appears to be an issue with awareness. At least some survey respondents wrote that they were not familiar enough with groups to answer questions effectively, even though these same respondents reported affiliation with the group. Additionally, personal interviews highlighted that there were different understandings among the highly engaged stakeholders about the responsibilities of the various groups. This assessment report has already covered the recommendation to clarify group responsibilities (see section 3.2.6); however, clarity is necessary but insufficient for effective group engagement. In addition to defining responsibilities, communicate those responsibilities actively, regularly, and consistently. Such communication is critical in elevating both stakeholder awareness of the governance groups and engagement in those groups.

Recommendations:

1. Draft documents to be shared with stakeholders across the state that clearly describe the responsibilities of groups within and tangential to the governance structure.
2. Actively disseminate those materials to as many appropriate stakeholders as possible, either via electronic means or in paper format, so that your stakeholders will be aware of the groups and the groups' responsibilities.
3. Consider creating training that includes specific and detailed information about governance in Colorado to be delivered to appropriate agencies. Said training

should include the role of governance, the benefits of governance cooperation, and the responsibilities of different governance groups.

4. Leverage the current HSAC regional structure for training and information dissemination to ensure that information gets to as many areas of the state as possible.
5. Leverage the full-time SWIC as the figurehead for interoperable communications across the state by capitalizing on the SWIC's position to build relationships with disparate agencies.

3.2.9 Perceived Lack of Trust

Description: Personal interviews and facilitated focus group discussions highlighted a perceived lack of trust between levels of government across the state. Individuals described historical information that influenced feelings of mistrust and has led to difficult relationship building. Trust is a vital component in governance, especially when legislative authority to enforce decisions is lacking, as it is in Colorado. Cooperation and trust are key elements when governance is based on agreements between agencies and levels of government, and so they must be built to achieve cooperation. Neither will be built quickly, and it is important that leaders maintain a patient attitude during the trust building process.

Recommendation:

1. Ensure open and transparent communication about decision-making processes and provide a voice to as many stakeholders as possible. Again, active dissemination is critical. Rather than relying on stakeholders to seek out information, ensure information is actively disseminated to stakeholders.
2. Leverage a regionalized structure (see section 3.2.10) to ensure that all regions of the state are represented in information dissemination and gathering processes.
3. Consider the possibility of having a key representative (possibly the SWIC) or outreach committee travel to different regions within the state to ensure face-to-face contact with stakeholders in less represented areas. Trust building sometimes requires in-person contact rather than electronic or telephonic contact.

Regionalization

3.2.10 Regional Structure Disconnected from PSCS

Description: The regional communications structure in Colorado is part of the HSAC and is separate from the PSCS. According to interviewees and survey takers, the impetus for the creation of the HSAC regional communication subcommittees was to administer and manage grant funding across the state. Now that grant funding has become more scarce, many of the regional communication subcommittees have become less active or inactive. The survey responses indicate that disparate regions across the state have diverse levels of activity as well. Almost three-quarters (74%) of survey respondents came from three of the nine regions (North Central, Northwest, and Northeast). While there were responses from all nine regions, this statistic clearly indicates considerable diversity in the level of engagement in different areas of the state.

These differences in participation might be associated with difficulty identifying stakeholders in the other regions, or it may be a problem with encouraging interest from those areas. Either way, a regionalized structure, specific to the PSCS would help to alleviate this challenge.

Recommendations:

1. Unplug the regional communications subcommittee structure from the position directly subordinate to the HSAC and plug it in to a position directly subordinate to the PSCS (see Figure 3). The regional communication subcommittees may maintain their current responsibilities while taking on responsibilities of outreach and education, technical guidance, and reporting to the PSCS on matters relevant for regional interoperable communications.
2. Actively recruit regional coordinators for regions that are not currently active, and engage in outreach and education designed to highlight the importance and urgency of a regional approach to interoperable communications governance.

4 Overall Governance Recommendations

Based on the history of interoperable communications governance in Colorado, as evidenced by the inputs of participants in this assessment and the documents listed in Section 1.2.4,

- Maintain a dedicated SWIC position filled with a full-time staff member. Leverage the SWIC position to build relationships with disparate agencies, regions, and groups (see sections 3.2.8 and 3.2.9).
- Formally regionalize interoperable communications governance in Colorado to ensure that stakeholders in all areas of the state are allowed to have a voice and are also kept apprised of progress and committee activity (see sections 3.2.7, 3.2.8, and 3.2.10).
- Consider consolidating the full interoperable communication governance structure (including dedicated broadband (FirstNet Colorado), LMR, and 9-1-1/NG9-1-1) under one single state agency to facilitate cooperation, communication, and collaboration between groups (see Figure 3 for a recommended structure). See sections 3.2.1, 3.2.2, and 3.2.3 for detailed discussion.
- Identify and reach out to relevant stakeholders across the state, maintaining a master list to ensure all relevant stakeholders are kept up to date (see sections 3.2.7, 3.2.8, and 3.2.9).

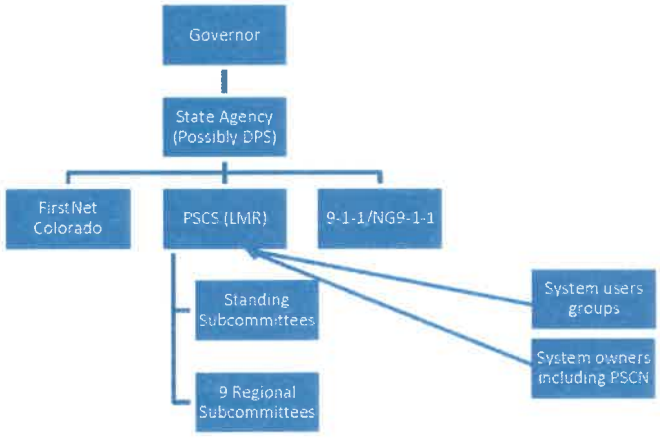

Figure 3: Recommended Governance Structure

5 Conclusion

The State of Colorado is currently positioned such that leadership fully understands and embraces the importance of interoperable communications for public safety responders statewide. OEC/ICTAP encourages the State to review this assessment for opportunities to capitalize on the strengths and accomplishments of the previous governance structure while moving forward into a new structure designed to empower statewide participation and progress. Addressing these governance issues statewide will help ensure that Colorado's governance structure will effectively support public safety operations in the coming years.

Appendix A Interview and Survey Questions

A.1 Interview Questions

In collaboration with the State of Colorado, OEC/ICTAP personnel formulated a series of seventeen questions to ask volunteer interoperability stakeholders during a series of personal interviews (either in-person or via telephone). The finalized list of questions follows:

1. What role do you play, or have you played, in interoperable communications in CO? Are you / have you been a member or leader of a group or committee?
2. How long have you been/were you involved with interoperable communications governance in CO? In another state or with the federal government?
3. In what area of the state are you located?
4. What is the structure of CO interoperable communications governance?
    - What are the different groups called?
    - What are the responsibilities of those groups?
    - Who leads those groups?
5. What area of interoperable communication governance in Colorado do you think could be held up to the rest of the country as "Best Practices?"
6. What is your perception of the effectiveness of the overall interoperable communications governance in CO as it stands today?
    - What factors do you believe contribute to the current effectiveness?
    - What would you do differently?
7. How would you describe the climate between agencies/groups/system owners (in terms of cooperation, communication, interaction, interdependence) regarding interoperable communications governance?
    - Are there any particular examples of what you describe?
    - What factors do you believe contribute to the current climate?
    - What would you do differently?
8. What is your perception of the level of involvement across the state in interoperable communications? Do you feel that the people who need to be involved are engaged and involved?
    - What factors do you believe contribute to the level of involvement?
    - What would you do differently?
9. Are you familiar with the governance recommendations set out in the Colorado System-Wide Business Plan of June 2015? (If not, read synopsis of recommendations.)
    - Which recommendations do you think will best serve the stakeholders?
    - What concerns do you have about each of these recommendations?
    - What is your overall reaction to the recommendations?

- What recommendations do you personally have that were not included in this list?

10. How frequently does the group you are involved with meet? (Repeat for each group with which the participants is involved.)
    - How effective is this frequency of meetings?
    - When was the last time the group met?
11. How well do you feel the group functions?
    - What factors do you believe contribute to the functioning of the group?
    - Do members of the group interact effectively?
    - What would you do differently?
12. What are the goals and responsibilities of the group?
    - Do you feel that the goals and responsibilities are clear?
    - Do you feel that the goals and responsibilities are unique/distinct from other groups?
    - Do you feel that the responsibilities of the group are inclusive enough?
13. How are members of this group selected?
    - Do you believe that the selection process (if any) is effective?
14. How effective is the group as a whole?
    - What factors do you believe contribute to the effectiveness of the group?
    - What would you do differently?
15. What are your thoughts about inclusiveness/involvement/representativeness in the group?
    - Are there any entities that you think should be added to the group?
16. What are your thoughts about how well the disparate groups work together / collaborate?
    - What factors do you believe contribute to this level of collaboration?
    - What would you do differently?
17. Is there anything you would like to add that I've not asked about?

A.2 Facilitated Focus Group Discussions Questions

In collaboration with the State of Colorado, OEC/ICTAP personnel formulated a series of seven questions to ask focus group participants during the Statewide Public Safety Radio Summit. The finalized list of questions follows:

Understanding of the structure (what groups are there, what do they do, how are they organized)

1. What is the structure of CO interoperable communications governance?
    - What are the different groups called?
    - What are the responsibilities of those groups?
    - Who leads those groups?

Effectiveness

2. What area of interoperable communication governance in Colorado do you think could be held up to the rest of the country as "Best Practices?"
3. What is your perception of the effectiveness of the overall statewide interoperable communications governance in as it stands today?
   - What factors do you believe contribute to the current effectiveness?
   - What would you do differently?
4. How would you describe the climate between agencies/groups/system owners (in terms of cooperation, communication, interaction, interdependence) regarding interoperable communications governance?
   - Are there any particular examples of what you describe?
   - What factors do you believe contribute to the current climate?
   - What would you do differently?
5. What is your perception of the level of involvement across the state in interoperable communications? Do you feel that the people who need to be involved are engaged and involved?
   - What factors do you believe contribute to the level of involvement?
   - What would you do differently?

Business Plan Recommendations (June 2015, Federal Engineering)

6. Going through the recommendations one at a time[15], what are your reactions to these recommendations? Will they improve the governance structure in CO?
7. What recommendations do you personally have that were not included in this list?

A.3 Facilitated Focus Group Discussion Participant Agencies

Focus group participants included 41 individuals representing diverse agencies from across the state. Focus group participants represented law enforcement, fire, communications, transportation, emergency management, and general government entities. Represented entities are listed below as identified in the facilitated focus group discussion sign-in sheets:

Local Entities

- Arapahoe County
- Arvada Police Department
- Aurora Communications
- Black Hawk
- Boulder Sheriff's Office
- City of Denver (Communications)
- Clear Creek County Sheriff
- Douglas County
- Douglas County Sheriff
- El Paso County Communications
- Evergreen Fire Communications
- Garfield County Emergency Communications

[15] Recommendations from the June, 2015 Colorado State-Wide Public Safety Radio Business Plan referenced above.

- Grand Junction Police Department
- Jefferson County Sheriff's Office
- Lakewood Police Department
- Larimer County
- PPRCN
- Pueblo County Sheriff's Office
- Sterling Communications
- Weld County Wireless System (Communications)

Regional Entities

- Foothills Fire Protection District
- Front Range Communications Consortium (FRCC)
- North Central All-Hazards Region (NCR)
- Pikes Peak Regional Communication Network (PPRCN)
- West All Hazards Region

State Entities

- Colorado Department of Transportation
- Colorado Division of Homeland Security and Emergency Management (DHSEM)
- Colorado Office of Information Technology (OIT)
- Colorado State Fire Chiefs
- Colorado State Patrol
- Regional Transportation District (RTD)

Federal Entity

- Joint Communications Task Force (JCTF)

Industry

- Cox Wireless

A.4 The Colorado Governance Assessment On-line Stakeholder Survey Questions

OEC/ICTAP collaborated with interoperable communications leadership personnel in Colorado to develop and refine a list of questions distributed to stakeholders via an on-line survey. The survey items addressed the following topics:

- Demographic information
  - Professional Affiliation
  - Discipline
  - Location/Area within state
  - Jurisdiction
  - Role (level within organizational structure)
  - Tenure
  - Perceptions of professional knowledge re: communications systems
  - Level of affiliation with governance groups

- Engagement with the group (repeated for all groups)
  - Since June 2014 how many meetings of this group have you attended (Slide bar numerical entry)
  - Do you know who your representative to this group is? (Yes/No)
  - Since June 2014, I have… (Yes/No)
    - …spoken directly with my designated representative to this group
    - …participated directly in the group (via voting, open comment period, etc.).
    - …brought issues or needs to the attention of this group.
    - …received information requests from this group.
    - …received progress updates from this group.
- Knowledge of group responsibilities
  - Respondents were asked to report whether or not a list of items represented the responsibilities of the group. Choices consisted of the stated responsibilities of the group (either from by-laws, legislation, articles of incorporation or website information) along with responsibilities that were assigned to another group.
- Perceptions of group effectiveness (on a five-point scale: 1=strongly disagree, 5=strongly agree)
  - This group is accomplishing its stated goals.
  - This group is representing my agency's best interests.
  - This group is representing the overall state's best interests.
  - The person who represents my organization's interests with this group is aware of my needs and concerns.
  - This group's efforts are transparent to all stakeholders.
  - This group meets often enough to maintain momentum and progress.
  - This group is focused on the tasks that it should be focused on.
  - The membership of this group is representative of the interested/impacted parties across the state.
  - I feel confident that this group could address and resolve an issue (within their purview) that I could bring to them.
  - This group is well structured and organized.
  - The scope of this group is too narrow.
  - This group is less productive than other groups I have experienced.
  - Participation in this group is beneficial to me/my agency.
  - Participation in this group has increased my knowledge of public safety communication issues in Colorado.
  - Participation in this group has increased my collaborations with peers in my region.
  - This group is unnecessary.
  - The work accomplished by this group is adequately accomplished by other groups, making it redundant.
  - What changes would you make to improve the group?

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- In your opinion, what is the MOST valuable aspect of the group?
- In your opinion, what is the LEAST valuable aspect of the group?
- What barriers, if any, keep the group from being more effective?
- What responsibilities do you see the group tasked with in the future?
- Please provide any additional comments that you have about the group.

Appendix B Public Safety Communications Subcommittee (PSCS) Findings

B.1 PSCS Respondent Information

Data on the PSCS comes from four sources: personal interviews with highly involved stakeholders, facilitated focus group discussions, document review, and on-line survey responses. This section details the findings from The Colorado Governance Assessment On-line Stakeholder Survey.

Of the 195 respondents who completed demographic information in the on-line survey, 56 answered the group of questions regarding the PSCS. Of those respondents:

- 8 identified themselves as a voting member of the PSCS.
- 48 identified themselves as interacting directly or indirectly with the PSCS (but not as an appointed member).

Respondents reported being affiliated with Public Safety, Public Service, and Private Enterprise organizations. Discipline information for PSCS survey respondents is provided below.

Table 8: PSCS Respondent Disciplines

Discipline	Number
Communication	24
Law enforcement	13
Fire	9
Emergency Management	5
Utilities	2
Government / Administration	1
Private Enterprise	1
Other – Not Specified	1
TOTAL	**56**

B.2 PSCS Activity and Engagement

This assessment effort highlighted the following facets of the PSCS regarding engagement and activity for the group.

For the 56 survey respondents who provided data for the PSCS, the average number of meetings attended since June of 2014 was between 7 and 8 meetings. Out of 56 respondents, 16 (29%) reported not having been to a meeting during that time frame. Removing those respondents who have not attended any meetings, the 40 remaining respondents reported having attended between 10 and 11 meetings on average during that period.

Approximately three-quarters of the respondents indicated that they knew who represented their agency's interests within the PSCS (73%), that they have spoken directly with that person since June 2014 (71%). About two-thirds have received information requests from the PSCS (70%). Approximately half have participated (44%), or seen a resolution to a public safety communication initiative because of the group

(59%). The vast majority of respondents reported having received progress reports from the group.

Table 9: PSCS Activity

PSCS	Yes	No	Percent Yes
Do you know who represents the interests of your organization on the PSCS?	41	15	73%
Since 06/2014... spoken directly with the person who represents my organization's interests.	40	16	71%
Since 06/2014... participated directly in the group.	25	31	44%
Since 06/2014... brought issues or needs to the attention of the group.	30	26	54%
Since 06/2014... received information requests from the group?	39	17	70%
Since 06/2014... received progress reports from the group?	45	11	80%
Since 06/2014... seen resolution to a public safety communication initiative due to the efforts of the PSCS.	33	23	59%

B.3 PSCS Effectiveness

This assessment effort identified the following perceptions among respondents regarding the effectiveness of the PSCS. The overwhelming response from survey respondents is positive. There are consistently more responses on the positive side of each item than on the negative side, and in some cases the difference is significant. It is important, however, to consider that there are also relatively large numbers of respondents selecting not to answer the question, which might be an issue associated with knowledge of the workings of the group or it might be an issue of engagement. Both of these possibilities are addressed in the recommendations in the main body of this assessment report (specifically, sections 3.2.6 and 3.2.8). Also, it is important to remember that there are a limited number of respondents for this group, so the opinions stated may not represent all relevant stakeholders.

Table 10: PSCS Effectiveness Perceptions

Item	Percent Agree	Percent Disagree	Percent No Opinion
The PSCS is accomplishing its stated goals.	43%	13%	44%
The PSCS is representing my agency's best interests.	43%	15%	42%
The PSCS is representing my region's best interests.	54%	16%	30%
My PSCS representative is aware of my needs and concerns.	57%	09%	34%
My PSCS representative keeps me aware of group progress.	47%	18%	35%
The efforts of the PSCS are transparent to stakeholders.	45%	18%	37%
The PSCS meets often enough to maintain momentum and progress.	55%	09%	36%
The PSCS is focused on the tasks it should be focused on.	50%	09%	41%
The membership of the PSCS is representative of impacted parties across the state.	46%	16%	38%
The PSCS could address an issue I might bring to them.	54%	14%	32%

The PSCS is well structured and organized.	44%	17%	39%
The scope of the PSCS is too narrow.	38%	07%	55%
The PSCS is less productive than other groups I've experienced.	13%	39%	48%
Participation in the PSCS is beneficial to me / my agency.	57%	16%	27%
Participation in the PSCS has increased my knowledge of public safety communications in Colorado.	50%	13%	37%
Participation in the PSCS has increased my collaboration with peers in my region.	32%	15%	53%
The PSCS is unnecessary.	09%	66%	25%
The work of the PSCS is redundant.	07%	61%	32%

B.4 PSCS Knowledge

In an attempt to capture the degree to which respondents understand the responsibilities of the PSCS, a set of survey items were created asking participants whether or not a particular responsibility is associated with the group. Some of the responsibilities were taken directly from the legislation defining the role of the PSCS, and some of the responsibilities were taken from documents of other groups. The following table shows the percentage of "Yes" responses to each of the presented responsibilities. Items marked with an asterisk (*) are responsibilities taken directly from Senate Bill 14-127.

Table 11: Stakeholder Perceptions of PSCS Responsibilities

Responsibility	Percent Yes
*...promoting interoperable communications among public safety organizations throughout the state.	96%
*... representing HSAC in matters concerning public safety communications and interoperability of communication systems.	88%
*... informing HSAC on the development, maintenance, upgrade, and operation of the DTRS.	71%
*... Presenting an annual report to the Colorado General Assembly Joint Budget Committee.	84%
*... providing policy level direction and promoting the efficient and effective use of resources for matters relating to public safety communications interoperability.	84%
*... promoting cooperation among local, tribal, state, and federal public safety agencies as well as nongovernmental organizations that are in the business of providing public safety support in addressing statewide radio interoperability needs in the state.	88%
*... assisting public safety entities in the development of projects, plans, policies, standards, priorities, guidelines, and training for radio interoperability.	79%
*... coordinating with other communications oversight groups to ensure adequate wireless spectrum to accommodate all users.	70%
*... providing recommendations to HSAC, when appropriate, concerning issues related to statewide interoperable radio communications for public safety in Colorado.	93%
... managing user connections to the DTRS.	34%

...implementing communications infrastructure statewide as part of the DTRS.	32%
...managing funding streams for update and maintenance of statewide communication networks.	46%

For each of the responsibilities that are explicitly assigned to the PSCS per Senate Bill 14-127, at least 70% of the participants correctly indicated them as responsibilities belonging the PSCS. For responsibilities that are not associated with the PSCS, fewer than 50% of respondents incorrectly indicated that they were associated responsibilities. While these figures indicate understanding on the part of survey respondents, a closer examination of the variability between responsibility statements reveals that in some instances, there is a lack of clarity. For example, fewer than two-thirds (70%) of the respondents identified "...coordinating with other communications oversight groups..." as a responsibility of the PSCS. Also, almost half of the respondents (46%) incorrectly identified "...managing funding streams for update and maintenance of statewide communication networks" as a responsibility of the PSCS. These findings highlight the need for stakeholder outreach and education recommended in section 3.2.8 of this report.

B.5 Open Ended Question Responses

The on-line survey provided respondents with an opportunity to answer open-ended questions regarding the PSCS[16]. Following is a list of the open-ended questions and the responses provided by survey respondents. Each bullet within a question represents a different respondent, thus repeated comments within the same section are comments made by different people.

What changes would you make to improve the PSCS?

- More effort to realize current gaps in interoperability, and work to bridge those gaps
- Represent all radio systems, not just the DTRS.
- Broader representation. Currently LE and Fire represent their local agency but not a voice to the broader regional LE and Fire representation.
- Push out information - make others aware of its existence and what it is for.
- I would say abolish this group as they are completely ineffective. They have not provided one benefit to communications.
- Add responsibility as well as enforcement.
- Have voting representation from each All Hazards Region.
- Survey questions represent the problem. There is too much focus on the Statewide DTRS. While representation on the PSCS includes other systems, there is too much focus on the DTRS. Let the state take care of their system.
- Sorry, but you all need to work with ALL fire services in Colorado including the Colorado State Fire Fighters Association, PFFA, and Colorado Division of Fire Prevention and control. 80% of the fire service in the NATION is made of VOLUNTEERS and our input is valuable.
- Get everyone involved not just large agencies.

[16] Open-ended survey responses were edited for typographical errors, grammatical errors impacting clarity, and personally identifiable information. Any comments directed at or about single individuals were provided separately to the assessment POC. Non-substantive comments (e.g., "I have no comment") were removed and comments specifically about the survey were removed and retained as feedback for OEC/ICTAP personnel.

- Ability to open access via online showing project, goal, time line, and lead person.
- More VHF and small agency involvement.
- Remove legislatively required positions that offer no value. Otherwise this group does a great job of finding ways to move forward and make progress.
- Elevate organizationally.
- Many states have elevated Communications interoperability committees to a cabinet level within their political structure. In Colorado the PSCS is a subcommittee of the HSAC making many of the functions and issues they deal with dependent upon the Director of Homeland Security, Office of Emergency Management. Communications and interoperable communications is not just about emergencies it is about day to day needs also. The PSCS should be made a separate committee under the Executive Director of Public Safety, a cabinet member.
- More active participation from HSAC.
- Give it a direct connection to a cabinet level member and change its authority to a more action role rather than a recommendation role.

In your opinion, what is the MOST valuable aspect of the PSCS?

- The direct link to the Joint Budget Committee as a foothold for educating legislature and to work on sustained funding.
- State-wide effort to keep Colorado the most open and interoperable state it can be.
- Coordination and education between disparate agencies.
- PSCS has been great at including all radio users not just statewide DTR users but VHF and other 800 users.
- Collaboration.
- Ability to obtain funding.
- Learning what goes on state wide.
- The PSCS helps bring the several different system owners/users together to work out interoperability with each other. Helps educate people.
- Provide information to PSAPs and to State level.
- Assisting the SWIC in updating and maintaining the interoperability plan and working with legislators to obtain funding for upgrade and maintenance of the DTRS.
- It is now all inclusive regardless of the particular radio system(s) you use and has the most balanced representation and participation of all of the communications groups for bringing disparate systems together to achieve interoperability.
- Collaborative nature.
- The ability to plan, develop and implement a system that is truly interoperable. Making all players aware of how best to work together and of course the collective management of the system.
- The Directors and guests have learned over time that they can bring their issues to the Sub-committee without concern of ridicule or being ignored.
- Getting the right people in the same room.
- Bringing the oversight personnel of disparate radio systems together in a way that they feel comfortable to discuss differences.

In your opinion, what is the LEAST valuable aspect of the PSCS?

- Lack of a strong, influential champion at the upper level of government.
- Assessing the needs of any individual system. Including the DTRS. System needs are the issues of their owners, not the PSCS.
- PSCS leadership.
- Negative impact to schedule to support meetings.
- Some of the director positions wasted on the unions or other groups who have no interest and no participation. I know these were forced on the group originally and not desired to begin with.
- Lack of motivating factor (i.e., if PSCS helped manage grants, they would have power through its motivating factor).
- The missing representatives for legislatively created positions representing one of the recognized Tribes in Colorado, Professional Public Safety Union, and non-legislatively created positions representing large to small disparate systems throughout Colorado. This is the type of group that needs a larger membership to insure buy in throughout the state. Consensus can be obtained from a well-orchestrated committee if they work in smaller working groups and present to the larger group the concept for consensus.
- Holding onto "old" issues. Having to juggle too many divergent systems built on the same platform.
- All volunteer limited time to tackle the needed areas.

What barriers, if any, keep the PSCS from being more effective?

- Being a subcommittee of the HSAC, that really do not understand public safety communications.
- Encryption, and how agencies choose to use it. Individual agencies not having a system (or radios) that can interoperate with other agencies.
- Politics.
- Not sure your material and voice are reaching the entire spectrum.
- Political and self-serving interest.
- Participation of all radio users.
- Improve ties to Governor's Office and LE and FD agency's in state. Leverage technology such as web tools to make meetings and activities more accessible.
- PSCS does not have all the duties the SIEC had when it existed. It is not the exact replacement for the SIEC.
- Break the barrier of PROFESSIONAL firefighters and VOLUNTEER firefighters. Fire will kill either of us and we need to work together to make gains at the government level. We are only hurting ourselves.
- Lack of participation by smaller agencies.
- Limited funding and limited participation.
- More direct voice. The message gets delivered to the JBC and the SAHAC but does that message reach all of the legislators or the governor? Participation from agencies outside of the front range is a barrier for all communications committees I know of and participate in that have a statewide objective.
- Paradox of home rule - PSCS members want leadership from State but simultaneously refuse to accept it due to home rule.
- The legislative act creating the PSCS did not use strong verbs in areas where they would have given the PSCS the ability to create Standard Operating

Procedures and Policies that would be complied with. The group is an advisory group while that is adequate in some cases there are instances where someone has to write the "Law".

- Lack of total cooperation from different parties whose lack of trust of State OIT continues to show. You can keep your individuality but still remain part of the big picture. No interoperability needed.
- limited funding, no full time employee directed by the subcommittee.

What responsibilities do you see the PSCS tasked with in the future?

- Overall management of the DTRS with some funding and political clout to sustain the system along with providing policy guidance and interoperability assistance to various systems.
- Once gaps are recognized, the PSCS should help regions of the state by guiding them toward solutions (as necessary).
- Coordinating the interoperability between systems.
- Oversight of LMR and LTE assets in a Neutral cohesive manner.
- Promoting, supporting, working with All Hazards Region Communications Committees. The PSCS could be the high level promoter and coordinator of inter-operable communications training and exercises in Colorado.
- How can all agencies communicate across different platforms and what the State can do to assist?
- If a statewide funding mechanism (tax, fee, etc.) is ever created to fund or assist in funding public safety communications networks across the state, this group could be a good place to look for managing those funds and deciding the priorities and needs to be funded for the numerous systems in use.
- Planning and management of grants/funding.
- Solving encryption interoperability, solving LTE to LMR interoperability through ISSI, solving regional interoperability with bordering states.
- Better use / implementation of interoperability. How to blend LTE and LMR into a cohesive emergency response platform.
- More closely related to improving broadband data and an interface to LMR, resolving what others have not been able to in reference to Next Generation 9-1-1.

Please provide any additional comments that you have about the PSCS.

- Bob Ricketts has done a terrific job so far leading this group. He is organized, inclusive, and open.
- Appointment by the Governor of representatives from each All Hazard Region to the SIEC provided a committee with effective statewide representation. The PSCS does not have that type of representation. Having representatives that represent statewide groups provides less effective representation than having representatives from each and every All Hazards Region. For example, there is no communication from fire departments/districts across the state to one or two representatives on the PSCS. Fire Departments are more likely to communicate with their All Hazards Regional Committee through Emergency Managers.
- The division between DTRS and non-DTRS needs to erode and decisions need to be made based on views of regional needs.

- The group has immense talent and the desire to "Do the Right Thing." They have a core group that will make it happen no matter what they have to overcome with just a dash of support.

Appendix C PSCN Findings

C.1 PSCN Respondent Information

Data on the PSCN comes from two sources: personal interviews with highly involved stakeholders and on-line survey responses. This section details the findings from The Colorado Governance Assessment On-line Stakeholder Survey.

It is important to point out that the PSCN does not hold public meetings, and is not a user's group with representatives, and therefore many of the survey items are not meaningful or relevant to the PSCN. The data is reported here only because it was collected and in the interest of transparency with regard to the survey findings. Tables in this section only include those items which are relevant to the PSCN.

Of the 195 respondents who completed demographic information in the on-line survey, 47 answered the group of questions regarding the PSCN. Of those respondents:

- 8 identified themselves as a voting member of the PSCN.
- 39 identified themselves as interacting directly or indirectly with the PSCN (but not as an appointed member).

Respondents reported being affiliated with Public Safety, Public Service, and Private Enterprise organizations. Discipline information for PSCN survey respondents is provided below.

Table 12: PSCN Respondent Disciplines

Discipline	Number
Communication	21
Law Enforcemnt	9
Fire	8
Government / Administration	3
Emergency Management	2
Utilities	1
Private Enterprise	1
Other[17]	2
TOTAL	**47**

C.2 PSCN Activity and Engagement

This assessment effort highlighted the following facets of the PSCN regarding engagement and activity. The PSCN is not a user's group, and thus the items regarding activity and engagement were judged as irrelevant to the organization. Survey responses are described below in text format only.

For the 47 survey respondents who provided data for the PSCN, the average number of meetings attended since June of 2014 was between 4 and 5 meetings. Out of 47

[17] Other Disciplines reported being involved with all or multiple of the listed disciplines.

respondents, 19 (40%) reported not having been to a meeting during that time frame. Removing those respondents who have not attended any meetings, the 28 remaining respondents reported having attended between 8 and 9 meetings on average during that time.

Approximately half of the respondents indicated that they knew who represented their agency's interests within the PSCN (49%) and that they have spoken directly with that person since June 2014 (47%). About half of respondents reported that they had received information requests (55%), received progress reports (49%), and seen a resolution to a public safety communication initiative due to the efforts of the PSCN (49%) since June of 2016. Approximately one-third of respondents reported having participated directly in the PSCN (26%) or having brought issues or needs to the attention of the PSCN (38%) in that same time frame. One concern with these reports is that respondents who have some interaction with the PSCN may not attend meetings or have a representative with the PSCN because the PSCN is focused on the DTRS. These statistics may not accurately reflect the activity of the PSCN for that reason and should be interpreted with caution.

C.3 PSCN Effectiveness

This assessment effort identified the following perceptions among respondents regarding the effectiveness of the PSCN. Positive responses outweighed negative responses in all areas. The large percentage of "No Opinion" responses may be due to an issue with question relevance to the PSCN and does not necessarily reflect a lack of engagement from relevant stakeholders. PSCN leadership is encouraged to evaluate these findings for information that may assist them in their goal setting. Items that ICTAP personnel judged to be irrelevant, based on a clarified understanding of the type of organization that the PSCN is, were removed from Table 14.

Table 13: PSCN Effectiveness Perceptions

Item	Percent Agree	Percent Disagree	Percent No Opinion
The PSCN is accomplishing its stated goals.	44%	4%	52%
The PSCN is representing my agency's best interests.	41%	9%	50%
The PSCN is representing my region's best interests.	48%	11%	41%
The PSCN is focused on the tasks it should be focused on.	44%	4%	52%

C.4 PSCN Knowledge

In an attempt to capture the degree to which respondents understand the responsibilities of the PSCN, a set of survey items were created asking participants whether or not a particular responsibility is associated with the group. Some of the responsibilities were taken directly from the PSCN web page[18], and some of the responsibilities were taken from documents of other groups. The following table shows the percentage of "Yes"

[18] http://www.oit.state.co.us/cto/dtrs

responses to each of the presented responsibilities. Items marked with an asterisk (*) are responsibilities that ICTAP personnel identified as belonging to the PSCN.

Table 14: Stakeholder Perceptions of PSCN Responsibilities

Responsibility	Percent Yes
...informing HSAC on the development, maintenance, upgrade, and operation of the DTRS.	81%
...assisting public safety entities in the development of projects, plans, policies, standards, priorities, guidelines, and training for radio interoperability.	74%
*...managing user connections to the DTRS.	66%
*...implementing communications infrastructure statewide as part of the DTRS.	72%
...managing funding streams for update and maintenance of statewide communication networks.	77%

Respondents correctly identified the two responsibilities that clearly belong to the PSCN about two-thirds of the time (66% and 72%). Unfortunately, the majority of respondents also incorrectly attributed the three non-PSCN responsibilities to the PSCN. The reason for this misidentification may be that the responsibilities of the PSCN overlap with those of the PSCS and other groups, or it may be that stakeholders do not clearly understand the division of responsibilities between the groups. Recommendations in the main body of this report address both issues about the PSCS and those recommendations should also be considered for the PSCN in an attempt to clarify the governance structure and group responsibilities for their stakeholders.

C.5 Open Ended Question Responses

The on-line survey provided respondents with an opportunity to answer open-ended questions regarding the PSCN[19]. Following is a list of the open-ended questions and the responses provided by survey respondents. Each bullet within a question represents a different respondent, thus repeated comments within the same section are observations made by different people.

What changes would you make to improve the PSCN?

- Instead of having it under the Governor's Office of Information Technology, it should a stand-alone department/division. If it needs to be within current department of State government, then it should be under Public Safety.
- More appropriate facilities. Most seem like an afterthought, shoving people into spare sheds or basements.
- Provide more money, training and personnel.
- Come to our regional communication meetings.
- Remove them from OIT and either make them their own division or in a division that does not oppress their message and efforts due to competing projects for the same funds. Give them a voice that is heard without interference! It is

[19] Open-ended survey responses were edited for typographical errors, grammatical errors impacting clarity, and personally identifiable information. Any comments directed at or about single individuals were provided separately to the assessment POC. Non-substantive comments (e.g. "I have no comment") were removed and comments specifically about the survey were removed and retained as feedback for OEC/ICTAP personnel.

ridiculous that the JBC was expecting an item from them not too long ago so it could be funded and the management above them in IT never submitted the project for consideration requiring and advisor for the JBC to call members of the PSCN directly to get it. Give them a voice, fund them properly, and quite letting others mess with their projects.

- Elevate it organizationally and move it from OIT - its duties and goals are not understood by OIT management.
- Take away the ownership of the System ID as they are not the user base they are the maintainers of the DTRS system.

In your opinion, what is the MOST valuable aspect of the PSCN?

- They maintain the State's portion of the DTRS infrastructure.
- Administration, management, and maintenance of the statewide DTR system.
- Knowledge of systems and rapid response to issues.
- Making contacts, getting information.
- The implementation of infrastructure to enhance interoperable communications.
- The technical expertise and daily management of the DTRS. A close second is the long range planning for sustainability as the "boots on the ground" experts of what the predictable needs will be.
- The PSCN is entirely responsible for the sustainment and maintenance of State owned DTRS, VHF and other state communications assets.
- The dedication of its staff - they do amazing things with so little resources.

In your opinion, what is the LEAST valuable aspect of the PSCN?

- They want to be the full controlling entity.
- Lack of more field offices and personnel.
- Does not engage in our region.
- They need to communicate to DTRS users and to other organizations better - PSCN always has the best of intentions (ALWAYS) but they don't communicate their plans well so they are often viewed with suspicion.
- They don't play well in the sand box and are not a good partner more often than not.
- They consistently do not communicate their intentions with partner agencies.

What barriers, if any, keep the PSCN from being more effective?

- Being in OIT.
- Politics and resources.
- Provide more money, training and personnel.
- Distance to Denver.
- The layers of bureaucracy they are buried under and outright obstructions created by OIT people they report to / through. Yes, it seems slightly better after the years of enormous efforts by members of PSCN and "grassroots" efforts by several local government agencies / infrastructure partners with their legislators to make sure they were finally heard and the extremely critical needs finally addressed through legislation so OIT couldn't be an obstruction.
- Funding.
- PSCN should take direction from SWIC who takes direction from PSCS/SCIP, but only on issues related to DTRS and other state-funded networks
- They own the System ID for the DTRS.

What responsibilities do you see the PSCN tasked with in the future?

- Continued sustainment of existing and future infrastructure for the State.
- At a high level, promote, coordinate, report interoperable communications training and exercises at the regional and state level.
- Same responsibilities as today. "Care and feeding" of the DTRS and interoperable solutions with other radio networks.

Please provide any additional comments that you have about the PSCN.

- Come to our regional meetings.
- We own and manage our own communications network, which works well for us. We bridge the gap of interoperability with the DTRS system with dual band radios and patched channels. I have little or no knowledge of PSCN, and I'm not really in a position to comment about them.
- I would like to know when and where the PSCN meets. I would like to attend a meeting to see if this is a group I should have more involvement with as I have limited knowledge of what they do.

Appendix D HSAC Regional Communications Subcommittee Findings

D.1 HSAC Regional Communications Subcommittee Respondent Information

Data on the HSAC Regional Communications Subcommittees comes from four sources: personal interviews with highly involved stakeholders, facilitated focus group discussions, and on-line survey responses. This section details the findings from The Colorado Governance Assessment On-line Stakeholder Survey.

Of the 195 respondents who completed demographic information in the on-line survey, 47 answered the group of questions regarding the HSAC Regional Communications Subcommittees. Of those respondents:

- 11 identified themselves as a voting member of the HSAC Regional Communications Subcommittees.
- 36 identified themselves as interacting directly or indirectly with the HSAC Regional Communications Subcommittees (but not as an appointed member).

Respondents reported being affiliated with Public Safety and Public Service organizations. Discipline information for HSAC Regional Communications Subcommittees survey respondents is provided below.

Table 15: PSCS Respondent Disciplines

Discipline	Number
Communication	20
Law enforcement	10
Fire	9
Emergency Management	2
Emergency Medical Services	2
Utilities	1
Government / Administration	1
Public Health	1
Other[20]	1
TOTAL	**47**

D.2 HSAC Regional Communications Subcommittee Activity and Engagement

This assessment effort highlighted the following facets of the HSAC Regional Communications Subcommittees regarding engagement and activity.

There was at least one respondent from each region who completed questions regarding the HSAC Regional Communications Subcommittees. However, just as with the overall demographics of survey respondents, the HSAC Regional Communications

[20] Other Disciplines reported being involved with all or multiple of the listed disciplines.

Subcommittee section of the survey had an over-representation of respondents from only some regions and an underrepresentation of respondents from other regions. In fact, for items specifically asking about the Regional Communications Subcommittees, only the North Central region had more than 10 respondents. This distribution indicates a severe lack of participation in the survey from disparate counties across the state. The reason for this lack of participation may be a lack of interest on the part of the regional stakeholders, or it may be an issue with outreach. Recommendations in the body of this report (specifically sections 3.2.7, 3.2.8, and 3.2.10) address both of these matters.

Table 16: Regional Participation in Regional Communications Subcommittee Section of the Survey

Colorado All-Hazards Region	Respondents	Respondents reporting more than 5 meetings since June 2014
North Central	23	5
Northwest	7	1
Northeast	6	1
South	2	1
West	2	0
South Central	1	1
Southwest	3	2
San Luis Valley	2	1
Southeast	1	0
Grand Total	**47**	

For the 47 survey respondents who provided data for the HSAC Regional Communications Subcommittees, the average number of meetings attended since June of 2014 was between 3 and 4 meetings. Out of 47 respondents, 22 (47%) reported not having been to a meeting during that time frame. Removing those respondents who have not attended any meetings, the 25 remaining respondents reported having attended between 6 and 7 meetings on average during that period.

Approximately half of the respondents indicated that they knew who represented their agency's interests within the HSAC Regional Communication Subcommittee (57%) and that they have spoken directly with that person since June 2014 (51%). About half of respondents reported that they had received information requests (47%) and received progress reports (51%). Approximately one-third of respondents reported having participated directly in the HSAC Regional Communications Subcommittee in their region (28%), having brought issues or needs to the attention of their Subcommittee (34%), or having seen a resolution to a public safety communication initiative due to the efforts of the Subcommittee (30%) since June 2014. Personal interviews highlighted a lack of engagement with many of the Regional Communications Subcommittees. Although these statistics are relatively low, they are likely not representative of the more inactive areas as a result of the lack of survey responses from 6 of the 9 regions across the state. Thus, the real activity of the Regional Communications Subcommittees is likely much less than is represented here.

Table 17: HSAC Reginal Communications Subcommittee Activity

HSAC Regional Communications Subcommittees	Yes	No	Percent Yes
Do you know who represents the interests of your organization on the HSAC Regional Communications Subcommittees	27	20	57%
Since 06/2014... spoken directly with the person who represents my organization's interests.	24	23	51%
Since 06/2014... participated directly in the group.	13	34	28%
Since 06/2014... brought issues or needs to the attention of the group.	16	31	34%
Since 06/2014... received information requests from the group?	22	25	47%
Since 06/2014... received progress reports from the group?	24	23	51%
Since 06/2014... seen resolution to a public safety communication initiative due to the efforts of the HSAC Regional Communications Subcommittees.	14	33	30%

D.3 HSAC Regional Communications Subcommittee Effectiveness

This assessment effort identified the following perceptions among respondents regarding the effectiveness of the HSAC Regional Communications Subcommittees. The percentage of respondents endorsing positive statements is higher than the percentage endorsing negative statements, however, for many statements, well over half of the respondents provided no opinion. Personal interviews and focus group discussions highlighted the lack of activity in many of the All Hazards Regions. The demographic information for respondents to this survey highlights this issue as well, as there were only three of the nine regions well represented by survey respondents.

Table 18: Regional Communications Subcommittee Effectiveness Perceptions

Item	Percent Agree	Percent Disagree	Percent No Opinion
The HSAC Regional Communications Subcommittee is accomplishing its stated goals.	23%	12%	64%
The HSAC Regional Communications Subcommittee is representing my agency's best interests.	34%	17%	49%
The HSAC Regional Communications Subcommittee is representing my region's best interests.	40%	13%	47%
My HSAC Regional Communications Subcommittee representative is aware of my needs and concerns.	40%	15%	45%
My HSAC Regional Communications Subcommittee representative keeps me aware of group progress.	38%	13%	49%
The efforts of the HSAC Regional Communications Subcommittee are transparent to stakeholders.	30%	10%	60%
The HSAC Regional Communications Subcommittee meets often enough to maintain momentum and progress.	21%	11%	68%
The HSAC Regional Communications Subcommittee is focused on the tasks it should be focused on.	30%	10%	60%
The membership of the HSAC Regional Communications Subcommittee is representative of impacted parties across the state.	26%	19%	55%

The HSAC Regional Communications Subcommittee could address an issue I might bring to them.	32%	13%	55%
The HSAC Regional Communications Subcommittee is well structured and organized.	21%	9%	70%
The scope of the HSAC Regional Communications Subcommittee is too narrow.	4%	21%	75%
The HSAC Regional Communications Subcommittee is less productive than other groups I've experienced.	6%	26%	68%
Participation in the HSAC Regional Communications Subcommittee is beneficial to me / my agency.	42%	11%	47%
Participation in the HSAC Regional Communications Subcommittee has increased my knowledge of public safety communications in Colorado.	53%	15%	32%
Participation in the HSAC Regional Communications Subcommittee has increased my collaboration with peers in my region.	32%	13%	55%
The HSAC Regional Communications Subcommittee is unnecessary.	4%	47%	49%
The work of the HSAC Regional Communications Subcommittee is redundant.	2%	48%	51%

D.4 HSAC Regional Communications Subcommittee Knowledge

In an attempt to capture the degree to which respondents understand the responsibilities of the HSAC Regional Communications Subcommittees, a set of survey items were created asking participants whether or not a particular responsibility is associated with the group. Some of the responsibilities were taken directly from the HSAC web page[21], and some of the responsibilities were taken from documents of other groups. The following table shows the percentage of "Yes" responses to each of the presented responsibilities. Items marked with an asterisk (*) are responsibilities that ICTAP personnel identified as belonging to the HSAC Regional Communications Subcommittees.

Table 19: Stakeholder Perceptions of PSCS Responsibilities

Responsibility	Percent Yes
...informing HSAC on the development, maintenance, upgrade, and operation of the DTRS.	49%
...assisting public safety entities in the development of projects, plans, policies, standards, priorities, guidelines, and training for radio interoperability.	68%
...managing user connections to the DTRS.	28%
...implementing communications infrastructure statewide as part of the DTRS.	23%
...managing funding streams for update and maintenance of statewide communication networks.	45%
*... reviewing grant funding applications.	68%

[21] http://dhsem.state.co.us/division/committees/homeland-security-all-hazards-senior-advisory-committee

Overall, respondents did not appear to be sure of the responsibilities of the HSAC Regional Communications Subcommittees. Also, the document review failed to uncover clear and consistent information regarding common responsibilities across regions. Recommendations in the main body of this report (specifically sections 3.2.6 and 3.2.10) address this issue.

D.5 Open Ended Question Responses

The on-line survey provided respondents with an opportunity to answer open-ended questions regarding the HSAC Regional Communications Subcommittee [22]. Following is a list of the open-ended questions and the responses provided by survey respondents. Each bullet within a question represents a different respondent, thus repeated comments within the same section are comments made by different people.

What changes would you make to improve the HSAC Regional Communications Subcommittee?

- The Communications Sub-committee was formed to get grant funds. In my Region the reduction in grant funding has caused a lack of interest in spending time to drive to attend meetings with no fiscal benefit. Have DSHEM provide motivation for Regions to support a strong Communications Sub-committee. Have CSP management direct CSP Communications Center Managers to be active Sub-committee members. Other State agencies such as CDOT could also have managers participate. Colorado Health care agencies receive grant funding that requires participation in communication exercises. A DHSOEM representative from the field management section ought to be on the PSCS. The food chain for the Communications Sub-committee passes though the DHSOEM Field Managers.
- Outreach.
- The North Central region functions very well and has a high level of participation.
- I don't even know who our representative is...so that is the first change.
- With no money in the pot there is no participation.
- gain more participation from more agencies.

In your opinion, what is the MOST valuable aspect of the HSAC Regional Communications Subcommittee?

- The fact that they have brought together representatives from the region from disparate systems to work together for the good of the region. The NCR Comms should be the boiler plate for other regions on how to work together.
- Ability to achieve regional interoperability goals and practices.
- Subject matter experts are always available to answer questions, interested in information from agencies they don't necessarily work with on a daily basis.
- Coordination, sharing of technical expertise.

In your opinion, what is the LEAST valuable aspect of the HSAC Regional Communications Subcommittee?

[22] Open-ended survey responses were edited for typographical errors, grammatical errors impacting clarity, and personally identifiable information. Any comments directed at or about single individuals were provided separately to the assessment POC. Non-substantive comments (e.g. "I have no comment") were removed and comments specifically about the survey were removed and retained as feedback for OEC/ICTAP personnel.

- PSAP's do not participate.
- With no money in the pot except to pay for a FTE to be the coordinator for the region the OEM managers of the region have disbanded making the ability to interoperate between disparate communications systems a priority.
- Coordination, sharing of technical expertise recently with the lack of funds in grant programs.

What barriers, if any, keep the HSAC Regional Communications Subcommittees from being more effective?

- Being treated as less important that the needs of the Front Range on a regular basis.
- Lack of incentive to maintain the Sub-committees. Distance and time needed for members to meet.
- Decreased funding.
- Money and desire.
- Lack of funds in grant programs.

What responsibilities do you see the HSAC Regional Communications Subcommittee tasked with in the future?

- Growth and improvement for our DTR system to improve safety standards in areas that have experienced comms difficulties for many years.
- Updating a TICP with no help to print or train on the use of.
- None; too few attend.

Please provide any additional comments that you have about the HSAC Regional Communications Subcommittee.

- We need strong support to move forward with funding for desperately needed towers.
- How do you know if you have region and/or state level inter-operability? You can have someone check boxes on a form. Or, you can demonstrate actual capability through reviews of actual incidents and conducting then reviewing appropriate exercises. Regional Communications Sub-committees can be designated and held responsible for conducting and assessing communications exercises.
- I would be interested in learning more about the HSAC so I could determine if this is a group with which I should have more interaction.

Appendix E CCNC Findings

E.1 CCNC Respondent Information

Data on the CCNC comes from four sources: personal interviews with highly involved stakeholders, facilitated focus group discussions, document review, and on-line survey responses. This section details the findings from The Colorado Governance Assessment On-line Stakeholder Survey.

Of the 195 respondents who completed demographic information in the on-line survey, 55 answered the group of questions regarding the CCNC. Of those respondents:

- 19 identified themselves as a voting member of the CCNC.
- 36 identified themselves as interacting directly or indirectly with the CCNC (but not as an appointed member).

Respondents reported being affiliated with Public Safety, Public Service, and Private Enterprise organizations. Discipline information for CCNC survey respondents is provided below.

Table 20: CCNC Respondent Disciplines

Discipline	Number
Communication	24
Law enforcement	15
Fire	9
Government / Administration	2
Public Health	1
Utilities	1
Search and Rescue	1
Private Enterprise	1
Other[23]	1
TOTAL	**55**

E.2 CCNC Activity and Engagement

This assessment effort highlighted the following facets of the CCNC regarding engagement and activity.

For the 55 survey respondents who provided data for the CCNC, the average number of meetings attended since June of 2014 was 10. Out of 55 respondents, 14 (25%) reported not having been to a meeting during that time frame. Removing those respondents who have not attended any meetings, the 41 remaining respondents reported having attended between 13 and 14 meetings on average since June of 2014.

Approximately half of the respondents indicated that they have brought issues to the attention of the CCNC (56%) and that they have participated directly in the CCNC (51%). Every other metric of activity and engagement with the CCNC showed approximately

[23] Other Disciplines reported being involved with all or multiple of the listed disciplines.

The CCNC could address an issue I might bring to them.	56%	09%	35%
The CCNC is well structured and organized.	56%	09%	35%
The scope of the CCNC is too narrow.	09%	40%	51%
The CCNC is less productive than other groups I've experienced.	15%	45%	40%
Participation in the CCNC is beneficial to me / my agency.	58%	09%	33%
Participation in the CCNC has increased my knowledge of public safety communications in Colorado.	58%	09%	33%
Participation in the CCNC has increased my collaboration with peers in my region.	56%	07%	36%
The CCNC is unnecessary.	16%	60%	24%
The work of the CCNC is redundant.	15%	56%	29%

E.4 CCNC Knowledge

In an attempt to capture the degree to which respondents understand the responsibilities of the CCNC, a set of survey items were created asking participants whether or not a particular responsibility is associated with the group. Some of the responsibilities were taken directly from the CCNC articles of incorporation, and some of the responsibilities were taken from documents of other groups. The following table shows the percentage of "Yes" responses to each of the presented responsibilities. Items marked with an asterisk (*) are responsibilities that ICTAP personnel identified as belonging to the CCNC.

Table 23: Stakeholder Perceptions of CCNC Responsibilities

Responsibility	Percent Yes
*... managing user connections to the Statewide Digital Trunked Radio System (DTRS)	82%
... presenting an annual report to the Colorado General Assembly Joint Budget Committee.	44%
... providing policy level direction and promoting the efficient and effective use of resources for matters relating to public safety communications interoperability.	85%
... implementing communications infrastructure statewide as part of the Statewide Digital Trunked Radio System (DTRS).	60%
... assisting public safety entities in the development of projects, plans, policies, standards, priorities, guidelines, and training for radio interoperability.	76%
... coordinating with other communications oversight groups to ensure adequate wireless spectrum to accommodate all users.	62%
... managing funding streams for update and maintenance of statewide communication networks.	35%
... providing recommendations to the Homeland Security & All Hazards Senior Advisory Committee, when appropriate, concerning issues related to statewide interoperable radio communications for public safety in Colorado.	64%

Respondents correctly identified the one clear responsibility of the CCNC (82%). Respondents also endorsed some responsibilities that clearly belong elsewhere as belonging with the CCNC. Specifically, 85% of respondents indicated that the CCNC is

responsible for providing policy level direction regarding interoperable communication within the state. It may be that some respondents interpreted this statement differently than others. However, this finding highlights the need for clarification of responsibilities within groups and differentiation of responsibilities from between groups, as recommended in section 3.2.6 of the body of this report.

E.5 Open Ended Question Responses

The on-line survey provided respondents with an opportunity to answer open-ended questions regarding the CCNC[24]. Following is a list of the open-ended questions and the responses provided by survey respondents. Each bullet within a question represents a different respondent, thus repeated comments within the same section are comments made by different people.

What changes would you make to improve the CCNC?

- Expanded and improved training for radio users and for CCNC officers.
- We had to build our own infrastructure to get in-building coverage which was marginal at best with the State DTRS. My center dispatches for North Metro and since they were also being dispatched by Adcom we were forced to go with FRCC. Since we went to FRRCC we are not allowed to have a designated DTRS talk group for our transport unit that travels throughout the State. I try to stay out of the politics between CCNC and FRCC, but this is just one example of the lack of vision and purpose of CCNC.
- Needs more participation from all of its regions. Metro is the only one who is always fully engaged from the majority of its directors and does more than the lion's share of the work.
- Incorporate it into PSCS - it should have goals, duties, deliverables assigned to it by PSCS - it should be the "tech and ops" groups of PSCS (PSCS can/should rely on it for investigations and work products).
- Recommend it gets ownership of the System ID, and a full time executive director.

In your opinion, what is the MOST valuable aspect of the CCNC?

- Exchange of ideas and concerns between various public safety agencies and general DTR coordination and education.
- It is volunteer.
- Providing policy and procedure for managing statewide DTRS.
- Upgrade Information, System status, User status updates.
- The collaboration and partnerships it created for all levels of government to cooperate in building and using the statewide system. As one of the very first groups to create these types of partnerships and cooperative funding and building of infrastructure, numerous other states have called the leadership of CCNC for advice in creating their own governance and statewide systems. Without CCNC and the original partners DTRS would still be just an unfunded

[24] Open-ended survey responses were edited for typographical errors, grammatical errors impacting clarity, and personally identifiable information. Any comments directed at or about single individuals were provided separately to the assessment POC. Non-substantive comments (e.g. "I have no comment") were removed and comments specifically about the survey were removed and retained as feedback for OEC/ICTAP personnel.

plan for the state and we would have a few regional networks and a lot more still on VHF.
- Collaborative nature and the dedication of those that participate in it.
- Collaboration.

In your opinion, what is the LEAST valuable aspect of the CCNC?

- It is volunteer.
- The yearly Golf Tournament.
- It has no mandate.
- It has no teeth when it comes down to dealing with state.

What barriers, if any, keep the CCNC?

- No legislatively appointed responsibility or oversight.
- Participation from its member agencies. This has always been the problem. It has always been the same handful of agencies providing the people to do almost all of the work.
- If CCNC were organizationally aligned as subcommittee(s) of PSCS, they could help PSCS accomplish so much more - as it is, PSCS has many directors (all good people) but no "do-ers" while CCNC has many "do-ers" but no mandated leadership.
- It is a 501(c)(3) Non Profit Corporation made up of Government Agencies -- Hmmmm.
- It has no way to force the state to be a good partner.

What responsibilities do you see the CCNC tasked with in the future?

- Better control over misuse of regional channels.
- Supporting the "tech and ops" role needed by PSCS.

Please provide any additional comments that you have about the CCNC.

- Again, the total focus of the CCNC is the Statewide DTRS.... get off the DTRS and include questions about other systems. i.e. funding, governance, technology, training, usage, etc.
- It's been a long time since I've attended a CCNC meeting. I would like information on the current schedule and location of regular meetings.

Appendix F Acronyms & Abbreviations

Item/Acronym	Definition
CCNC	Consolidated Communications Network of Colorado
CCSA	Consolidated Communication System Authority
CDOT	Colorado Department of Transportation
CO	Colorado
CSP	Colorado State Patrol
DHS	Department of Homeland Security
DHSEM	Department of Homeland Security and Emergency Management
DPS	Department of Public Safety
DTR	Digital Trunked Radio System
DTRS	Digital Trunked Radio System
EMS	Emergency Medical Services
EO	Executive Order
FD	Fire Department
FirstNet	First Responder Network
FRCC	Front Range Communications Consortium
FTE	Full-Time Employee
HSAC	Homeland Security & All-Hazards Senior Advisory Committee
ICTAP	Interoperable Communications Technical Assistance Program
JBC	Joint Budget Committee
JCTF	Joint Communications Task Force
LE	Law Enforcement
LMR	Land Mobile Radio
LTE	Long Term Evolution
MARC	The Metro Area Radio Cooperative
NCR	North Central All-Hazards Region
NG9-1-1	Next Generation 9-1-1
NCRCN	Northern Colorado Regional Communications Network
NGO	Non-governmental Organization
OEC	Office of Emergency Communications
OIT	Office of Information Technology
PPRCN	Pikes Peak Regional Communications Network
PSCN	Public Safety Communications Network
PSCS	Public Safety Communications Subcommittee

Item/Acronym	Definition
RMA	Rocky Mountain Harris Users Group
RTD	Regional Transportation District
SCIP	State Communicaitons Interoperability Plan
SIEC	Statewide Interoperability Executive Council
SWIC	Statewide Interoperability Coordinator
UHF	Ultra High Frequency
VHF	Very High Frequency

Appendix F

Partial Statewide Ownership List – DOES NOT INCLUDE SOVEREIGN SYSTEMS

Continued on next page

			Primary	Only for Transport Links	2nd	Switch Assn or	
Pueblo County	Radio Site Repeater	12 Mile	60			6	12_Mile.Repeater.1
Pueblo County	Radio Site Repeater	12 Mile	60			6	12_Mile.Repeater.2
Pueblo County	Radio Site Repeater	12 Mile	60			6	12_Mile.Repeater.3
Pueblo County	Radio Site Repeater	12 Mile	60			6	12_Mile.Repeater.4
Pueblo County	Radio Site Repeater	12 Mile	60			6	12_Mile.Repeater.5
Pueblo County	Radio Site Repeater	12 Mile	60			6	12_Mile.Repeater.6
Pueblo County	Radio Site Repeater	12 Mile	60			6	12_Mile.Repeater.7
Pueblo County	Radio Site Repeater	12 Mile	60			6	12_Mile.Repeater.8
State of Colorado	Radio Site Repeater	Abajo Peak	2			2	Abajo_Peak.Repeater.1
State of Colorado	Radio Site Repeater	Abajo Peak	2			2	Abajo_Peak.Repeater.2
State of Colorado	Radio Site Repeater	Abajo Peak	2			2	Abajo_Peak.Repeater.3
State of Colorado	Radio Site Repeater	Abajo Peak	2			2	Abajo_Peak.Repeater.4
State of Colorado	Radio Site Repeater	Abajo Peak	2			2	Abajo_Peak.Repeater.5
RTD	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.1
RTD	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.2
RTD	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.3
RTD	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.4
RTD	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.5
RTD	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.6
State of Colorado	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.7
State of Colorado	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.8
State of Colorado	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.9
Arapahoe County	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.10
Arapahoe County	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.11
Arapahoe County	Radio Site Repeater	Admin (Arapahoe)	1			1	Admin.Repeater.12
PPRCN	Radio Site Repeater	Airport	17			4	Airport.Repeater.1
PPRCN	Radio Site Repeater	Airport	17			4	Airport.Repeater.2
PPRCN	Radio Site Repeater	Airport	17			4	Airport.Repeater.3
PPRCN	Radio Site Repeater	Airport	17			4	Airport.Repeater.4
PPRCN	Radio Site Repeater	Airport	17			4	Airport.Repeater.5
PPRCN	Radio Site Repeater	Airport	17			4	Airport.Repeater.6
PPRCN	Radio Site Repeater	Airport	17			4	Airport.Repeater.7
PPRCN	Radio Site Repeater	Airport	17			4	Airport.Repeater.8
PPRCN	Radio Site Repeater	Airport	17			4	Airport.Repeater.9
PPRCN	Radio Site Repeater	Airport	17			4	Airport.Repeater.10
Pitkin County	Radio Site Repeater	Ajax	66			2	Ajax.Repeater.1
Pitkin County	Radio Site Repeater	Ajax	66			2	Ajax.Repeater.2
Pitkin County	Radio Site Repeater	Ajax	66			2	Ajax.Repeater.3
Pitkin County	Radio Site Repeater	Ajax	66			2	Ajax.Repeater.4
Pitkin County	Radio Site Repeater	Ajax	66			2	Ajax.Repeater.5
Holy Cross	Radio Site Repeater	Ajax	66			2	Ajax.Repeater.6
State of Colorado	Radio Site Repeater	Akron	17			3	Akron.Repeater.1
State of Colorado	Radio Site Repeater	Akron	17			3	Akron.Repeater.2
State of Colorado	Radio Site Repeater	Akron	17			3	Akron.Repeater.3
State of Colorado	Radio Site Repeater	Akron	17			3	Akron.Repeater.4
State of Colorado	Radio Site Repeater	Akron	17			3	Akron.Repeater.5
State of Colorado	Radio Site Repeater	Alamosa	52			6	Alamosa.Repeater.1
State of Colorado	Radio Site Repeater	Alamosa	52			6	Alamosa.Repeater.2
State of Colorado	Radio Site Repeater	Alamosa	52			6	Alamosa.Repeater.3
State of Colorado	Radio Site Repeater	Alamosa	52			6	Alamosa.Repeater.4
State of Colorado	Radio Site Repeater	Alamosa	52			6	Alamosa.Repeater.5
State of Colorado	Radio Site Repeater	Alamosa	52			6	Alamosa.Repeater.6
State of Colorado	Radio Site Repeater	Anton	19			3	Anton.Repeater.1
State of Colorado	Radio Site Repeater	Anton	19			3	Anton.Repeater.2
State of Colorado	Radio Site Repeater	Anton	19			3	Anton.Repeater.3
State of Colorado	Radio Site Repeater	Anton	19			3	Anton.Repeater.4
State of Colorado	Radio Site Repeater	Anton	19			3	Anton.Repeater.5
State of Colorado	Radio Site Repeater	Arkansas Valley CF	69			6	Arkansas_Valley_CF.Repeater.1
State of Colorado	Radio Site Repeater	Arkansas Valley CF	69			6	Arkansas_Valley_CF.Repeater.2
State of Colorado	Radio Site Repeater	Arkansas Valley CF	69			6	Arkansas_Valley_CF.Repeater.3
State of Colorado	Radio Site Repeater	Arkansas Valley CF	69			6	Arkansas_Valley_CF.Repeater.4
State of Colorado	Radio Site Repeater	Arkansas Valley CF	69			6	Arkansas_Valley_CF.Repeater.5
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.1
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.2
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.3
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.4
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.5
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.6
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.7
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.8
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.9
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.10
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.11
State of Colorado	Radio Site Repeater	Auraria	70			1	Auraria.Repeater.12
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.1
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.2
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.3
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.4
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.5
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.6
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.7

			Primary	Only for Transport Links	2nd	Switch Assn or	
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.8
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.9
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.10
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.11
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.12
PPRCN	Radio Site Repeater	Austin Bluffs	16			4	Austin_Bluffs.Repeater.13
PPRCN	Radio Site Repeater	Badger	20			4	Badger.Repeater.6
PPRCN	Radio Site Repeater	Badger	20			4	Badger.Repeater.7
PPRCN	Radio Site Repeater	Badger	20			4	Badger.Repeater.8
PPRCN	Radio Site Repeater	Badger	20			4	Badger.Repeater.9
PPRCN	Radio Site Repeater	Badger	20			4	Badger.Repeater.10
State of Colorado	Radio Site Repeater	Badger	45			1	Badger.Repeater.1
State of Colorado	Radio Site Repeater	Badger	45			1	Badger.Repeater.2
State of Colorado	Radio Site Repeater	Badger	45			1	Badger.Repeater.3
State of Colorado	Radio Site Repeater	Badger	45			1	Badger.Repeater.4
Park County	Radio Site Repeater	Badger	45			1	Badger.Repeater.5
State of Colorado	Radio Site Repeater	Bailey	54			1	Bailey.Repeater.1
State of Colorado	Radio Site Repeater	Bailey	54			1	Bailey.Repeater.2
State of Colorado	Radio Site Repeater	Bailey	54			1	Bailey.Repeater.3
State of Colorado	Radio Site Repeater	Bailey	54			1	Bailey.Repeater.4
Park County	Radio Site Repeater	Bailey	54			1	Bailey.Repeater.5
State of Colorado	Radio Site Repeater	Bakers Peak	41			2	Bakers_Peak.Repeater.1
State of Colorado	Radio Site Repeater	Bakers Peak	41			2	Bakers_Peak.Repeater.2
State of Colorado	Radio Site Repeater	Bakers Peak	41			2	Bakers_Peak.Repeater.3
State of Colorado	Radio Site Repeater	Bakers Peak	41			2	Bakers_Peak.Repeater.4
State of Colorado	Radio Site Repeater	Bakers Peak	41			2	Bakers_Peak.Repeater.5
NCRCN	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.1
NCRCN	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.2
NCRCN	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.3
NCRCN	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.4
NCRCN	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.5
Larimer County	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.6
Larimer County	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.7
Larimer County	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.8
Longmont, City of	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.9
Dept of Energy	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.10
State of Colorado	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.11
State of Colorado	Radio Site Repeater	Bald North	61			3	Bald_North.Repeater.12
State of Colorado	Radio Site Repeater	Bald South	15			6	Bald_South.Repeater.1
State of Colorado	Radio Site Repeater	Bald South	15			6	Bald_South.Repeater.2
State of Colorado	Radio Site Repeater	Bald South	15			6	Bald_South.Repeater.3
State of Colorado	Radio Site Repeater	Bald South	15			6	Bald_South.Repeater.4
State of Colorado	Radio Site Repeater	Bald South	15			6	Bald_South.Repeater.5
State of Colorado	Radio Site Repeater	Bald South	15			6	Bald_South.Repeater.6
Holy Cross	Radio Site Repeater	Beacon Hill	96			2	Beacon_Hill.Repeater.1
Holy Cross	Radio Site Repeater	Beacon Hill	96			2	Beacon_Hill.Repeater.2
Holy Cross	Radio Site Repeater	Beacon Hill	96			2	Beacon_Hill.Repeater.3
Holy Cross	Radio Site Repeater	Beacon Hill	96			2	Beacon_Hill.Repeater.4
Holy Cross	Radio Site Repeater	Beacon Hill	96			2	Beacon_Hill.Repeater.5
Holy Cross	Radio Site Repeater	Beacon Hill	96			2	Beacon_Hill.Repeater.6
Holy Cross	Radio Site Repeater	Beacon Hill	96			2	Beacon_Hill.Repeater.7
Holy Cross	Radio Site Repeater	Beacon Hill	96			2	Beacon_Hill.Repeater.8
Larimer County	Radio Site Repeater	Bear Gulch	33			3	Bear_Gulch.Repeater.1
Larimer County	Radio Site Repeater	Bear Gulch	33			3	Bear_Gulch.Repeater.2
Larimer County	Radio Site Repeater	Bear Gulch	33			3	Bear_Gulch.Repeater.3
Larimer County	Radio Site Repeater	Bear Gulch	33			3	Bear_Gulch.Repeater.4
Larimer County	Radio Site Repeater	Bear Gulch	33			3	Bear_Gulch.Repeater.5
Eagle County	Radio Site Repeater	Beaver Creek	35			2	Beaver_Creek.Repeater.1
Eagle County	Radio Site Repeater	Beaver Creek	35			2	Beaver_Creek.Repeater.2
Eagle County	Radio Site Repeater	Beaver Creek	35			2	Beaver_Creek.Repeater.3
Eagle County	Radio Site Repeater	Beaver Creek	35			2	Beaver_Creek.Repeater.4
Eagle County	Radio Site Repeater	Beaver Creek	35			2	Beaver_Creek.Repeater.5
Eagle County	Radio Site Repeater	Beaver Creek	35			2	Beaver_Creek.Repeater.6
Holy Cross	Radio Site Repeater	Beaver Creek	35			2	Beaver_Creek.Repeater.7
State of Colorado	Radio Site Repeater	Betasso	32			3	Betasso.Repeater.1
State of Colorado	Radio Site Repeater	Betasso	32			3	Betasso.Repeater.2
State of Colorado	Radio Site Repeater	Betasso	32			3	Betasso.Repeater.3
State of Colorado	Radio Site Repeater	Betasso	32			3	Betasso.Repeater.4
State of Colorado	Radio Site Repeater	Betasso	32			3	Betasso.Repeater.5
State of Colorado	Radio Site Repeater	Bethune	30			1	Bethune.Repeater.1
State of Colorado	Radio Site Repeater	Bethune	30			1	Bethune.Repeater.2
State of Colorado	Radio Site Repeater	Bethune	30			1	Bethune.Repeater.3
State of Colorado	Radio Site Repeater	Bethune	30			1	Bethune.Repeater.4
State of Colorado	Radio Site Repeater	Bethune	30			1	Bethune.Repeater.5
PPRCN	Radio Site Repeater	Black Forest	21			4	Black_Forest.Repeater.1
PPRCN	Radio Site Repeater	Black Forest	21			4	Black_Forest.Repeater.2
PPRCN	Radio Site Repeater	Black Forest	21			4	Black_Forest.Repeater.3
PPRCN	Radio Site Repeater	Black Forest	21			4	Black_Forest.Repeater.4
PPRCN	Radio Site Repeater	Black Forest	21			4	Black_Forest.Repeater.5
PPRCN	Radio Site Repeater	Black Forest	21			4	Black_Forest.Repeater.6
PPRCN	Radio Site Repeater	Black Forest	21			4	Black_Forest.Repeater.7

			Primary	Only for Transport Links	2nd	Switch Assn #	
State of Colorado	Radio Site Repeater	Black Hawk	19			1	Black_Hawk.Repeater.1
State of Colorado	Radio Site Repeater	Black Hawk	19			1	Black_Hawk.Repeater.2
State of Colorado	Radio Site Repeater	Black Hawk	19			1	Black_Hawk.Repeater.3
State of Colorado	Radio Site Repeater	Black Hawk	19			1	Black_Hawk.Repeater.4
State of Colorado	Radio Site Repeater	Black Hawk	19			1	Black_Hawk.Repeater.5
GJRCC	Radio Site Repeater	Black Ridge	22			2	Black_Ridge.Repeater.1
GJRCC	Radio Site Repeater	Black Ridge	22			2	Black_Ridge.Repeater.2
GJRCC	Radio Site Repeater	Black Ridge	22			2	Black_Ridge.Repeater.3
GJRCC	Radio Site Repeater	Black Ridge	22			2	Black_Ridge.Repeater.4
GJRCC	Radio Site Repeater	Black Ridge	22			2	Black_Ridge.Repeater.5
GJRCC	Radio Site Repeater	Black Ridge	22			2	Black_Ridge.Repeater.6
GJRCC	Radio Site Repeater	Black Ridge	22			2	Black_Ridge.Repeater.7
Eagle County	Radio Site Repeater	Blowout	59			2	Blowout.Repeater.1
Eagle County	Radio Site Repeater	Blowout	59			2	Blowout.Repeater.2
Eagle County	Radio Site Repeater	Blowout	59			2	Blowout.Repeater.3
Eagle County	Radio Site Repeater	Blowout	59			2	Blowout.Repeater.4
Eagle County	Radio Site Repeater	Blowout	59			2	Blowout.Repeater.5
Eagle County	Radio Site Repeater	Blowout	59			2	Blowout.Repeater.6
State of Colorado	Radio Site Repeater	Blue Ridge	48			3	Blue_Ridge.Repeater.1
State of Colorado	Radio Site Repeater	Blue Ridge	48			3	Blue_Ridge.Repeater.2
State of Colorado	Radio Site Repeater	Blue Ridge	48			3	Blue_Ridge.Repeater.3
State of Colorado	Radio Site Repeater	Blue Ridge	48			3	Blue_Ridge.Repeater.4
State of Colorado	Radio Site Repeater	Blue Ridge	48			3	Blue_Ridge.Repeater.5
State of Colorado	Radio Site Repeater	Bowen Marker	31			6	Bowen_Marker.Repeater.1
State of Colorado	Radio Site Repeater	Bowen Marker	31			6	Bowen_Marker.Repeater.2
State of Colorado	Radio Site Repeater	Bowen Marker	31			6	Bowen_Marker.Repeater.3
State of Colorado	Radio Site Repeater	Bowen Marker	31			6	Bowen_Marker.Repeater.4
State of Colorado	Radio Site Repeater	Bowen Marker	31			6	Bowen_Marker.Repeater.5
State of Colorado	Radio Site Repeater	Bowen Marker	31			6	Bowen_Marker.Repeater.6
State of Colorado	Radio Site Repeater	Boyero	22			1	Boyero.Repeater.1
State of Colorado	Radio Site Repeater	Boyero	22			1	Boyero.Repeater.2
State of Colorado	Radio Site Repeater	Boyero	22			1	Boyero.Repeater.3
State of Colorado	Radio Site Repeater	Boyero	22			1	Boyero.Repeater.4
State of Colorado	Radio Site Repeater	Boyero	22			1	Boyero.Repeater.5
State of Colorado	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.1
State of Colorado	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.2
State of Colorado	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.3
State of Colorado	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.4
State of Colorado	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.5
State of Colorado	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.6
State of Colorado	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.7
NCRCN	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.8
NCRCN	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.9
NCRCN	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.10
Larimer County	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.11
Larimer County	Radio Site Repeater	Buckhorn	13			3	Buckhorn.Repeater.12
State of Colorado	Radio Site Repeater	Buena Vista CF	4			6	Buena_Vista_CF.Repeater.1
State of Colorado	Radio Site Repeater	Buena Vista CF	4			6	Buena_Vista_CF.Repeater.2
State of Colorado	Radio Site Repeater	Buena Vista CF	4			6	Buena_Vista_CF.Repeater.3
State of Colorado	Radio Site Repeater	Buena Vista CF	4			6	Buena_Vista_CF.Repeater.4
State of Colorado	Radio Site Repeater	Buena Vista CF	4			6	Buena_Vista_CF.Repeater.5
State of Colorado	Radio Site Repeater	Buffalo Pass	3			2	Bufffalo_Pass.Repeater.1
State of Colorado	Radio Site Repeater	Buffalo Pass	3			2	Bufffalo_Pass.Repeater.2
State of Colorado	Radio Site Repeater	Buffalo Pass	3			2	Bufffalo_Pass.Repeater.3
State of Colorado	Radio Site Repeater	Buffalo Pass	3			2	Bufffalo_Pass.Repeater.4
State of Colorado	Radio Site Repeater	Buffalo Pass	3			2	Bufffalo_Pass.Repeater.5
Larimer County	Radio Site Repeater	Bull Mountain	23			3	Bull_Mountain.Repeater.1
Larimer County	Radio Site Repeater	Bull Mountain	23			3	Bull_Mountain.Repeater.2
Larimer County	Radio Site Repeater	Bull Mountain	23			3	Bull_Mountain.Repeater.3
Larimer County	Radio Site Repeater	Bull Mountain	23			3	Bull_Mountain.Repeater.4
Larimer County	Radio Site Repeater	Bull Mountain	23			3	Bull_Mountain.Repeater.5
Arapahoe County	Radio Site Repeater	Byers	73			1	Byers.Repeater.1
Arapahoe County	Radio Site Repeater	Byers	73			1	Byers.Repeater.2
Arapahoe County	Radio Site Repeater	Byers	73			1	Byers.Repeater.3
Arapahoe County	Radio Site Repeater	Byers	73			1	Byers.Repeater.4
Arapahoe County	Radio Site Repeater	Byers	73			1	Byers.Repeater.5
Arapahoe County	Radio Site Repeater	Byers	73			1	Byers.Repeater.6
PPRCN	Radio Site Repeater	Calhan	14			4	Calhan.Repeater.1
PPRCN	Radio Site Repeater	Calhan	14			4	Calhan.Repeater.2
PPRCN	Radio Site Repeater	Calhan	14			4	Calhan.Repeater.3
PPRCN	Radio Site Repeater	Calhan	14			4	Calhan.Repeater.4
PPRCN	Radio Site Repeater	Calhan	14			4	Calhan.Repeater.5
PPRCN	Radio Site Repeater	Calhan	14			4	Calhan.Repeater.6
State of Colorado	Radio Site Repeater	Carlton	29			6	Carlton.Repeater.1
State of Colorado	Radio Site Repeater	Carlton	29			6	Carlton.Repeater.2
State of Colorado	Radio Site Repeater	Carlton	29			6	Carlton.Repeater.3
State of Colorado	Radio Site Repeater	Carlton	29			6	Carlton.Repeater.4
State of Colorado	Radio Site Repeater	Carlton	29			6	Carlton.Repeater.5
Eagle County	Radio Site Repeater	Castle	47			2	Castle.Repeater.1
Eagle County	Radio Site Repeater	Castle	47			2	Castle.Repeater.2
Eagle County	Radio Site Repeater	Castle	47			2	Castle.Repeater.3

			Primary	Only for Transport Links	2nd	Switch Assn or	
Eagle County	Radio Site Repeater	Castle	47			2	Castle.Repeater.4
Eagle County	Radio Site Repeater	Castle	47			2	Castle.Repeater.5
Eagle County	Radio Site Repeater	Castle	47			2	Castle.Repeater.6
State of Colorado	Radio Site Repeater	Cathedral Bluffs	6			2	Cathedral_Bluffs.Repeater.1
State of Colorado	Radio Site Repeater	Cathedral Bluffs	6			2	Cathedral_Bluffs.Repeater.2
State of Colorado	Radio Site Repeater	Cathedral Bluffs	6			2	Cathedral_Bluffs.Repeater.3
State of Colorado	Radio Site Repeater	Cathedral Bluffs	6			2	Cathedral_Bluffs.Repeater.4
State of Colorado	Radio Site Repeater	Cathedral Bluffs	6			2	Cathedral_Bluffs.Repeater.5
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.1
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.2
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.3
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.4
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.5
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.6
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.7
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.8
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.9
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.10
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.11
PPRCN	Radio Site Repeater	Cedar Heights	24			4	Cedar_Heights.Repeater.12
State of Colorado	Radio Site Repeater	Cedar Mtn	21			2	Cedar_Mtn.Repeater.1
State of Colorado	Radio Site Repeater	Cedar Mtn	21			2	Cedar_Mtn.Repeater.2
State of Colorado	Radio Site Repeater	Cedar Mtn	21			2	Cedar_Mtn.Repeater.3
State of Colorado	Radio Site Repeater	Cedar Mtn	21			2	Cedar_Mtn.Repeater.4
State of Colorado	Radio Site Repeater	Cedar Mtn	21			2	Cedar_Mtn.Repeater.5
State of Colorado	Radio Site Repeater	Cedar Mtn	21			2	Cedar_Mtn.Repeater.6
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.1
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.2
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.3
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.4
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.5
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.6
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.7
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.8
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.9
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.10
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.11
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.12
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.13
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.14
Arapahoe County	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.15
RTD	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.16
RTD	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.17
RTD	Radio Site Repeater	Chevron	64			1	Chevron.Repeater.18
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.1
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.2
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.3
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.4
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.5
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.6
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.7
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.8
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.9
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.10
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.11
State of Colorado	Radio Site Repeater	Cheyenne Mtn	48			6	Cheyenne_Mtn.Repeater.12
State of Colorado	Radio Site Repeater	Coal Bank	28			2	Coal_Bank.Repeater.1
State of Colorado	Radio Site Repeater	Coal Bank	28			2	Coal_Bank.Repeater.2
State of Colorado	Radio Site Repeater	Coal Bank	28			2	Coal_Bank.Repeater.3
State of Colorado	Radio Site Repeater	Coal Bank	28			2	Coal_Bank.Repeater.4
State of Colorado	Radio Site Repeater	Coal Bank	28			2	Coal_Bank.Repeater.5
State of Colorado	Radio Site Repeater	Coaldale	64			6	Coaldale.Repeater.1
State of Colorado	Radio Site Repeater	Coaldale	64			6	Coaldale.Repeater.2
State of Colorado	Radio Site Repeater	Coaldale	64			6	Coaldale.Repeater.3
State of Colorado	Radio Site Repeater	Coaldale	64			6	Coaldale.Repeater.4
State of Colorado	Radio Site Repeater	Coaldale	64			6	Coaldale.Repeater.5
GJRCC	Radio Site Repeater	Collbran	98			2	Collbran.Repeater.1
GJRCC	Radio Site Repeater	Collbran	98			2	Collbran.Repeater.2
GJRCC	Radio Site Repeater	Collbran	98			2	Collbran.Repeater.3
GJRCC	Radio Site Repeater	Collbran	98			2	Collbran.Repeater.4
GJRCC	Radio Site Repeater	Collbran	98			2	Collbran.Repeater.5
GJRCC	Radio Site Repeater	Collbran	98			2	Collbran.Repeater.6
State of Colorado	Radio Site Repeater	Coonskin	72			2	Coonskin.Repeater.1
State of Colorado	Radio Site Repeater	Coonskin	72			2	Coonskin.Repeater.2
State of Colorado	Radio Site Repeater	Coonskin	72			2	Coonskin.Repeater.3
State of Colorado	Radio Site Repeater	Coonskin	72			2	Coonskin.Repeater.4
State of Colorado	Radio Site Repeater	Coonskin	72			2	Coonskin.Repeater.5
Summit County	Radio Site Repeater	Copper Mtn	7			2	Copper_Mtn.Repeater.1
Summit County	Radio Site Repeater	Copper Mtn	7			2	Copper_Mtn.Repeater.2
Summit County	Radio Site Repeater	Copper Mtn	7			2	Copper_Mtn.Repeater.3
Summit County	Radio Site Repeater	Copper Mtn	7			2	Copper_Mtn.Repeater.4

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Summit County	Radio Site Repeater	Copper Mtn	7			2	Copper_Mtn.Repeater.5
State of Colorado	Radio Site Repeater	Cordova Pass	59			6	Cordova_Pass.Repeater.1
State of Colorado	Radio Site Repeater	Cordova Pass	59			6	Cordova_Pass.Repeater.2
State of Colorado	Radio Site Repeater	Cordova Pass	59			6	Cordova_Pass.Repeater.3
State of Colorado	Radio Site Repeater	Cordova Pass	59			6	Cordova_Pass.Repeater.4
State of Colorado	Radio Site Repeater	Cordova Pass	59			6	Cordova_Pass.Repeater.5
State of Colorado	Radio Site Repeater	Craig	91			2	Craig.Repeater.1
State of Colorado	Radio Site Repeater	Craig	91			2	Craig.Repeater.2
State of Colorado	Radio Site Repeater	Craig	91			2	Craig.Repeater.3
State of Colorado	Radio Site Repeater	Craig	91			2	Craig.Repeater.4
State of Colorado	Radio Site Repeater	Craig	91			2	Craig.Repeater.5
State of Colorado	Radio Site Repeater	Craig	91			2	Craig.Repeater.6
State of Colorado	Radio Site Repeater	Creede	67			6	Creede.Repeater.1
State of Colorado	Radio Site Repeater	Creede	67			6	Creede.Repeater.2
State of Colorado	Radio Site Repeater	Creede	67			6	Creede.Repeater.3
State of Colorado	Radio Site Repeater	Creede	67			6	Creede.Repeater.4
State of Colorado	Radio Site Repeater	Creede	67			6	Creede.Repeater.5
State of Colorado	Radio Site Repeater	Crested Butte	65			2	Crested_Butte.Repeater.1
State of Colorado	Radio Site Repeater	Crested Butte	65			2	Crested_Butte.Repeater.2
State of Colorado	Radio Site Repeater	Crested Butte	65			2	Crested_Butte.Repeater.3
State of Colorado	Radio Site Repeater	Crested Butte	65			2	Crested_Butte.Repeater.4
State of Colorado	Radio Site Repeater	Crested Butte	65			2	Crested_Butte.Repeater.5
Pitkin County	Radio Site Repeater	Crown Mountain	86			2	Crown_Mountain.Repeater.1
Pitkin County	Radio Site Repeater	Crown Mountain	86			2	Crown_Mountain.Repeater.2
Pitkin County	Radio Site Repeater	Crown Mountain	86			2	Crown_Mountain.Repeater.3
Pitkin County	Radio Site Repeater	Crown Mountain	86			2	Crown_Mountain.Repeater.4
Pitkin County	Radio Site Repeater	Crown Mountain	86			2	Crown_Mountain.Repeater.5
State of Colorado	Radio Site Repeater	Dakota	24			1	Dakota_Mountain.Repeater.1
State of Colorado	Radio Site Repeater	Dakota	24			1	Dakota_Mountain.Repeater.2
State of Colorado	Radio Site Repeater	Dakota	24			1	Dakota_Mountain.Repeater.3
State of Colorado	Radio Site Repeater	Dakota	24			1	Dakota_Mountain.Repeater.4
State of Colorado	Radio Site Repeater	Dakota	24			1	Dakota_Mountain.Repeater.5
State of Colorado	Radio Site Repeater	Dakota	24			1	Dakota_Mountain.Repeater.6
State of Colorado	Radio Site Repeater	Deer Peak	51			6	Deer_Peak.Repeater.1
State of Colorado	Radio Site Repeater	Deer Peak	51			6	Deer_Peak.Repeater.2
State of Colorado	Radio Site Repeater	Deer Peak	51			6	Deer_Peak.Repeater.3
State of Colorado	Radio Site Repeater	Deer Peak	51			6	Deer_Peak.Repeater.4
State of Colorado	Radio Site Repeater	Deer Peak	51			6	Deer_Peak.Repeater.5
State of Colorado	Radio Site Repeater	Deer Peak	51			6	Deer_Peak.Repeater.6
State of Colorado	Radio Site Repeater	Deer Peak	51			6	Deer_Peak.Repeater.7
State of Colorado	Radio Site Repeater	Deer Peak	51			6	Deer_Peak.Repeater.8
State of Colorado	Radio Site Repeater	Deer Peak	51			6	Deer_Peak.Repeater.9
Arapahoe County	Radio Site Repeater	Deer Trail	37			1	Deer_Trail.Repeater.1
Arapahoe County	Radio Site Repeater	Deer Trail	37			1	Deer_Trail.Repeater.2
Arapahoe County	Radio Site Repeater	Deer Trail	37			1	Deer_Trail.Repeater.3
Arapahoe County	Radio Site Repeater	Deer Trail	37			1	Deer_Trail.Repeater.4
Arapahoe County	Radio Site Repeater	Deer Trail	37			1	Deer_Trail.Repeater.5
State of Colorado	Radio Site Repeater	Deer Trail	37			1	Deer_Trail.Repeater.6
State of Colorado	Radio Site Repeater	Delta	51			2	Delta.Repeater.1
State of Colorado	Radio Site Repeater	Delta	51			2	Delta.Repeater.2
State of Colorado	Radio Site Repeater	Delta	51			2	Delta.Repeater.3
State of Colorado	Radio Site Repeater	Delta	51			2	Delta.Repeater.4
State of Colorado	Radio Site Repeater	Delta	51			2	Delta.Repeater.5
State of Colorado	Radio Site Repeater	Dolores	8			2	Dolores.Repeater.1
State of Colorado	Radio Site Repeater	Dolores	8			2	Dolores.Repeater.2
State of Colorado	Radio Site Repeater	Dolores	8			2	Dolores.Repeater.3
State of Colorado	Radio Site Repeater	Dolores	8			2	Dolores.Repeater.4
SW Region	Radio Site Repeater	Dolores	8			2	Dolores.Repeater.5
SW Region	Radio Site Repeater	Dolores	8			2	Dolores.Repeater.6
Rio Blanco County	Radio Site Repeater	Douglas Pass	64			2	Douglas_Pass.Repeater.1
Rio Blanco County	Radio Site Repeater	Douglas Pass	64			2	Douglas_Pass.Repeater.2
Rio Blanco County	Radio Site Repeater	Douglas Pass	64			2	Douglas_Pass.Repeater.3
Rio Blanco County	Radio Site Repeater	Douglas Pass	64			2	Douglas_Pass.Repeater.4
Rio Blanco County	Radio Site Repeater	Douglas Pass	64			2	Douglas_Pass.Repeater.5
Rio Blanco County	Radio Site Repeater	Douglas Pass	64			2	Douglas_Pass.Repeater.6
NCRCN	Radio Site Repeater	Drake	59			3	Drake.Repeater.1
NCRCN	Radio Site Repeater	Drake	59			3	Drake.Repeater.2
NCRCN	Radio Site Repeater	Drake	59			3	Drake.Repeater.3
Larimer County	Radio Site Repeater	Drake	59			3	Drake.Repeater.4
Larimer County	Radio Site Repeater	Drake	59			3	Drake.Repeater.5
State of Colorado	Radio Site Repeater	DRDC CF	9			1	DRDC_CF.Repeater.1
State of Colorado	Radio Site Repeater	DRDC CF	9			1	DRDC_CF.Repeater.2
State of Colorado	Radio Site Repeater	DRDC CF	9			1	DRDC_CF.Repeater.3
State of Colorado	Radio Site Repeater	DRDC CF	9			1	DRDC_CF.Repeater.4
State of Colorado	Radio Site Repeater	DRDC CF	9			1	DRDC_CF.Repeater.5
State of Colorado	Radio Site Repeater	DRDC CF	9			1	DRDC_CF.Repeater.6
State of Colorado	Radio Site Repeater	DRDC CF	9			1	DRDC_CF.Repeater.7
Glendale, City of	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.1
Glendale, City of	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.2
Glendale, City of	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.3
RTD	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.4

			Primary	Only for Transport Links	2nd	Switch Assn or	
RTD	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.5
RTD	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.6
Arapahoe County	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.7
Arapahoe County	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.8
Arapahoe County	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.9
Arapahoe County	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.10
Arapahoe County	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.11
Arapahoe County	Radio Site Repeater	Denver TX	20			1	Denver TX.Repeater.12
State of Colorado	Radio Site Repeater	DTB Test	67			1	DTB_Test.Repeater.1
State of Colorado	Radio Site Repeater	DTB Test	67			1	DTB_Test.Repeater.2
State of Colorado	Radio Site Repeater	DTB Test	67			1	DTB_Test.Repeater.3
State of Colorado	Radio Site Repeater	East Canon Complex (ECC)	58			6	ECC.Repeater.1
State of Colorado	Radio Site Repeater	East Canon Complex (ECC)	58			6	ECC.Repeater.2
State of Colorado	Radio Site Repeater	East Canon Complex (ECC)	58			6	ECC.Repeater.3
State of Colorado	Radio Site Repeater	East Canon Complex (ECC)	58			6	ECC.Repeater.4
State of Colorado	Radio Site Repeater	East Canon Complex (ECC)	58			6	ECC.Repeater.5
State of Colorado	Radio Site Repeater	East Canon Complex (ECC)	58			6	ECC.Repeater.6
State of Colorado	Radio Site Repeater	East Canon Complex (ECC)	58			6	ECC.Repeater.7
State of Colorado	Radio Site Repeater	East Canon Complex (ECC)	58			6	ECC.Repeater.8
State of Colorado	Radio Site Repeater	East Canon Complex (ECC)	58			6	ECC.Repeater.9
State of Colorado	Radio Site Repeater	East Canon Complex (ECC)	58			6	ECC.Repeater.10
Eagle County	Radio Site Repeater	East Vail	78			2	East_Vail.Repeater.1
Eagle County	Radio Site Repeater	East Vail	78			2	East_Vail.Repeater.2
Eagle County	Radio Site Repeater	East Vail	78			2	East_Vail.Repeater.3
Eagle County	Radio Site Repeater	East Vail	78			2	East_Vail.Repeater.4
Eagle County	Radio Site Repeater	East Vail	78			2	East_Vail.Repeater.5
State of Colorado	Radio Site Repeater	Egnar	79			2	Egnar.Repeater.1
State of Colorado	Radio Site Repeater	Egnar	79			2	Egnar.Repeater.2
State of Colorado	Radio Site Repeater	Egnar	79			2	Egnar.Repeater.3
State of Colorado	Radio Site Repeater	Egnar	79			2	Egnar.Repeater.4
State of Colorado	Radio Site Repeater	Egnar	79			2	Egnar.Repeater.5
Steamboat Springs, City of	Radio Site Repeater	Emerald Mtn	81			2	Emerald_Mtn.Repeater.1
Steamboat Springs, City of	Radio Site Repeater	Emerald Mtn	81			2	Emerald_Mtn.Repeater.2
Steamboat Springs, City of	Radio Site Repeater	Emerald Mtn	81			2	Emerald_Mtn.Repeater.3
Steamboat Springs, City of	Radio Site Repeater	Emerald Mtn	81			2	Emerald_Mtn.Repeater.4
Steamboat Springs, City of	Radio Site Repeater	Emerald Mtn	81			2	Emerald_Mtn.Repeater.5
State of Colorado	Radio Site Repeater	Farwell	73			2	Farwell.Repeater.1
State of Colorado	Radio Site Repeater	Farwell	73			2	Farwell.Repeater.2
State of Colorado	Radio Site Repeater	Farwell	73			2	Farwell.Repeater.3
State of Colorado	Radio Site Repeater	Farwell	73			2	Farwell.Repeater.4
State of Colorado	Radio Site Repeater	Farwell	73			2	Farwell.Repeater.5
State of Colorado	Radio Site Repeater	Firstview	33			1	Firstview.Repeater.1
State of Colorado	Radio Site Repeater	Firstview	33			1	Firstview.Repeater.2
State of Colorado	Radio Site Repeater	Firstview	33			1	Firstview.Repeater.3
State of Colorado	Radio Site Repeater	Firstview	33			1	Firstview.Repeater.4
State of Colorado	Radio Site Repeater	Firstview	33			1	Firstview.Repeater.5
NCRCN	Radio Site Repeater	Fort Collins PVH	60			3	Fort_Collins_PVH.Repeater.1
NCRCN	Radio Site Repeater	Fort Collins PVH	60			3	Fort_Collins_PVH.Repeater.2
NCRCN	Radio Site Repeater	Fort Collins PVH	60			3	Fort_Collins_PVH.Repeater.3
NCRCN	Radio Site Repeater	Fort Collins PVH	60			3	Fort_Collins_PVH.Repeater.4
NCRCN	Radio Site Repeater	Fort Collins PVH	60			3	Fort_Collins_PVH.Repeater.5
NCRCN	Radio Site Repeater	Fort Collins PVH	60			3	Fort_Collins_PVH.Repeater.6
NCRCN	Radio Site Repeater	Fort Collins PVH	60			3	Fort_Collins_PVH.Repeater.7
State of Colorado	Radio Site Repeater	Fort Lyon CF	55			6	Fort_Lyon_CF.Repeater.1
State of Colorado	Radio Site Repeater	Fort Lyon CF	55			6	Fort_Lyon_CF.Repeater.2
State of Colorado	Radio Site Repeater	Fort Lyon CF	55			6	Fort_Lyon_CF.Repeater.3
State of Colorado	Radio Site Repeater	Fort Lyon CF	55			6	Fort_Lyon_CF.Repeater.4
State of Colorado	Radio Site Repeater	Fort Lyon CF	55			6	Fort_Lyon_CF.Repeater.5
Otero County	Radio Site Repeater	Fort Lyon CF	55			6	Fort_Lyon_CF.Repeater.6
State of Colorado	Radio Site Repeater	Fort Morgan	16			3	Fort_Morgan.Repeater.1
State of Colorado	Radio Site Repeater	Fort Morgan	16			3	Fort_Morgan.Repeater.2
State of Colorado	Radio Site Repeater	Fort Morgan	16			3	Fort_Morgan.Repeater.3
State of Colorado	Radio Site Repeater	Fort Morgan	16			3	Fort_Morgan.Repeater.4
State of Colorado	Radio Site Repeater	Fort Morgan	16			3	Fort_Morgan.Repeater.5
State of Colorado	Radio Site Repeater	Fort Morgan	16			3	Fort_Morgan.Repeater.6
PPRCN	Radio Site Repeater	Fountain Valley	11			4	Fountain_Valley.Repeater.1
PPRCN	Radio Site Repeater	Fountain Valley	11			4	Fountain_Valley.Repeater.2
PPRCN	Radio Site Repeater	Fountain Valley	11			4	Fountain_Valley.Repeater.3
PPRCN	Radio Site Repeater	Fountain Valley	11			4	Fountain_Valley.Repeater.4
PPRCN	Radio Site Repeater	Fountain Valley	11			4	Fountain_Valley.Repeater.5
PPRCN	Radio Site Repeater	Fountain Valley	11			4	Fountain_Valley.Repeater.6
PPRCN	Radio Site Repeater	Fountain Valley	11			4	Fountain_Valley.Repeater.7
PPRCN	Radio Site Repeater	Fountain Valley	11			4	Fountain_Valley.Repeater.8
State of Colorado	Radio Site Repeater	Fowler	34			6	Fowler.Repeater.1
State of Colorado	Radio Site Repeater	Fowler	34			6	Fowler.Repeater.2
State of Colorado	Radio Site Repeater	Fowler	34			6	Fowler.Repeater.3
State of Colorado	Radio Site Repeater	Fowler	34			6	Fowler.Repeater.4
State of Colorado	Radio Site Repeater	Fowler	34			6	Fowler.Repeater.5
State of Colorado	Radio Site Repeater	Fowler	34			6	Fowler.Repeater.6
State of Colorado	Radio Site Repeater	Franktown	10			1	Franktown.Repeater.1
State of Colorado	Radio Site Repeater	Franktown	10			1	Franktown.Repeater.2

			Primary	Only for Transport Links	2nd	Switch Assn or	
State of Colorado	Radio Site Repeater	Franktown	10			1	Franktown.Repeater.3
State of Colorado	Radio Site Repeater	Franktown	10			1	Franktown.Repeater.4
State of Colorado	Radio Site Repeater	Franktown	10			1	Franktown.Repeater.5
State of Colorado	Radio Site Repeater	Franktown	10			1	Franktown.Repeater.6
Huerfano County	Radio Site Repeater	Gardner	53			6	Gardner.Repeater.1
Huerfano County	Radio Site Repeater	Gardner	53			6	Gardner.Repeater.2
Huerfano County	Radio Site Repeater	Gardner	53			6	Gardner.Repeater.3
Huerfano County	Radio Site Repeater	Gardner	53			6	Gardner.Repeater.4
Huerfano County	Radio Site Repeater	Gardner	53			6	Gardner.Repeater.5
Garfield County	Radio Site Repeater	Glenwood	26			2	Glenwood.Repeater.1
Garfield County	Radio Site Repeater	Glenwood	26			2	Glenwood.Repeater.2
Garfield County	Radio Site Repeater	Glenwood	26			2	Glenwood.Repeater.3
Garfield County	Radio Site Repeater	Glenwood	26			2	Glenwood.Repeater.4
Garfield County	Radio Site Repeater	Glenwood	26			2	Glenwood.Repeater.5
Roaring Fork Transportation Authority	Radio Site Repeater	Glenwood	26			2	Glenwood.Repeater.6
Roaring Fork Transportation Authority	Radio Site Repeater	Glenwood	26			2	Glenwood.Repeater.7
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.1
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.2
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.3
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.4
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.5
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.6
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.7
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.8
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.9
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.10
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.11
Pueblo, City of	Radio Site Repeater	Goat Hill	1-2			6	Goat_Hill.Repeater.12
Montrose County	Radio Site Repeater	Gobblers Knob	46			2	Gobblers_Knob.Repeater.1
Montrose County	Radio Site Repeater	Gobblers Knob	46			2	Gobblers_Knob.Repeater.2
Montrose County	Radio Site Repeater	Gobblers Knob	46			2	Gobblers_Knob.Repeater.3
Montrose County	Radio Site Repeater	Gobblers Knob	46			2	Gobblers_Knob.Repeater.4
GJRCC	Radio Site Repeater	Grand Junction	89			2	Grand_Junction.Repeater.1
GJRCC	Radio Site Repeater	Grand Junction	89			2	Grand_Junction.Repeater.2
GJRCC	Radio Site Repeater	Grand Junction	89			2	Grand_Junction.Repeater.3
GJRCC	Radio Site Repeater	Grand Junction	89			2	Grand_Junction.Repeater.4
GJRCC	Radio Site Repeater	Grand Junction	89			2	Grand_Junction.Repeater.5
GJRCC	Radio Site Repeater	Grand Junction	89			2	Grand_Junction.Repeater.6
GJRCC	Radio Site Repeater	Grand Junction	89			2	Grand_Junction.Repeater.7
State of Colorado	Radio Site Repeater	Grand Mesa	1			2	Grand_Mesa.Repeater.1
State of Colorado	Radio Site Repeater	Grand Mesa	1			2	Grand_Mesa.Repeater.2
State of Colorado	Radio Site Repeater	Grand Mesa	1			2	Grand_Mesa.Repeater.3
State of Colorado	Radio Site Repeater	Grand Mesa	1			2	Grand_Mesa.Repeater.4
GJRCC	Radio Site Repeater	Grand Mesa	1			2	Grand_Mesa.Repeater.5
GJRCC	Radio Site Repeater	Grand Mesa	1			2	Grand_Mesa.Repeater.6
GJRCC	Radio Site Repeater	Grand Mesa	1			2	Grand_Mesa.Repeater.7
GJRCC	Radio Site Repeater	Grand Mesa	1			2	Grand_Mesa.Repeater.8
US Bureau of Reclamation	Radio Site Repeater	Granite	33			2	Granite.Repeater.1
US Bureau of Reclamation	Radio Site Repeater	Granite	33			2	Granite.Repeater.2
US Bureau of Reclamation	Radio Site Repeater	Granite	33			2	Granite.Repeater.3
US Bureau of Reclamation	Radio Site Repeater	Granite	33			2	Granite.Repeater.4
US Bureau of Reclamation	Radio Site Repeater	Granite	33			2	Granite.Repeater.5
Lake County	Radio Site Repeater	Granite	33			2	Granite.Repeater.6
State of Colorado	Radio Site Repeater	Grassy	71			2	Grassy.Repeater.1
State of Colorado	Radio Site Repeater	Grassy	71			2	Grassy.Repeater.2
State of Colorado	Radio Site Repeater	Grassy	71			2	Grassy.Repeater.3
State of Colorado	Radio Site Repeater	Grassy	71			2	Grassy.Repeater.4
State of Colorado	Radio Site Repeater	Grassy	71			2	Grassy.Repeater.5
State of Colorado	Radio Site Repeater	Grassy	71			2	Grassy.Repeater.6
State of Colorado	Radio Site Repeater	Greeley - State	14			3	Greeley.Repeater.1
State of Colorado	Radio Site Repeater	Greeley - State	14			3	Greeley.Repeater.2
State of Colorado	Radio Site Repeater	Greeley - State	14			3	Greeley.Repeater.3
State of Colorado	Radio Site Repeater	Greeley - State	14			3	Greeley.Repeater.4
State of Colorado	Radio Site Repeater	Greeley - State	14			3	Greeley.Repeater.5
State of Colorado	Radio Site Repeater	Greeley - State	14			3	Greeley.Repeater.6
State of Colorado	Radio Site Repeater	Greenhorn	35			6	Greenhorn.Repeater.1
State of Colorado	Radio Site Repeater	Greenhorn	35			6	Greenhorn.Repeater.2
State of Colorado	Radio Site Repeater	Greenhorn	35			6	Greenhorn.Repeater.3
State of Colorado	Radio Site Repeater	Greenhorn	35			6	Greenhorn.Repeater.4
State of Colorado	Radio Site Repeater	Greenhorn	35			6	Greenhorn.Repeater.5
State of Colorado	Radio Site Repeater	Greenhorn	35			6	Greenhorn.Repeater.6
State of Colorado	Radio Site Repeater	Grouse	30			2	Grouse.Repeater.1
State of Colorado	Radio Site Repeater	Grouse	30			2	Grouse.Repeater.2
State of Colorado	Radio Site Repeater	Grouse	30			2	Grouse.Repeater.3
State of Colorado	Radio Site Repeater	Grouse	30			2	Grouse.Repeater.4
State of Colorado	Radio Site Repeater	Grouse	30			2	Grouse.Repeater.5
State of Colorado	Radio Site Repeater	Gunbarrel	54			3	Gunbarrel.Repeater.1
State of Colorado	Radio Site Repeater	Gunbarrel	54			3	Gunbarrel.Repeater.2
State of Colorado	Radio Site Repeater	Gunbarrel	54			3	Gunbarrel.Repeater.3
State of Colorado	Radio Site Repeater	Gunbarrel	54			3	Gunbarrel.Repeater.4
State of Colorado	Radio Site Repeater	Gunbarrel	54			3	Gunbarrel.Repeater.5

			Primary	Only for Transport Links	2nd	Switch Assn or	
Longmont, City of	Radio Site Repeater	Gunbarrel	54			3	Gunbarrel.Repeater.6
RTD	Radio Site Repeater	Gunbarrel	54			3	Gunbarrel.Repeater.7
RTD	Radio Site Repeater	Gunbarrel	54			3	Gunbarrel.Repeater.8
RTD	Radio Site Repeater	Gunbarrel	54			3	Gunbarrel.Repeater.9
US Bureau of Reclamation	Radio Site Repeater	Hagerman Pass	32			2	Hagerman_Pass.Repeater.1
US Bureau of Reclamation	Radio Site Repeater	Hagerman Pass	32			2	Hagerman_Pass.Repeater.2
US Bureau of Reclamation	Radio Site Repeater	Hagerman Pass	32			2	Hagerman_Pass.Repeater.3
US Bureau of Reclamation	Radio Site Repeater	Hagerman Pass	32			2	Hagerman_Pass.Repeater.4
US Bureau of Reclamation	Radio Site Repeater	Hagerman Pass	32			2	Hagerman_Pass.Repeater.5
Lake County	Radio Site Repeater	Hagerman Pass	32			2	Hagerman_Pass.Repeater.6
State of Colorado	Radio Site Repeater	Harper Hill	39			2	Harper_Hill.Repeater.1
State of Colorado	Radio Site Repeater	Harper Hill	39			2	Harper_Hill.Repeater.2
State of Colorado	Radio Site Repeater	Harper Hill	39			2	Harper_Hill.Repeater.3
State of Colorado	Radio Site Repeater	Harper Hill	39			2	Harper_Hill.Repeater.4
State of Colorado	Radio Site Repeater	Harper Hill	39			2	Harper_Hill.Repeater.5
State of Colorado	Radio Site Repeater	Haswell	36			6	Haswell.Repeater.1
State of Colorado	Radio Site Repeater	Haswell	36			6	Haswell.Repeater.2
State of Colorado	Radio Site Repeater	Haswell	36			6	Haswell.Repeater.3
State of Colorado	Radio Site Repeater	Haswell	36			6	Haswell.Repeater.4
State of Colorado	Radio Site Repeater	Haswell	36			6	Haswell.Repeater.5
State of Colorado	Radio Site Repeater	Hayden	67			2	Hayden.Repeater.1
State of Colorado	Radio Site Repeater	Hayden	67			2	Hayden.Repeater.2
State of Colorado	Radio Site Repeater	Hayden	67			2	Hayden.Repeater.3
State of Colorado	Radio Site Repeater	Hayden	67			2	Hayden.Repeater.4
State of Colorado	Radio Site Repeater	Hayden	67			2	Hayden.Repeater.5
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.1
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.2
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.3
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.4
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.5
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.6
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.7
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.8
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.9
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.10
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.11
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.12
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.13
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.14
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.15
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.16
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.17
Douglas County	Radio Site Repeater	Hess	14-x			1	Hess.Repeater.18
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.1
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.2
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.3
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.4
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.5
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.6
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.7
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.8
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.9
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.10
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.11
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.12
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.13
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.14
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.15
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.16
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.17
Douglas County	Radio Site Repeater	Hidden Mesa	14-x			1	Hidden.Mesa.Repeater.18
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.1
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.2
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.3
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.4
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.5
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.6
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.7
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.8
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.9
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.10
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.11
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.12
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.13
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.14
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.15
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.16
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.17
Douglas County	Radio Site Repeater	Highlands Ranch	14-x			1	Highlands.Ranch.Repeater.18
State of Colorado	Radio Site Repeater	Hill 71	80			2	Hill_71.Repeater.1
State of Colorado	Radio Site Repeater	Hill 71	80			2	Hill_71.Repeater.2

			Primary	Only for Transport Links	2nd	Switch Assn or	
State of Colorado	Radio Site Repeater	Hill 71	80			2	Hill_71.Repeater.3
State of Colorado	Radio Site Repeater	Hill 71	80			2	Hill_71.Repeater.4
State of Colorado	Radio Site Repeater	Hill 71	80			2	Hill_71.Repeater.5
State of Colorado	Radio Site Repeater	Holly	44			6	Holly.Repeater.1
State of Colorado	Radio Site Repeater	Holly	44			6	Holly.Repeater.2
State of Colorado	Radio Site Repeater	Holly	44			6	Holly.Repeater.3
State of Colorado	Radio Site Repeater	Holly	44			6	Holly.Repeater.4
State of Colorado	Radio Site Repeater	Holly	44			6	Holly.Repeater.5
NCRCN	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.1
NCRCN	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.2
NCRCN	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.3
NCRCN	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.4
NCRCN	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.5
NCRCN	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.6
NCRCN	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.7
NCRCN	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.8
NCRCN	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.9
Larimer County	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.10
Larimer County	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.11
Larimer County	Radio Site Repeater	Horsetooth	62			3	Horsetooth.Repeater.12
State of Colorado	Radio Site Repeater	Hugo	63			1	Hugo.Repeater.1
State of Colorado	Radio Site Repeater	Hugo	63			1	Hugo.Repeater.2
State of Colorado	Radio Site Repeater	Hugo	63			1	Hugo.Repeater.3
State of Colorado	Radio Site Repeater	Hugo	63			1	Hugo.Repeater.4
State of Colorado	Radio Site Repeater	Hugo	63			1	Hugo.Repeater.5
State of Colorado	Radio Site Repeater	Idalia	31			3	Idalia.Repeater.1
State of Colorado	Radio Site Repeater	Idalia	31			3	Idalia.Repeater.2
State of Colorado	Radio Site Repeater	Idalia	31			3	Idalia.Repeater.3
State of Colorado	Radio Site Repeater	Idalia	31			3	Idalia.Repeater.4
State of Colorado	Radio Site Repeater	Idalia	31			3	Idalia.Repeater.5
Southern Ute	Radio Site Repeater	Ignacio	90			2	Ignacio.Repeater.1
Southern Ute	Radio Site Repeater	Ignacio	90			2	Ignacio.Repeater.2
Southern Ute	Radio Site Repeater	Ignacio	90			2	Ignacio.Repeater.3
Southern Ute	Radio Site Repeater	Ignacio	90			2	Ignacio.Repeater.4
Southern Ute	Radio Site Repeater	Ignacio	90			2	Ignacio.Repeater.5
Southern Ute	Radio Site Repeater	Ignacio	90			2	Ignacio.Repeater.6
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.1
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.2
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.3
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.4
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.5
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.6
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.7
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.8
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.9
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.10
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.11
Pueblo, City of	Radio Site Repeater	Jackson Hill	1-3			6	Jackson_Hill.Repeater.12
State of Colorado	Radio Site Repeater	Julesburg	35			3	Julesburg.Repeater.1
State of Colorado	Radio Site Repeater	Julesburg	35			3	Julesburg.Repeater.2
State of Colorado	Radio Site Repeater	Julesburg	35			3	Julesburg.Repeater.3
State of Colorado	Radio Site Repeater	Julesburg	35			3	Julesburg.Repeater.4
State of Colorado	Radio Site Repeater	Julesburg	35			3	Julesburg.Repeater.5
State of Colorado	Radio Site Repeater	Juniper Mtn	25			2	Juniper_Mtn.Repeater.1
State of Colorado	Radio Site Repeater	Juniper Mtn	25			2	Juniper_Mtn.Repeater.2
State of Colorado	Radio Site Repeater	Juniper Mtn	25			2	Juniper_Mtn.Repeater.3
State of Colorado	Radio Site Repeater	Juniper Mtn	25			2	Juniper_Mtn.Repeater.4
State of Colorado	Radio Site Repeater	Juniper Mtn	25			2	Juniper_Mtn.Repeater.5
State of Colorado	Radio Site Repeater	Kim	25			6	Kim.Repeater.1
State of Colorado	Radio Site Repeater	Kim	25			6	Kim.Repeater.2
State of Colorado	Radio Site Repeater	Kim	25			6	Kim.Repeater.3
State of Colorado	Radio Site Repeater	Kim	25			6	Kim.Repeater.4
State of Colorado	Radio Site Repeater	Kim	25			6	Kim.Repeater.5
State of Colorado	Radio Site Repeater	King Mountain	31			2	King_Mountain.Repeater.1
State of Colorado	Radio Site Repeater	King Mountain	31			2	King_Mountain.Repeater.2
State of Colorado	Radio Site Repeater	King Mountain	31			2	King_Mountain.Repeater.3
State of Colorado	Radio Site Repeater	King Mountain	31			2	King_Mountain.Repeater.4
State of Colorado	Radio Site Repeater	King Mountain	31			2	King_Mountain.Repeater.5
State of Colorado	Radio Site Repeater	Kiowa	72			1	Kiowa.Repeater.1
State of Colorado	Radio Site Repeater	Kiowa	72			1	Kiowa.Repeater.2
State of Colorado	Radio Site Repeater	Kiowa	72			1	Kiowa.Repeater.3
State of Colorado	Radio Site Repeater	Kiowa	72			1	Kiowa.Repeater.4
State of Colorado	Radio Site Repeater	Kiowa	72			1	Kiowa.Repeater.5
State of Colorado	Radio Site Repeater	Kiowa	72			1	Kiowa.Repeater.6
La Junta, City of	Radio Site Repeater	La Junta	68			6	La_Junta.Repeater.1
La Junta, City of	Radio Site Repeater	La Junta	68			6	La_Junta.Repeater.2
La Junta, City of	Radio Site Repeater	La Junta	68			6	La_Junta.Repeater.3
La Junta, City of	Radio Site Repeater	La Junta	68			6	La_Junta.Repeater.4
La Junta, City of	Radio Site Repeater	La Junta	68			6	La_Junta.Repeater.5
La Junta, City of	Radio Site Repeater	La Junta	68			6	La_Junta.Repeater.6
State of Colorado	Radio Site Repeater	La Monte Peak	9			2	La_Monte_Peak.Repeater.1

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State of Colorado	Radio Site Repeater	La Monte Peak	9			2	La_Monte_Peak.Repeater.2
State of Colorado	Radio Site Repeater	La Monte Peak	9			2	La_Monte_Peak.Repeater.3
State of Colorado	Radio Site Repeater	La Monte Peak	9			2	La_Monte_Peak.Repeater.4
SW Region	Radio Site Repeater	La Monte Peak	9			2	La_Monte_Peak.Repeater.5
SW Region	Radio Site Repeater	La Monte Peak	9			2	La_Monte_Peak.Repeater.6
State of Colorado	Radio Site Repeater	La Veta	32			6	La_Veta.Repeater.1
State of Colorado	Radio Site Repeater	La Veta	32			6	La_Veta.Repeater.2
State of Colorado	Radio Site Repeater	La Veta	32			6	La_Veta.Repeater.3
State of Colorado	Radio Site Repeater	La Veta	32			6	La_Veta.Repeater.4
State of Colorado	Radio Site Repeater	La Veta	32			6	La_Veta.Repeater.5
State of Colorado	Radio Site Repeater	La Veta	32			6	La_Veta.Repeater.6
State of Colorado	Radio Site Repeater	Lake Hill	57			2	Lake_Hill.Repeater.1
State of Colorado	Radio Site Repeater	Lake Hill	57			2	Lake_Hill.Repeater.2
State of Colorado	Radio Site Repeater	Lake Hill	57			2	Lake_Hill.Repeater.3
State of Colorado	Radio Site Repeater	Lake Hill	57			2	Lake_Hill.Repeater.4
State of Colorado	Radio Site Repeater	Lake Hill	57			2	Lake_Hill.Repeater.5
State of Colorado	Radio Site Repeater	Lamar	18			6	Lamar.Repeater.1
State of Colorado	Radio Site Repeater	Lamar	18			6	Lamar.Repeater.2
State of Colorado	Radio Site Repeater	Lamar	18			6	Lamar.Repeater.3
State of Colorado	Radio Site Repeater	Lamar	18			6	Lamar.Repeater.4
State of Colorado	Radio Site Repeater	Lamar	18			6	Lamar.Repeater.5
Douglas County	Radio Site Repeater	Larkspur	52-x			1	Larkspur.Repeater.1
Douglas County	Radio Site Repeater	Larkspur	52-x			1	Larkspur.Repeater.2
Douglas County	Radio Site Repeater	Larkspur	52-x			1	Larkspur.Repeater.3
Douglas County	Radio Site Repeater	Larkspur	52-x			1	Larkspur.Repeater.4
Douglas County	Radio Site Repeater	Larkspur	52-x			1	Larkspur.Repeater.5
Douglas County	Radio Site Repeater	Larkspur	52-x			1	Larkspur.Repeater.6
Douglas County	Radio Site Repeater	Larkspur	52-x			1	Larkspur.Repeater.7
Douglas County	Radio Site Repeater	Larkspur	52-x			1	Larkspur.Repeater.8
Douglas County	Radio Site Repeater	Larkspur	52-x			1	Larkspur.Repeater.9
Douglas County	Radio Site Repeater	Larkspur	52-x			1	Larkspur.Repeater.10
State of Colorado	Radio Site Repeater	Last Chance	39			3	Last_Chance.Repeater.1
State of Colorado	Radio Site Repeater	Last Chance	39			3	Last_Chance.Repeater.2
State of Colorado	Radio Site Repeater	Last Chance	39			3	Last_Chance.Repeater.3
State of Colorado	Radio Site Repeater	Last Chance	39			3	Last_Chance.Repeater.4
State of Colorado	Radio Site Repeater	Last Chance	39			3	Last_Chance.Repeater.5
State of Colorado	Radio Site Repeater	Last Dollar	24			2	Last_Dollar.Repeater.1
State of Colorado	Radio Site Repeater	Last Dollar	24			2	Last_Dollar.Repeater.2
State of Colorado	Radio Site Repeater	Last Dollar	24			2	Last_Dollar.Repeater.3
State of Colorado	Radio Site Repeater	Last Dollar	24			2	Last_Dollar.Repeater.4
State of Colorado	Radio Site Repeater	Last Dollar	24			2	Last_Dollar.Repeater.5
GJRCC	Radio Site Repeater	Lee's Point	43			2	Lee's_Point.Repeater.1
GJRCC	Radio Site Repeater	Lee's Point	43			2	Lee's_Point.Repeater.2
GJRCC	Radio Site Repeater	Lee's Point	43			2	Lee's_Point.Repeater.3
GJRCC	Radio Site Repeater	Lee's Point	43			2	Lee's_Point.Repeater.4
GJRCC	Radio Site Repeater	Lee's Point	43			2	Lee's_Point.Repeater.5
State of Colorado	Radio Site Repeater	Limon CF	38			1	Limon_CF.Repeater.1
State of Colorado	Radio Site Repeater	Limon CF	38			1	Limon_CF.Repeater.2
State of Colorado	Radio Site Repeater	Limon CF	38			1	Limon_CF.Repeater.3
State of Colorado	Radio Site Repeater	Limon CF	38			1	Limon_CF.Repeater.4
State of Colorado	Radio Site Repeater	Limon CF	38			1	Limon_CF.Repeater.5
Rio Blanco County	Radio Site Repeater	Lobo	82			2	Lobo.Repeater.1
Rio Blanco County	Radio Site Repeater	Lobo	82			2	Lobo.Repeater.2
Rio Blanco County	Radio Site Repeater	Lobo	82			2	Lobo.Repeater.3
Rio Blanco County	Radio Site Repeater	Lobo	82			2	Lobo.Repeater.4
Rio Blanco County	Radio Site Repeater	Lobo	82			2	Lobo.Repeater.5
Rio Blanco County	Radio Site Repeater	Lobo	82			2	Lobo.Repeater.6
State of Colorado	Radio Site Repeater	Log Hill	38			2	Log_Hill.Repeater.1
State of Colorado	Radio Site Repeater	Log Hill	38			2	Log_Hill.Repeater.2
State of Colorado	Radio Site Repeater	Log Hill	38			2	Log_Hill.Repeater.3
State of Colorado	Radio Site Repeater	Log Hill	38			2	Log_Hill.Repeater.4
State of Colorado	Radio Site Repeater	Log Hill	38			2	Log_Hill.Repeater.5
Longmont, City of	Radio Site Repeater	Longmont	56			3	Longmont.Repeater.1
Longmont, City of	Radio Site Repeater	Longmont	56			3	Longmont.Repeater.2
Longmont, City of	Radio Site Repeater	Longmont	56			3	Longmont.Repeater.3
Longmont, City of	Radio Site Repeater	Longmont	56			3	Longmont.Repeater.4
Longmont, City of	Radio Site Repeater	Longmont	56			3	Longmont.Repeater.5
Longmont, City of	Radio Site Repeater	Longmont	56			3	Longmont.Repeater.6
Jefferson County	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.1
Jefferson County	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.2
Jefferson County	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.3
Jefferson County	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.4
Jefferson County	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.5
Jefferson County	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.6
Jefferson County	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.7
Jefferson County	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.8
Jefferson County	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.9
Arapahoe County	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.10
State of Colorado	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.11
State of Colorado	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.12
State of Colorado	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.13

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State of Colorado	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.14
State of Colorado	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.15
State of Colorado	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.16
ADCOM	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.17
ADCOM	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.18
ADCOM	Radio Site Repeater	Lookout	8			1	Lookout.Repeater.19
NCRCN	Radio Site Repeater	Loveland	63			3	Loveland.Repeater.1
NCRCN	Radio Site Repeater	Loveland	63			3	Loveland.Repeater.1
NCRCN	Radio Site Repeater	Loveland	63			3	Loveland.Repeater.1
NCRCN	Radio Site Repeater	Loveland	63			3	Loveland.Repeater.1
NCRCN	Radio Site Repeater	Loveland	63			3	Loveland.Repeater.1
NCRCN	Radio Site Repeater	Loveland	63			3	Loveland.Repeater.1
State of Colorado	Radio Site Repeater	Loveland Ski	21			1	Loveland_Ski.Repeater.1
State of Colorado	Radio Site Repeater	Loveland Ski	21			1	Loveland_Ski.Repeater.2
State of Colorado	Radio Site Repeater	Loveland Ski	21			1	Loveland_Ski.Repeater.3
State of Colorado	Radio Site Repeater	Loveland Ski	21			1	Loveland_Ski.Repeater.4
State of Colorado	Radio Site Repeater	Loveland Ski	21			1	Loveland_Ski.Repeater.5
Eagle County	Radio Site Repeater	Lower Beaver Creek	95			2	Lower_Beaver_Creek.Repeater.1
Eagle County	Radio Site Repeater	Lower Beaver Creek	95			2	Lower_Beaver_Creek.Repeater.2
Eagle County	Radio Site Repeater	Lower Beaver Creek	95			2	Lower_Beaver_Creek.Repeater.3
Eagle County	Radio Site Repeater	Lower Beaver Creek	95			2	Lower_Beaver_Creek.Repeater.4
Eagle County	Radio Site Repeater	Lower Beaver Creek	95			2	Lower_Beaver_Creek.Repeater.5
Eagle County	Radio Site Repeater	Lower Dowd	50			2	Lower_Dowd.Repeater.1
Eagle County	Radio Site Repeater	Lower Dowd	50			2	Lower_Dowd.Repeater.2
Eagle County	Radio Site Repeater	Lower Dowd	50			2	Lower_Dowd.Repeater.3
Eagle County	Radio Site Repeater	Lower Dowd	50			2	Lower_Dowd.Repeater.4
Eagle County	Radio Site Repeater	Lower Dowd	50			2	Lower_Dowd.Repeater.5
Eagle County	Radio Site Repeater	Lower Dowd	50			2	Lower_Dowd.Repeater.6
Eagle County	Radio Site Repeater	Lower Dowd	50			2	Lower_Dowd.Repeater.7
State of Colorado	Radio Site Repeater	Lower Dowd	50			2	Lower_Dowd.Repeater.8
Holy Cross	Radio Site Repeater	Marble	97			2	Marble.Repeater.1
Holy Cross	Radio Site Repeater	Marble	97			2	Marble.Repeater.2
Holy Cross	Radio Site Repeater	Marble	97			2	Marble.Repeater.3
Holy Cross	Radio Site Repeater	Marble	97			2	Marble.Repeater.4
Rio Blanco County	Radio Site Repeater	Marvine Hill	88			2	Marvine_Hill.Repeater.1
Rio Blanco County	Radio Site Repeater	Marvine Hill	88			2	Marvine_Hill.Repeater.2
Rio Blanco County	Radio Site Repeater	Marvine Hill	88			2	Marvine_Hill.Repeater.3
Rio Blanco County	Radio Site Repeater	Marvine Hill	88			2	Marvine_Hill.Repeater.4
Rio Blanco County	Radio Site Repeater	Marvine Hill	88			2	Marvine_Hill.Repeater.5
Rio Blanco County	Radio Site Repeater	Marvine Hill	88			2	Marvine_Hill.Repeater.6
Broomfield, City of	Radio Site Repeater	Mead	12			1	Mead.Repeater.1
State of Colorado	Radio Site Repeater	Mead	12			1	Mead.Repeater.2
State of Colorado	Radio Site Repeater	Mead	12			1	Mead.Repeater.3
State of Colorado	Radio Site Repeater	Mead	12			1	Mead.Repeater.4
State of Colorado	Radio Site Repeater	Mead	12			1	Mead.Repeater.5
State of Colorado	Radio Site Repeater	Mead	12			1	Mead.Repeater.6
State of Colorado	Radio Site Repeater	Mead	12			1	Mead.Repeater.7
Weld County	Radio Site Repeater	Mead	12			1	Mead.Repeater.8
Longmont, City of	Radio Site Repeater	Mead	12			1	Mead.Repeater.9
Longmont, City of	Radio Site Repeater	Mead	12			1	Mead.Repeater.10
Longmont, City of	Radio Site Repeater	Mead	12			1	Mead.Repeater.11
Longmont, City of	Radio Site Repeater	Mead	12			1	Mead.Repeater.12
Rio Blanco County	Radio Site Repeater	Mellen Hill	87			2	Mellen_Hill.Repeater.1
Rio Blanco County	Radio Site Repeater	Mellen Hill	87			2	Mellen_Hill.Repeater.2
Rio Blanco County	Radio Site Repeater	Mellen Hill	87			2	Mellen_Hill.Repeater.3
Rio Blanco County	Radio Site Repeater	Mellen Hill	87			2	Mellen_Hill.Repeater.4
Rio Blanco County	Radio Site Repeater	Mellen Hill	87			2	Mellen_Hill.Repeater.5
Rio Blanco County	Radio Site Repeater	Mellen Hill	87			2	Mellen_Hill.Repeater.6
GJRCC	Radio Site Repeater	Mesa Point	60			2	Mesa_Point.Repeater.1
GJRCC	Radio Site Repeater	Mesa Point	60			2	Mesa_Point.Repeater.2
GJRCC	Radio Site Repeater	Mesa Point	60			2	Mesa_Point.Repeater.3
GJRCC	Radio Site Repeater	Mesa Point	60			2	Mesa_Point.Repeater.4
GJRCC	Radio Site Repeater	Mesa Point	60			2	Mesa_Point.Repeater.5
GJRCC	Radio Site Repeater	Mesa Point	60			2	Mesa_Point.Repeater.6
Mesa County	Radio Site Repeater	Mesa Point	60			2	Mesa_Point.Repeater.7
State of Colorado	Radio Site Repeater	Methodist	50			6	Methodist.Repeater.1
State of Colorado	Radio Site Repeater	Methodist	50			6	Methodist.Repeater.2
State of Colorado	Radio Site Repeater	Methodist	50			6	Methodist.Repeater.3
State of Colorado	Radio Site Repeater	Methodist	50			6	Methodist.Repeater.4
State of Colorado	Radio Site Repeater	Methodist	50			6	Methodist.Repeater.5
State of Colorado	Radio Site Repeater	Methodist	50			6	Methodist.Repeater.6
State of Colorado	Radio Site Repeater	Mines	11			1	Mines.Repeater.1
State of Colorado	Radio Site Repeater	Mines	11			1	Mines.Repeater.2
State of Colorado	Radio Site Repeater	Mines	11			1	Mines.Repeater.3
State of Colorado	Radio Site Repeater	Mines	11			1	Mines.Repeater.4
State of Colorado	Radio Site Repeater	Mines	11			1	Mines.Repeater.5
State of Colorado	Radio Site Repeater	Missionary Ridge	14			2	Missionary_Ridge.Repeater.1
State of Colorado	Radio Site Repeater	Missionary Ridge	14			2	Missionary_Ridge.Repeater.2
State of Colorado	Radio Site Repeater	Missionary Ridge	14			2	Missionary_Ridge.Repeater.3
State of Colorado	Radio Site Repeater	Missionary Ridge	14			2	Missionary_Ridge.Repeater.4
SW Region	Radio Site Repeater	Missionary Ridge	14			2	Missionary_Ridge.Repeater.5

			Primary	Only for Transport Links	2nd	Switch Assn or	
SW Region	Radio Site Repeater	Missionary Ridge	14			2	Missionary_Ridge.Repeater.6
State of Colorado	Radio Site Repeater	Monarch	20			6	Monarch.Repeater.1
State of Colorado	Radio Site Repeater	Monarch	20			6	Monarch.Repeater.2
State of Colorado	Radio Site Repeater	Monarch	20			6	Monarch.Repeater.3
State of Colorado	Radio Site Repeater	Monarch	20			6	Monarch.Repeater.4
State of Colorado	Radio Site Repeater	Monarch	20			6	Monarch.Repeater.5
State of Colorado	Radio Site Repeater	Monte Vista	61			2	Monte_Vista.Repeater.1
State of Colorado	Radio Site Repeater	Monte Vista	61			2	Monte_Vista.Repeater.2
State of Colorado	Radio Site Repeater	Monte Vista	61			2	Monte_Vista.Repeater.3
State of Colorado	Radio Site Repeater	Monte Vista	61			2	Monte_Vista.Repeater.4
State of Colorado	Radio Site Repeater	Monte Vista	61			2	Monte_Vista.Repeater.5
Garfield County	Radio Site Repeater	Monument	36			2	Monument.Repeater.1
Garfield County	Radio Site Repeater	Monument	36			2	Monument.Repeater.2
Garfield County	Radio Site Repeater	Monument	36			2	Monument.Repeater.3
Garfield County	Radio Site Repeater	Monument	36			2	Monument.Repeater.4
Garfield County	Radio Site Repeater	Monument	36			2	Monument.Repeater.5
Garfield County	Radio Site Repeater	Mt Callahan	17			2	Mt_Callahan.Repeater.1
Garfield County	Radio Site Repeater	Mt Callahan	17			2	Mt_Callahan.Repeater.2
Garfield County	Radio Site Repeater	Mt Callahan	17			2	Mt_Callahan.Repeater.3
Garfield County	Radio Site Repeater	Mt Callahan	17			2	Mt_Callahan.Repeater.4
Garfield County	Radio Site Repeater	Mt Callahan	17			2	Mt_Callahan.Repeater.5
Mesa County	Radio Site Repeater	Mt Callahan	17			2	Mt_Callahan.Repeater.6
State of Colorado	Radio Site Repeater	Mt Carmel	27			6	Mt_Carmel.Repeater.1
State of Colorado	Radio Site Repeater	Mt Carmel	27			6	Mt_Carmel.Repeater.2
State of Colorado	Radio Site Repeater	Mt Carmel	27			6	Mt_Carmel.Repeater.3
State of Colorado	Radio Site Repeater	Mt Carmel	27			6	Mt_Carmel.Repeater.4
State of Colorado	Radio Site Repeater	Mt Carmel	27			6	Mt_Carmel.Repeater.5
Garfield County	Radio Site Repeater	New Castle	84			2	New_Castle.Repeater.1
Garfield County	Radio Site Repeater	New Castle	84			2	New_Castle.Repeater.2
Garfield County	Radio Site Repeater	New Castle	84			2	New_Castle.Repeater.3
Garfield County	Radio Site Repeater	New Castle	84			2	New_Castle.Repeater.4
Garfield County	Radio Site Repeater	New Castle	84			2	New_Castle.Repeater.5
State of Colorado	Radio Site Repeater	New Raymer-State	25			3	New_Raymer.Repeater.1
State of Colorado	Radio Site Repeater	New Raymer-State	25			3	New_Raymer.Repeater.2
State of Colorado	Radio Site Repeater	New Raymer-State	25			3	New_Raymer.Repeater.3
State of Colorado	Radio Site Repeater	New Raymer-State	25			3	New_Raymer.Repeater.4
State of Colorado	Radio Site Repeater	New Raymer-State	25			3	New_Raymer.Repeater.5
Grand County	Radio Site Repeater	North Cottonwood	40			3	North Cottonwood.Repeater.1
Grand County	Radio Site Repeater	North Cottonwood	40			3	North Cottonwood.Repeater.2
Grand County	Radio Site Repeater	North Cottonwood	40			3	North Cottonwood.Repeater.3
Grand County	Radio Site Repeater	North Cottonwood	40			3	North Cottonwood.Repeater.4
Grand County	Radio Site Repeater	North Cottonwood	40			3	North Cottonwood.Repeater.5
Grand County	Radio Site Repeater	North Cottonwood	40			3	North Cottonwood.Repeater.6
State of Colorado	Radio Site Repeater	North Mtn	18			2	North_Mtn.Repeater.1
State of Colorado	Radio Site Repeater	North Mtn	18			2	North_Mtn.Repeater.2
State of Colorado	Radio Site Repeater	North Mtn	18			2	North_Mtn.Repeater.3
State of Colorado	Radio Site Repeater	North Mtn	18			2	North_Mtn.Repeater.4
State of Colorado	Radio Site Repeater	North Mtn	18			2	North_Mtn.Repeater.5
State of Colorado	Radio Site Repeater	Oak Brush Hill	19			2	Oak_Brush_Hill.Repeater.1
State of Colorado	Radio Site Repeater	Oak Brush Hill	19			2	Oak_Brush_Hill.Repeater.2
State of Colorado	Radio Site Repeater	Oak Brush Hill	19			2	Oak_Brush_Hill.Repeater.3
State of Colorado	Radio Site Repeater	Oak Brush Hill	19			2	Oak_Brush_Hill.Repeater.4
SW Region	Radio Site Repeater	Oak Brush Hill	19			2	Oak_Brush_Hill.Repeater.5
SW Region	Radio Site Repeater	Oak Brush Hill	19			2	Oak_Brush_Hill.Repeater.6
Routt County	Radio Site Repeater	Oak Creek	92			2	Oak_Creek.Repeater.1
Routt County	Radio Site Repeater	Oak Creek	92			2	Oak_Creek.Repeater.2
Routt County	Radio Site Repeater	Oak Creek	92			2	Oak_Creek.Repeater.3
Routt County	Radio Site Repeater	Oak Creek	92			2	Oak_Creek.Repeater.4
Routt County	Radio Site Repeater	Oak Creek	92			2	Oak_Creek.Repeater.5
Routt County	Radio Site Repeater	Oak Creek	92			2	Oak_Creek.Repeater.6
Garfield County	Radio Site Repeater	Parachute	13			2	Parachute.Repeater.1
Garfield County	Radio Site Repeater	Parachute	13			2	Parachute.Repeater.2
Garfield County	Radio Site Repeater	Parachute	13			2	Parachute.Repeater.3
Garfield County	Radio Site Repeater	Parachute	13			2	Parachute.Repeater.4
Garfield County	Radio Site Repeater	Parachute	13			2	Parachute.Repeater.5
Morgan County	Radio Site Repeater	Pawnee	29			3	Pawnee.Repeater.1
Morgan County	Radio Site Repeater	Pawnee	29			3	Pawnee.Repeater.2
Morgan County	Radio Site Repeater	Pawnee	29			3	Pawnee.Repeater.3
Morgan County	Radio Site Repeater	Pawnee	29			3	Pawnee.Repeater.4
Morgan County	Radio Site Repeater	Pawnee	29			3	Pawnee.Repeater.5
Morgan County	Radio Site Repeater	Pawnee	29			3	Pawnee.Repeater.6
State of Colorado	Radio Site Repeater	Peetz	28			3	Peetz.Repeater.1
State of Colorado	Radio Site Repeater	Peetz	28			3	Peetz.Repeater.2
State of Colorado	Radio Site Repeater	Peetz	28			3	Peetz.Repeater.3
State of Colorado	Radio Site Repeater	Peetz	28			3	Peetz.Repeater.4
State of Colorado	Radio Site Repeater	Peetz	28			3	Peetz.Repeater.5
State of Colorado	Radio Site Repeater	Phillips	53			3	Phillips.Repeater.1
State of Colorado	Radio Site Repeater	Phillips	53			3	Phillips.Repeater.2
State of Colorado	Radio Site Repeater	Phillips	53			3	Phillips.Repeater.3
State of Colorado	Radio Site Repeater	Phillips	53			3	Phillips.Repeater.4
State of Colorado	Radio Site Repeater	Phillips	53			3	Phillips.Repeater.5

			Primary	Only for Transport Links	2nd	Switch Assn or	
PPRCN	Radio Site Repeater	Pittsburg	18			4	Phittsburg.Repeater.1
PPRCN	Radio Site Repeater	Pittsburg	18			4	Phittsburg.Repeater.2
PPRCN	Radio Site Repeater	Pittsburg	18			4	Phittsburg.Repeater.3
PPRCN	Radio Site Repeater	Pittsburg	18			4	Phittsburg.Repeater.4
PPRCN	Radio Site Repeater	Pittsburg	18			4	Phittsburg.Repeater.5
PPRCN	Radio Site Repeater	Pittsburg	18			4	Phittsburg.Repeater.6
PPRCN	Radio Site Repeater	Pittsburg	18			4	Phittsburg.Repeater.7
State of Colorado	Radio Site Repeater	Point of Rocks	15			3	Point_of_Rocks.Repeater.1
State of Colorado	Radio Site Repeater	Point of Rocks	15			3	Point_of_Rocks.Repeater.2
State of Colorado	Radio Site Repeater	Point of Rocks	15			3	Point_of_Rocks.Repeater.3
State of Colorado	Radio Site Repeater	Point of Rocks	15			3	Point_of_Rocks.Repeater.4
State of Colorado	Radio Site Repeater	Point of Rocks	15			3	Point_of_Rocks.Repeater.5
State of Colorado	Radio Site Repeater	Point of Rocks	15			3	Point_of_Rocks.Repeater.6
Weld County	Radio Site Repeater	Point of Rocks	15			3	Point_of_Rocks.Repeater.7
State of Colorado	Radio Site Repeater	Poncha Springs	70			6	Poncha_Springs.Repeater.1
State of Colorado	Radio Site Repeater	Poncha Springs	70			6	Poncha_Springs.Repeater.2
State of Colorado	Radio Site Repeater	Poncha Springs	70			6	Poncha_Springs.Repeater.3
State of Colorado	Radio Site Repeater	Poncha Springs	70			6	Poncha_Springs.Repeater.4
State of Colorado	Radio Site Repeater	Poncha Springs	70			6	Poncha_Springs.Repeater.5
State of Colorado	Radio Site Repeater	Pooltable	42			2	Pooltable.Repeater.1
State of Colorado	Radio Site Repeater	Pooltable	42			2	Pooltable.Repeater.2
State of Colorado	Radio Site Repeater	Pooltable	42			2	Pooltable.Repeater.3
State of Colorado	Radio Site Repeater	Pooltable	42			2	Pooltable.Repeater.4
State of Colorado	Radio Site Repeater	Pooltable	42			2	Pooltable.Repeater.5
State of Colorado	Radio Site Repeater	Pooltable	42			2	Pooltable.Repeater.6
State of Colorado	Radio Site Repeater	Prospect	52			3	Prospect.Repeater.1
State of Colorado	Radio Site Repeater	Prospect	52			3	Prospect.Repeater.2
State of Colorado	Radio Site Repeater	Prospect	52			3	Prospect.Repeater.3
State of Colorado	Radio Site Repeater	Prospect	52			3	Prospect.Repeater.4
State of Colorado	Radio Site Repeater	Prospect	52			3	Prospect.Repeater.5
Larimer County	Radio Site Repeater	Prospect	52			3	Prospect.Repeater.6
Pueblo County	Radio Site Repeater	Pueblo Chem Depot	62			6	Pueblo_Chem.Repeater.1
Pueblo County	Radio Site Repeater	Pueblo Chem Depot	62			6	Pueblo_Chem.Repeater.2
Pueblo County	Radio Site Repeater	Pueblo Chem Depot	62			6	Pueblo_Chem.Repeater.3
Pueblo County	Radio Site Repeater	Pueblo Chem Depot	62			6	Pueblo_Chem.Repeater.4
Pueblo County	Radio Site Repeater	Pueblo Chem Depot	62			6	Pueblo_Chem.Repeater.5
Pueblo County	Radio Site Repeater	Pueblo Chem Depot	62			6	Pueblo_Chem.Repeater.6
Pueblo County	Radio Site Repeater	Pueblo Chem Depot	62			6	Pueblo_Chem.Repeater.7
Pueblo County	Radio Site Repeater	Pueblo Chem Depot	62			6	Pueblo_Chem.Repeater.8
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.1
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.2
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.3
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.4
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.5
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.6
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.7
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.8
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.9
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.10
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.11
Pueblo County	Radio Site Repeater	Pueblo West	1-5			6	Pueblo_West.Repeater.12
State of Colorado	Radio Site Repeater	Punkin Center	40			1	Punkin_Center.Repeater.1
State of Colorado	Radio Site Repeater	Punkin Center	40			1	Punkin_Center.Repeater.2
State of Colorado	Radio Site Repeater	Punkin Center	40			1	Punkin_Center.Repeater.3
State of Colorado	Radio Site Repeater	Punkin Center	40			1	Punkin_Center.Repeater.4
State of Colorado	Radio Site Repeater	Punkin Center	40			1	Punkin_Center.Repeater.5
GJRCC	Radio Site Repeater	Rabbit Valley	94			2	Rabbit_Valley.Repeater.1
GJRCC	Radio Site Repeater	Rabbit Valley	94			2	Rabbit_Valley.Repeater.2
GJRCC	Radio Site Repeater	Rabbit Valley	94			2	Rabbit_Valley.Repeater.3
GJRCC	Radio Site Repeater	Rabbit Valley	94			2	Rabbit_Valley.Repeater.4
GJRCC	Radio Site Repeater	Rabbit Valley	94			2	Rabbit_Valley.Repeater.5
GJRCC	Radio Site Repeater	Rabbit Valley	94			2	Rabbit_Valley.Repeater.6
State of Colorado	Radio Site Repeater	Ramah	23			1	Ramah.Repeater.1
State of Colorado	Radio Site Repeater	Ramah	23			1	Ramah.Repeater.2
State of Colorado	Radio Site Repeater	Ramah	23			1	Ramah.Repeater.3
State of Colorado	Radio Site Repeater	Ramah	23			1	Ramah.Repeater.4
State of Colorado	Radio Site Repeater	Ramah	23			1	Ramah.Repeater.5
Montrose County	Radio Site Repeater	Raspberry Ridge	29			2	Raspberry_Ridge.Repeater.1
Montrose County	Radio Site Repeater	Raspberry Ridge	29			2	Raspberry_Ridge.Repeater.2
Montrose County	Radio Site Repeater	Raspberry Ridge	29			2	Raspberry_Ridge.Repeater.3
Montrose County	Radio Site Repeater	Raspberry Ridge	29			2	Raspberry_Ridge.Repeater.4
Montrose County	Radio Site Repeater	Raspberry Ridge	29			2	Raspberry_Ridge.Repeater.5
Montrose County	Radio Site Repeater	Raspberry Ridge	29			2	Raspberry_Ridge.Repeater.6
State of Colorado	Radio Site Repeater	Raton Pass	57			6	Raton_Pass.Repeater.1
State of Colorado	Radio Site Repeater	Raton Pass	57			6	Raton_Pass.Repeater.2
State of Colorado	Radio Site Repeater	Raton Pass	57			6	Raton_Pass.Repeater.3
State of Colorado	Radio Site Repeater	Raton Pass	57			6	Raton_Pass.Repeater.4
State of Colorado	Radio Site Repeater	Raton Pass	57			6	Raton_Pass.Repeater.5
GJRCC	Radio Site Repeater	Redlands	56			2	Redlands.Repeater.1
GJRCC	Radio Site Repeater	Redlands	56			2	Redlands.Repeater.2
GJRCC	Radio Site Repeater	Redlands	56			2	Redlands.Repeater.3

			Primary	Only for Transport Links	2nd	Switch Assignor	
GJRCC	Radio Site Repeater	Redlands	56			2	Redlands.Repeater.4
GJRCC	Radio Site Repeater	Redlands	56			2	Redlands.Repeater.5
GJRCC	Radio Site Repeater	Redlands	56			2	Redlands.Repeater.6
GJRCC	Radio Site Repeater	Redlands	56			2	Redlands.Repeater.7
State of Colorado	Radio Site Repeater	Reiradon	18			3	Reiradon.Repeater.1
State of Colorado	Radio Site Repeater	Reiradon	18			3	Reiradon.Repeater.2
State of Colorado	Radio Site Repeater	Reiradon	18			3	Reiradon.Repeater.3
State of Colorado	Radio Site Repeater	Reiradon	18			3	Reiradon.Repeater.4
State of Colorado	Radio Site Repeater	Reiradon	18			3	Reiradon.Repeater.5
State of Colorado	Radio Site Repeater	Reiradon	18			3	Reiradon.Repeater.6
State of Colorado	Radio Site Repeater	Reiradon	18			3	Reiradon.Repeater.7
State of Colorado	Radio Site Repeater	Reiradon	18			3	Reiradon.Repeater.8
State of Colorado	Radio Site Repeater	Rico	48			2	Rico.Repeater.1
State of Colorado	Radio Site Repeater	Rico	48			2	Rico.Repeater.2
State of Colorado	Radio Site Repeater	Rico	48			2	Rico.Repeater.3
State of Colorado	Radio Site Repeater	Rico	48			2	Rico.Repeater.4
State of Colorado	Radio Site Repeater	Rico	48			2	Rico.Repeater.5
Garfield County	Radio Site Repeater	Rifle	83			2	Rifle.Repeater.1
Garfield County	Radio Site Repeater	Rifle	83			2	Rifle.Repeater.2
Garfield County	Radio Site Repeater	Rifle	83			2	Rifle.Repeater.3
Garfield County	Radio Site Repeater	Rifle	83			2	Rifle.Repeater.4
Garfield County	Radio Site Repeater	Rifle	83			2	Rifle.Repeater.5
Roaring Fork Transportation Authority	Radio Site Repeater	Rifle	83			2	Rifle.Repeater.6
Douglas County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.1
Douglas County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.2
Douglas County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.3
Douglas County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.4
Douglas County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.5
Jefferson County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.6
Jefferson County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.7
Jefferson County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.8
Jefferson County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.9
Jefferson County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.10
Arapahoe County	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.11
State of Colorado	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.12
State of Colorado	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.13
State of Colorado	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.14
State of Colorado	Radio Site Repeater	Riley Peak	2			1	Riley_Peak.Repeater.15
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.1
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.2
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.3
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.4
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.5
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.6
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.7
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.8
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.9
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.10
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.11
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.12
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.13
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.14
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.15
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.16
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.17
Douglas County	Radio Site Repeater	Rocky Point	14-x			1	Rocky.Point.Repeater.18
State of Colorado	Radio Site Repeater	Rose Ridge	63			2	Rose_Ridge.Repeater.1
State of Colorado	Radio Site Repeater	Rose Ridge	63			2	Rose_Ridge.Repeater.2
State of Colorado	Radio Site Repeater	Rose Ridge	63			2	Rose_Ridge.Repeater.3
State of Colorado	Radio Site Repeater	Rose Ridge	63			2	Rose_Ridge.Repeater.4
State of Colorado	Radio Site Repeater	Rose Ridge	63			2	Rose_Ridge.Repeater.5
State of Colorado	Radio Site Repeater	Sacramento	46			1	Sacramento.Repeater.1
State of Colorado	Radio Site Repeater	Sacramento	46			1	Sacramento.Repeater.2
State of Colorado	Radio Site Repeater	Sacramento	46			1	Sacramento.Repeater.3
State of Colorado	Radio Site Repeater	Sacramento	46			1	Sacramento.Repeater.4
Park County	Radio Site Repeater	Sacramento	46			1	Sacramento.Repeater.5
State of Colorado	Radio Site Repeater	Saguache Peak	54			6	Saguache_Peak.Repeater.1
State of Colorado	Radio Site Repeater	Saguache Peak	54			6	Saguache_Peak.Repeater.2
State of Colorado	Radio Site Repeater	Saguache Peak	54			6	Saguache_Peak.Repeater.3
State of Colorado	Radio Site Repeater	Saguache Peak	54			6	Saguache_Peak.Repeater.4
State of Colorado	Radio Site Repeater	Saguache Peak	54			6	Saguache_Peak.Repeater.5
State of Colorado	Radio Site Repeater	Saguache Peak	54			6	Saguache_Peak.Repeater.6
State of Colorado	Radio Site Repeater	San Antonio Pk, NM	45			6	San_Antonio_Pk.Repeater.1
State of Colorado	Radio Site Repeater	San Antonio Pk, NM	45			6	San_Antonio_Pk.Repeater.2
State of Colorado	Radio Site Repeater	San Antonio Pk, NM	45			6	San_Antonio_Pk.Repeater.3
State of Colorado	Radio Site Repeater	San Antonio Pk, NM	45			6	San_Antonio_Pk.Repeater.4
State of Colorado	Radio Site Repeater	San Antonio Pk, NM	45			6	San_Antonio_Pk.Repeater.5
State of Colorado	Radio Site Repeater	San Antonio Pk, NM	45			6	San_Antonio_Pk.Repeater.6
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.1
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.2
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.3

			Primary	Only for Transport Links	2nd	Switch Assn or	
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.4
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.5
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.6
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.7
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.8
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.9
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.10
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.11
State of Colorado	Radio Site Repeater	San Carlos CF	1-1			6	San_Carlos.Repeater.12
State of Colorado	Radio Site Repeater	San Luis	40			6	San_Luis.Repeater.1
State of Colorado	Radio Site Repeater	San Luis	40			6	San_Luis.Repeater.2
State of Colorado	Radio Site Repeater	San Luis	40			6	San_Luis.Repeater.3
State of Colorado	Radio Site Repeater	San Luis	40			6	San_Luis.Repeater.4
State of Colorado	Radio Site Repeater	San Luis	40			6	San_Luis.Repeater.5
State of Colorado	Radio Site Repeater	Sandoval	62			2	Sandaval.Repeater.1
State of Colorado	Radio Site Repeater	Sandoval	62			2	Sandaval.Repeater.2
State of Colorado	Radio Site Repeater	Sandoval	62			2	Sandaval.Repeater.3
State of Colorado	Radio Site Repeater	Sandoval	62			2	Sandaval.Repeater.4
State of Colorado	Radio Site Repeater	Sandoval	62			2	Sandaval.Repeater.5
SW Region	Radio Site Repeater	Sandoval	62			2	Sandaval.Repeater.6
Grand County	Radio Site Repeater	Santoy	42			3	Santoy.Repeater.1
Grand County	Radio Site Repeater	Santoy	42			3	Santoy.Repeater.2
Grand County	Radio Site Repeater	Santoy	42			3	Santoy.Repeater.3
Grand County	Radio Site Repeater	Santoy	42			3	Santoy.Repeater.4
Grand County	Radio Site Repeater	Santoy	42			3	Santoy.Repeater.5
Grand County	Radio Site Repeater	Santoy	42			3	Santoy.Repeater.6
State of Colorado	Radio Site Repeater	Sheeps Knob	58			2	Sheeps_Knob.Repeater.1
State of Colorado	Radio Site Repeater	Sheeps Knob	58			2	Sheeps_Knob.Repeater.2
State of Colorado	Radio Site Repeater	Sheeps Knob	58			2	Sheeps_Knob.Repeater.3
State of Colorado	Radio Site Repeater	Sheeps Knob	58			2	Sheeps_Knob.Repeater.4
State of Colorado	Radio Site Repeater	Sheeps Knob	58			2	Sheeps_Knob.Repeater.5
State of Colorado	Radio Site Repeater	Sheridan Lake	26			6	Sheridan_Lake.Repeater.1
State of Colorado	Radio Site Repeater	Sheridan Lake	26			6	Sheridan_Lake.Repeater.2
State of Colorado	Radio Site Repeater	Sheridan Lake	26			6	Sheridan_Lake.Repeater.3
State of Colorado	Radio Site Repeater	Sheridan Lake	26			6	Sheridan_Lake.Repeater.4
State of Colorado	Radio Site Repeater	Sheridan Lake	26			6	Sheridan_Lake.Repeater.5
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.1
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.2
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.3
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.4
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.5
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.6
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.7
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.8
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.9
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.10
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.11
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.12
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.13
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.14
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.15
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.16
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.17
Douglas County	Radio Site Repeater	Silver Heights	14-x			1	Silver_Heights.Repeater.18
State of Colorado	Radio Site Repeater	Silverton	70			2	Silverton.Repeater.1
State of Colorado	Radio Site Repeater	Silverton	70			2	Silverton.Repeater.2
State of Colorado	Radio Site Repeater	Silverton	70			2	Silverton.Repeater.3
State of Colorado	Radio Site Repeater	Silverton	70			2	Silverton.Repeater.4
State of Colorado	Radio Site Repeater	Silverton	70			2	Silverton.Repeater.5
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #1	99			n/a	SOW.1.Repeater.1
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #1	99			n/a	SOW.1.Repeater.2
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #1	99			n/a	SOW.1.Repeater.3
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #1	99			n/a	SOW.1.Repeater.4
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #1	99			n/a	SOW.1.Repeater.5
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #1	99			n/a	SOW.1.Repeater.6
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #2	99			n/a	SOW.2.Repeater.1
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #2	99			n/a	SOW.2.Repeater.2
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #2	99			n/a	SOW.2.Repeater.3
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #2	99			n/a	SOW.2.Repeater.4
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #2	99			n/a	SOW.2.Repeater.5
State of Colorado	Radio Site Repeater	Site On Wheels (SOW) #2	99			n/a	SOW.2.Repeater.6
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.1
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.2
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.3
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.4
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.5
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.6
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.7
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.8
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.9
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.10

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PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.11
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.12
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.13
PPRCN	Radio Site Repeater	Ski Summit	13			4	Ski_Summit.Repeater.14
State of Colorado	Radio Site Repeater	Smelter Mtn	23			2	Smelter_Mtn.Repeater.1
State of Colorado	Radio Site Repeater	Smelter Mtn	23			2	Smelter_Mtn.Repeater.2
State of Colorado	Radio Site Repeater	Smelter Mtn	23			2	Smelter_Mtn.Repeater.3
State of Colorado	Radio Site Repeater	Smelter Mtn	23			2	Smelter_Mtn.Repeater.4
State of Colorado	Radio Site Repeater	Smelter Mtn	23			2	Smelter_Mtn.Repeater.5
SW Region	Radio Site Repeater	Smelter Mtn	23			2	Smelter_Mtn.Repeater.6
Jefferson County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.1
Jefferson County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.2
Jefferson County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.3
Jefferson County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.4
Jefferson County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.5
Arapahoe County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.6
Arapahoe County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.7
Arapahoe County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.8
Arapahoe County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.9
Arapahoe County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.10
Arapahoe County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.11
Arapahoe County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.12
Arapahoe County	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.13
State of Colorado	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.14
State of Colorado	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.15
State of Colorado	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.16
State of Colorado	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.17
State of Colorado	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.18
State of Colorado	Radio Site Repeater	Smoky Hill	7			1	Smoky_Hill.Repeater.19
Morgan County	Radio Site Repeater	South Morgan	51			3	South Morgan.Repeater.1
Morgan County	Radio Site Repeater	South Morgan	51			3	South Morgan.Repeater.2
Morgan County	Radio Site Repeater	South Morgan	51			3	South Morgan.Repeater.3
Morgan County	Radio Site Repeater	South Morgan	51			3	South Morgan.Repeater.4
Morgan County	Radio Site Repeater	South Morgan	51			3	South Morgan.Repeater.5
Morgan County	Radio Site Repeater	South Morgan	51			3	South Morgan.Repeater.6
State of Colorado	Radio Site Repeater	Springfield	41			6	Springfield.Repeater.1
State of Colorado	Radio Site Repeater	Springfield	41			6	Springfield.Repeater.2
State of Colorado	Radio Site Repeater	Springfield	41			6	Springfield.Repeater.3
State of Colorado	Radio Site Repeater	Springfield	41			6	Springfield.Repeater.4
State of Colorado	Radio Site Repeater	Springfield	41			6	Springfield.Repeater.5
Jefferson County	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.1
Jefferson County	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.2
Jefferson County	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.3
Jefferson County	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.4
Jefferson County	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.5
Jefferson County	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.6
State of Colorado	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.7
State of Colorado	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.8
State of Colorado	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.9
State of Colorado	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.10
State of Colorado	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.11
State of Colorado	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.12
State of Colorado	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.13
State of Colorado	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.14
State of Colorado	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.15
State of Colorado	Radio Site Repeater	Squaw	6			1	Squaw.Repeater.16
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.1
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.2
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.3
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.4
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.5
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.6
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.7
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.8
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.9
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.10
PPRCN	Radio Site Repeater	Stanley Canyon	12			4	Stanley_Canyon.Repeater.11
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.1
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.2
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.3
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.4
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.5
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.6
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.7
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.8
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.9
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.10
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.11
RTD	Radio Site Repeater	State Capitol	71			1	State_Capitol.Repeater.12
State of Colorado	Radio Site Repeater	Sterling CF	57			3	Sterling_CF.Repeater.1
State of Colorado	Radio Site Repeater	Sterling CF	57			3	Sterling_CF.Repeater.2

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State of Colorado	Radio Site Repeater	Sterling CF	57			3	Sterling_CF.Repeater.3
State of Colorado	Radio Site Repeater	Sterling CF	57			3	Sterling_CF.Repeater.4
State of Colorado	Radio Site Repeater	Sterling CF	57			3	Sterling_CF.Repeater.5
State of Colorado	Radio Site Repeater	Sterling CF	57			3	Sterling_CF.Repeater.6
State of Colorado	Radio Site Repeater	Sterling CF	57			3	Sterling_CF.Repeater.7
State of Colorado	Radio Site Repeater	Sterling CF	57			3	Sterling_CF.Repeater.8
State of Colorado	Radio Site Repeater	Storm King	10			2	Storm_King.Repeater.1
State of Colorado	Radio Site Repeater	Storm King	10			2	Storm_King.Repeater.2
State of Colorado	Radio Site Repeater	Storm King	10			2	Storm_King.Repeater.3
State of Colorado	Radio Site Repeater	Storm King	10			2	Storm_King.Repeater.4
State of Colorado	Radio Site Repeater	Storm King	10			2	Storm_King.Repeater.5
State of Colorado	Radio Site Repeater	Sunlight	11			2	Sunlight.Repeater.1
State of Colorado	Radio Site Repeater	Sunlight	11			2	Sunlight.Repeater.2
State of Colorado	Radio Site Repeater	Sunlight	11			2	Sunlight.Repeater.3
State of Colorado	Radio Site Repeater	Sunlight	11			2	Sunlight.Repeater.4
State of Colorado	Radio Site Repeater	Sunlight	11			2	Sunlight.Repeater.5
Garfield County	Radio Site Repeater	Sunlight	11			2	Sunlight.Repeater.6
Eagle County	Radio Site Repeater	Sunlight	11			2	Sunlight.Repeater.7
Holy Cross	Radio Site Repeater	Sunlight	11			2	Sunlight.Repeater.8
Roaring Fork Transportation Authority	Radio Site Repeater	Sunlight	11			2	Sunlight.Repeater.9
Roaring Fork Transportation Authority	Radio Site Repeater	Sunlight	11			2	Sunlight.Repeater.10
State of Colorado	Radio Site Repeater	Sunset Mesa	5			2	Sunset_Mesa.Repeater.1
State of Colorado	Radio Site Repeater	Sunset Mesa	5			2	Sunset_Mesa.Repeater.2
State of Colorado	Radio Site Repeater	Sunset Mesa	5			2	Sunset_Mesa.Repeater.3
State of Colorado	Radio Site Repeater	Sunset Mesa	5			2	Sunset_Mesa.Repeater.4
State of Colorado	Radio Site Repeater	Sunset Mesa	5			2	Sunset_Mesa.Repeater.5
GJRCC	Radio Site Repeater	Sunset Mesa	5			2	Sunset_Mesa.Repeater.6
Grand County	Radio Site Repeater	Sunspot	15			1	Sunspot.Repeater.1
Grand County	Radio Site Repeater	Sunspot	15			1	Sunspot.Repeater.2
Grand County	Radio Site Repeater	Sunspot	15			1	Sunspot.Repeater.3
Grand County	Radio Site Repeater	Sunspot	15			1	Sunspot.Repeater.4
Grand County	Radio Site Repeater	Sunspot	15			1	Sunspot.Repeater.5
Grand County	Radio Site Repeater	Sunspot	15			1	Sunspot.Repeater.6
Douglas County	Radio Site Repeater	Swank Ranch	52-x			1	Swank.Ranch.Repeater.1
Douglas County	Radio Site Repeater	Swank Ranch	52-x			1	Swank.Ranch.Repeater.2
Douglas County	Radio Site Repeater	Swank Ranch	52-x			1	Swank.Ranch.Repeater.3
Douglas County	Radio Site Repeater	Swank Ranch	52-x			1	Swank.Ranch.Repeater.4
Douglas County	Radio Site Repeater	Swank Ranch	52-x			1	Swank.Ranch.Repeater.5
Douglas County	Radio Site Repeater	Swank Ranch	52-x			1	Swank.Ranch.Repeater.6
Douglas County	Radio Site Repeater	Swank Ranch	52-x			1	Swank.Ranch.Repeater.7
Douglas County	Radio Site Repeater	Swank Ranch	52-x			1	Swank.Ranch.Repeater.8
Douglas County	Radio Site Repeater	Swank Ranch	52-x			1	Swank.Ranch.Repeater.9
Douglas County	Radio Site Repeater	Swank Ranch	52-x			1	Swank.Ranch.Repeater.10
State of Colorado	Switch	Switch #1 (DTB)	n/a			1	Switch.1
State of Colorado	Switch	Switch #2 (Grand Junction)	n/a			2	Switch.2
State of Colorado	Switch	Switch #3 (PRPA)	n/a			3	Switch.3
PPRCN	Switch	Switch #4 (PPRCN)	n/a			4	Switch.4
Pueblo County	Simulcast Prime Site	Pueblo County Simulcast Prime Site (Site 1, Zone 6)	1			6	Pueblo.County.Simulcast.Prime.Site
Pueblo County	Switch	Switch #6 (Pueblo)	n/a			6	Switch.6
NCRCN	Radio Site Repeater	Table Mountain	43			3	Table_Mountain.Repeater.1
NCRCN	Radio Site Repeater	Table Mountain	43			3	Table_Mountain.Repeater.2
NCRCN	Radio Site Repeater	Table Mountain	43			3	Table_Mountain.Repeater.3
NW Region	Radio Site Repeater	Table Mountain	43			3	Table_Mountain.Repeater.4
NW Region	Radio Site Repeater	Table Mountain	43			3	Table_Mountain.Repeater.5
Delta County	Radio Site Repeater	Tank Hill	93			2	Tank_Hill.Repeater.1
Delta County	Radio Site Repeater	Tank Hill	93			2	Tank_Hill.Repeater.2
Delta County	Radio Site Repeater	Tank Hill	93			2	Tank_Hill.Repeater.3
Delta County	Radio Site Repeater	Tank Hill	93			2	Tank_Hill.Repeater.4
Delta County	Radio Site Repeater	Tank Hill	93			2	Tank_Hill.Repeater.5
PPRCN	Radio Site Repeater	Templeton Gap	22			4	Templeton_Gap.Repeater.1
PPRCN	Radio Site Repeater	Templeton Gap	22			4	Templeton_Gap.Repeater.2
PPRCN	Radio Site Repeater	Templeton Gap	22			4	Templeton_Gap.Repeater.3
PPRCN	Radio Site Repeater	Templeton Gap	22			4	Templeton_Gap.Repeater.4
PPRCN	Radio Site Repeater	Templeton Gap	22			4	Templeton_Gap.Repeater.5
PPRCN	Radio Site Repeater	Templeton Gap	22			4	Templeton_Gap.Repeater.6
PPRCN	Radio Site Repeater	Templeton Gap	22			4	Templeton_Gap.Repeater.7
PPRCN	Radio Site Repeater	Templeton Gap	22			4	Templeton_Gap.Repeater.8
State of Colorado	Radio Site Repeater	Tenderfoot II	17			6	Tenderfoot_II.Repeater.1
State of Colorado	Radio Site Repeater	Tenderfoot II	17			6	Tenderfoot_II.Repeater.2
State of Colorado	Radio Site Repeater	Tenderfoot II	17			6	Tenderfoot_II.Repeater.3
State of Colorado	Radio Site Repeater	Tenderfoot II	17			6	Tenderfoot_II.Repeater.4
State of Colorado	Radio Site Repeater	Tenderfoot II	17			6	Tenderfoot_II.Repeater.5
Jefferson County	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.1
Jefferson County	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.2
Jefferson County	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.3
ADCOM	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.4
ADCOM	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.5
ADCOM	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.6
ADCOM	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.7
ADCOM	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.8
State of Colorado	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.9

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State of Colorado	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.10
State of Colorado	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.11
State of Colorado	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.12
State of Colorado	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.13
State of Colorado	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.14
State of Colorado	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.15
State of Colorado	Radio Site Repeater	Thorodin	5			1	Thorodin.Repeater.16
State of Colorado	Radio Site Repeater	Toonerville	28			6	Toonerville.Repeater.1
State of Colorado	Radio Site Repeater	Toonerville	28			6	Toonerville.Repeater.2
State of Colorado	Radio Site Repeater	Toonerville	28			6	Toonerville.Repeater.3
State of Colorado	Radio Site Repeater	Toonerville	28			6	Toonerville.Repeater.4
State of Colorado	Radio Site Repeater	Toonerville	28			6	Toonerville.Repeater.5
State of Colorado	Radio Site Repeater	Trinidad CF	56			6	Trinidad_CF.Repeater.1
State of Colorado	Radio Site Repeater	Trinidad CF	56			6	Trinidad_CF.Repeater.2
State of Colorado	Radio Site Repeater	Trinidad CF	56			6	Trinidad_CF.Repeater.3
State of Colorado	Radio Site Repeater	Trinidad CF	56			6	Trinidad_CF.Repeater.4
State of Colorado	Radio Site Repeater	Trinidad CF	56			6	Trinidad_CF.Repeater.5
PPRCN	Radio Site Repeater	Truckton	19			4	Truckton.Repeater.1
PPRCN	Radio Site Repeater	Truckton	19			4	Truckton.Repeater.2
PPRCN	Radio Site Repeater	Truckton	19			4	Truckton.Repeater.3
PPRCN	Radio Site Repeater	Truckton	19			4	Truckton.Repeater.4
PPRCN	Radio Site Repeater	Truckton	19			4	Truckton.Repeater.5
PPRCN	Radio Site Repeater	Truckton	19			4	Truckton.Repeater.6
State of Colorado	Radio Site Repeater	TV Hill	34			2	TV_Hill.Repeater.1
State of Colorado	Radio Site Repeater	TV Hill	34			2	TV_Hill.Repeater.2
State of Colorado	Radio Site Repeater	TV Hill	34			2	TV_Hill.Repeater.3
State of Colorado	Radio Site Repeater	TV Hill	34			2	TV_Hill.Repeater.4
State of Colorado	Radio Site Repeater	TV Hill	34			2	TV_Hill.Repeater.5
State of Colorado	Radio Site Repeater	Teepee Park	49			2	Teepee Park.Repeater.1
State of Colorado	Radio Site Repeater	Teepee Park	49			2	Teepee Park.Repeater.1
State of Colorado	Radio Site Repeater	Teepee Park	49			2	Teepee Park.Repeater.1
State of Colorado	Radio Site Repeater	Teepee Park	49			2	Teepee Park.Repeater.1
State of Colorado	Radio Site Repeater	Teepee Park	49			2	Teepee Park.Repeater.1
State of Colorado	Radio Site Repeater	Twin	49			6	Twin.Repeater.1
State of Colorado	Radio Site Repeater	Twin	49			6	Twin.Repeater.2
State of Colorado	Radio Site Repeater	Twin	49			6	Twin.Repeater.3
State of Colorado	Radio Site Repeater	Twin	49			6	Twin.Repeater.4
State of Colorado	Radio Site Repeater	Twin	49			6	Twin.Repeater.5
State of Colorado	Radio Site Repeater	Twin	49			6	Twin.Repeater.6
Canon City, City of	Radio Site Repeater	Twin	49			6	Twin.Repeater.7
Canon City, City of	Radio Site Repeater	Twin	49			6	Twin.Repeater.8
State of Colorado	Radio Site Repeater	Twin	49			6	Twin.Repeater.9
State of Colorado	Radio Site Repeater	Twin	49			6	Twin.Repeater.10
Summit County	Radio Site Repeater	Tyrolean	77			2	Tyrolean.Repeater.1
Summit County	Radio Site Repeater	Tyrolean	77			2	Tyrolean.Repeater.2
Summit County	Radio Site Repeater	Tyrolean	77			2	Tyrolean.Repeater.3
Summit County	Radio Site Repeater	Tyrolean	77			2	Tyrolean.Repeater.4
Summit County	Radio Site Repeater	Tyrolean	77			2	Tyrolean.Repeater.5
Montrose County	Radio Site Repeater	Uravan	85			2	Uravan.Repeater.1
Montrose County	Radio Site Repeater	Uravan	85			2	Uravan.Repeater.2
Montrose County	Radio Site Repeater	Uravan	85			2	Uravan.Repeater.3
Montrose County	Radio Site Repeater	Uravan	85			2	Uravan.Repeater.4
Montrose County	Radio Site Repeater	Uravan	85			2	Uravan.Repeater.5
State of Colorado	Radio Site Repeater	Ute	74			2	Ute.Repeater.1
State of Colorado	Radio Site Repeater	Ute	74			2	Ute.Repeater.2
State of Colorado	Radio Site Repeater	Ute	74			2	Ute.Repeater.3
State of Colorado	Radio Site Repeater	Ute	74			2	Ute.Repeater.4
State of Colorado	Radio Site Repeater	Ute	74			2	Ute.Repeater.5
State of Colorado	Radio Site Repeater	Vail	76			2	Vail.Repeater.1
State of Colorado	Radio Site Repeater	Vail	76			2	Vail.Repeater.2
State of Colorado	Radio Site Repeater	Vail	76			2	Vail.Repeater.3
State of Colorado	Radio Site Repeater	Vail	76			2	Vail.Repeater.4
Eagle County	Radio Site Repeater	Vail	76			2	Vail.Repeater.5
Eagle County	Radio Site Repeater	Vail	76			2	Vail.Repeater.6
State of Colorado	Radio Site Repeater	Valley	42			6	Valley.Repeater.1
State of Colorado	Radio Site Repeater	Valley	42			6	Valley.Repeater.2
State of Colorado	Radio Site Repeater	Valley	42			6	Valley.Repeater.3
State of Colorado	Radio Site Repeater	Valley	42			6	Valley.Repeater.4
State of Colorado	Radio Site Repeater	Valley	42			6	Valley.Repeater.5
La Junta, City of	Radio Site Repeater	Valley	42			6	Valley.Repeater.6
State of Colorado	Radio Site Repeater	Verdemont	16			6	Verdemont.Repeater.1
State of Colorado	Radio Site Repeater	Verdemont	16			6	Verdemont.Repeater.2
State of Colorado	Radio Site Repeater	Verdemont	16			6	Verdemont.Repeater.3
State of Colorado	Radio Site Repeater	Verdemont	16			6	Verdemont.Repeater.4
State of Colorado	Radio Site Repeater	Verdemont	16			6	Verdemont.Repeater.5
State of Colorado	Radio Site Repeater	Vermillion Bluffs	16			2	Vermillion_Bluffs.Repeater.1
State of Colorado	Radio Site Repeater	Vermillion Bluffs	16			2	Vermillion_Bluffs.Repeater.2
State of Colorado	Radio Site Repeater	Vermillion Bluffs	16			2	Vermillion_Bluffs.Repeater.3
State of Colorado	Radio Site Repeater	Vermillion Bluffs	16			2	Vermillion_Bluffs.Repeater.4
State of Colorado	Radio Site Repeater	Vermillion Bluffs	16			2	Vermillion_Bluffs.Repeater.5
State of Colorado	Radio Site Repeater	W Mountain	44			2	W_Mountain.Repeater.1

			Primary	Only for Transport Links	2nd	Switch Assn or	
State of Colorado	Radio Site Repeater	W Mountain	44			2	W_Mountain.Repeater.2
State of Colorado	Radio Site Repeater	W Mountain	44			2	W_Mountain.Repeater.3
State of Colorado	Radio Site Repeater	W Mountain	44			2	W_Mountain.Repeater.4
State of Colorado	Radio Site Repeater	W Mountain	44			2	W_Mountain.Repeater.5
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.1
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.2
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.3
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.4
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.5
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.6
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.7
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.8
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.9
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.10
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.11
Pueblo, City of	Radio Site Repeater	Walking Stick	1-4			6	Walking_Stick.Repeater.12
State of Colorado	Radio Site Repeater	Walsenburg	43			6	Walsenburg.Repeater.1
State of Colorado	Radio Site Repeater	Walsenburg	43			6	Walsenburg.Repeater.2
State of Colorado	Radio Site Repeater	Walsenburg	43			6	Walsenburg.Repeater.3
State of Colorado	Radio Site Repeater	Walsenburg	43			6	Walsenburg.Repeater.4
Huerfano County	Radio Site Repeater	Walsenburg	43			6	Walsenburg.Repeater.5
Huerfano County	Radio Site Repeater	Walsenburg	43			6	Walsenburg.Repeater.6
State of Colorado	Radio Site Repeater	Walton Mtn	43			2	Walton_Mtn.Repeater.1
State of Colorado	Radio Site Repeater	Walton Mtn	43			2	Walton_Mtn.Repeater.2
State of Colorado	Radio Site Repeater	Walton Mtn	43			2	Walton_Mtn.Repeater.3
State of Colorado	Radio Site Repeater	Walton Mtn	43			2	Walton_Mtn.Repeater.4
State of Colorado	Radio Site Repeater	Walton Mtn	43			2	Walton_Mtn.Repeater.5
State of Colorado	Radio Site Repeater	Waterdog	75			2	Waterdog.Repeater.1
State of Colorado	Radio Site Repeater	Waterdog	75			2	Waterdog.Repeater.2
State of Colorado	Radio Site Repeater	Waterdog	75			2	Waterdog.Repeater.3
State of Colorado	Radio Site Repeater	Waterdog	75			2	Waterdog.Repeater.4
State of Colorado	Radio Site Repeater	Waterdog	75			2	Waterdog.Repeater.5
Douglas County	Radio Site Repeater	West Creek	52-x			1	West Creek.Repeater.1
Douglas County	Radio Site Repeater	West Creek	52-x			1	West Creek.Repeater.2
Douglas County	Radio Site Repeater	West Creek	52-x			1	West Creek.Repeater.3
Douglas County	Radio Site Repeater	West Creek	52-x			1	West Creek.Repeater.4
Douglas County	Radio Site Repeater	West Creek	52-x			1	West Creek.Repeater.5
Douglas County	Radio Site Repeater	West Creek	52-x			1	West Creek.Repeater.6
Douglas County	Radio Site Repeater	West Creek	52-x			1	West Creek.Repeater.7
Douglas County	Radio Site Repeater	West Creek	52-x			1	West Creek.Repeater.8
Douglas County	Radio Site Repeater	West Creek	52-x			1	West Creek.Repeater.9
Douglas County	Radio Site Repeater	West Creek	52-x			1	West.Creek.Repeater.10
State of Colorado	Radio Site Repeater	Whitewater	12			2	Whitewater.Repeater.1
State of Colorado	Radio Site Repeater	Whitewater	12			2	Whitewater.Repeater.2
State of Colorado	Radio Site Repeater	Whitewater	12			2	Whitewater.Repeater.3
State of Colorado	Radio Site Repeater	Whitewater	12			2	Whitewater.Repeater.4
GJRCC	Radio Site Repeater	Whitewater	12			2	Whitewater.Repeater.5
GJRCC	Radio Site Repeater	Whitewater	12			2	Whitewater.Repeater.6
State of Colorado	Radio Site Repeater	Wildhorse	21			3	Wildhorse.Repeater.1
State of Colorado	Radio Site Repeater	Wildhorse	21			3	Wildhorse.Repeater.2
State of Colorado	Radio Site Repeater	Wildhorse	21			3	Wildhorse.Repeater.3
State of Colorado	Radio Site Repeater	Wildhorse	21			3	Wildhorse.Repeater.4
State of Colorado	Radio Site Repeater	Wildhorse	21			3	Wildhorse.Repeater.5
Eagle County	Radio Site Repeater	Wolcott	55			2	Wolcott.Repeater.1
Eagle County	Radio Site Repeater	Wolcott	55			2	Wolcott.Repeater.2
Eagle County	Radio Site Repeater	Wolcott	55			2	Wolcott.Repeater.3
Eagle County	Radio Site Repeater	Wolcott	55			2	Wolcott.Repeater.4
Eagle County	Radio Site Repeater	Wolcott	55			2	Wolcott.Repeater.5
State of Colorado	Radio Site Repeater	Wolf Creek Pass	27			2	Wolf_Creek_Pass.Repeater.1
State of Colorado	Radio Site Repeater	Wolf Creek Pass	27			2	Wolf_Creek_Pass.Repeater.2
State of Colorado	Radio Site Repeater	Wolf Creek Pass	27			2	Wolf_Creek_Pass.Repeater.3
State of Colorado	Radio Site Repeater	Wolf Creek Pass	27			2	Wolf_Creek_Pass.Repeater.4
State of Colorado	Radio Site Repeater	Wolf Creek Pass	27			2	Wolf_Creek_Pass.Repeater.5
PPRCN	Radio Site Repeater	Woodland Park	15			4	Woodland_Park.Repeater.1
PPRCN	Radio Site Repeater	Woodland Park	15			4	Woodland_Park.Repeater.2
PPRCN	Radio Site Repeater	Woodland Park	15			4	Woodland_Park.Repeater.3
PPRCN	Radio Site Repeater	Woodland Park	15			4	Woodland_Park.Repeater.4
PPRCN	Radio Site Repeater	Woodland Park	15			4	Woodland_Park.Repeater.5
PPRCN	Radio Site Repeater	Woodland Park	15			4	Woodland_Park.Repeater.6
State of Colorado	Radio Site Repeater	Wray	44			3	Wray.Repeater.1
State of Colorado	Radio Site Repeater	Wray	44			3	Wray.Repeater.2
State of Colorado	Radio Site Repeater	Wray	44			3	Wray.Repeater.3
State of Colorado	Radio Site Repeater	Wray	44			3	Wray.Repeater.4
State of Colorado	Radio Site Repeater	Wray	44			3	Wray.Repeater.5
State of Colorado	Radio Site Repeater	Yuma	34			3	Yuma.Repeater.1
State of Colorado	Radio Site Repeater	Yuma	34			3	Yuma.Repeater.2
State of Colorado	Radio Site Repeater	Yuma	34			3	Yuma.Repeater.3
State of Colorado	Radio Site Repeater	Yuma	34			3	Yuma.Repeater.4
State of Colorado	Radio Site Repeater	Yuma	34			3	Yuma.Repeater.5
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.1
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.2

			Primary	Only for Transport Links	2nd	Switch Assn or	
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.3
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.4
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.5
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.6
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.7
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.8
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.9
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.10
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.11
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.12
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.13
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.14
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.15
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.16
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.17
Douglas County	Radio Site Repeater	Xcel 470	14-x			1	Xcel.470.Repeater.18
Arapahoe County	Radio Site Repeater	Zap	47			1	Zap.Repeater.1
Arapahoe County	Radio Site Repeater	Zap	47			1	Zap.Repeater.2
Arapahoe County	Radio Site Repeater	Zap	47			1	Zap.Repeater.3
Arapahoe County	Radio Site Repeater	Zap	47			1	Zap.Repeater.4
Arapahoe County	Radio Site Repeater	Zap	47			1	Zap.Repeater.5
Arapahoe County	Radio Site Repeater	Zap	47			1	Zap.Repeater.6
State of Colorado	Radio Site Repeater	Zap	47			1	Zap.Repeater.7
ADCOM	Radio Site Repeater	Zap	47			1	Zap.Repeater.8
ADCOM	Radio Site Repeater	Zap	47			1	Zap.Repeater.9
Castle Rock, City of	Dispatch Center	Castle Rock PD Dispatch (4 Positions)	SZ0D1C1D03	4		1	Castle.Rock.PD.Dispatch.Center
State of Colorado	Dispatch Center	SOC Pueblo Dispatch (7 Positions)	SZ0D1C6D26	7		6	SOC.Pueblo.Dispatch.Center
State of Colorado	Dispatch Center	SOC Denver - Kipling Dispatch (8 Positions)	SZ0D1C1D08	8		n/a	SOC.Denver.Kipling.Dispatch.Center
State of Colorado	Dispatch Center	SOC Denver - CGW Dispatch (1 Position)	SZ0D1C1D09	1		n/a	SOC.Denver.CGW.Dispatch.Center
State of Colorado	Dispatch Center	SOC Denver - OEM Dispatch (1 Position)	SZ0D1C1D10	1		n/a	SOC.Denver.OEM.Dispatch.Center
South Metro Fire	Dispatch Center	S_Metro Fire Dispatch (6 Positions)	SZ0D1C1D10	6		1	S.Metro.Fire.Dispatch.Center
Park County	Dispatch Center	Park County Dispatch (5 Positions)	SZ0D1C1D11	5		1	Park.County.Dispatch.Center
Arapahoe County	Dispatch Center	Arapahoe County Dispatch (7 Positions)	SZ0D1C1D13	7		1	Arapahoe.County.Dispatch.Center
State of Colorado	Dispatch Center	SOC Denver - ESU Dispatch (1 Position)	SZ0D1C1D14	1		n/a	SOC.Denver.ESU.Dispatch.Center
Littleton, City of Police Department	Dispatch Center	Littleton, City of PD Dispatch (4 Positions)	SZ0D1C1D15	4		1	Littleton.City.of.PD.Dispatch.Center
Littleton, City of Fire Department	Dispatch Center	Littleton, City of FD Dispatch (4 Positions)	SZ0D1C1D15	4		1	Littleton.City.of.FD.Dispatch.Center
Englewood, City of	Dispatch Center	Englewood, City Of Dispatch (3 Positions)	SZ0D1C1D16	3		1	Englewood.City.Of.Dispatch.Center
Glendale, City of	Dispatch Center	Glendale, City of Dispatch (3 Positions)	SZ0D1C1D17	3		1	Glendale.City.of.Dispatch.Center
Parker, City of	Dispatch Center	Parker, City of PD Dispatch (6 Positions)	SZ0D1C1D18	6		1	Parker.City.of.PD.Dispatch.Center
CDOT	Dispatch Center	CDOT TOC Dispatch (1 Position)	SZ0D1C1D19	1		1	CDOT.TOC.Dispatch.Center
CDOT	Dispatch Center	CDOT Eisenhower Dispatch (2 Positions)	SZ0D1C1D20	2		1	CDOT.Eisenhower.Dispatch.Center
Cheyenne County	Dispatch Center	Cheyenne County Dispatch (1 Position)	SZ0D1C1D21	1		1	Cheyenne.County.Dispatch.Center
Kit Carson County	Dispatch Center	Kit Carson County Dispatch (2 Positions)	SZ0D1C1D22	2		1	Kit.Carson.County.Dispatch.Center
Pueblo County	Dispatch Center	Pueblo County Dispatch (11 Positions)	SZ0D1C1D37	11		1	Pueblo.County.Dispatch.Center
Pueblo, City of	Dispatch Center	Pueblo, City of Dispatch (9 Positions)	SZ0D1C1D38	9		1	Pueblo.City.of.Dispatch.Center
Golden, City of	Dispatch Center	Golden, City of Dispatch (3 Positions)	SZ0D1C1D39	3		1	Golden.City.of.Dispatch.Center
Douglas County	Dispatch Center	Douglass County Dispatch (19 Positions)	SZ0D1C1D40	19		1	Douglass.County.Dispatch.Center
Jefferson County	Dispatch Center	Jefferson County Dispatch (5 Positions)	SZ0D1C1D41	5		1	Jefferson.County.Dispatch.Center
RTD	Dispatch Center	RTD District Shops Dispatch (14 Positions)	SZ0D1C1D42	14		1	RTD.District.Shops.Dispatch.Center
RTD	Dispatch Center	RTD Mariposa Dispatch (6 Positions)	SZ0D1C1D43	6		1	RTD.Mariposa.DispatchCenter
State of Colorado	Dispatch Center	Zone 1 Master Site (1 Position)	SZ0D1C1	1		n/a	Zone.1.Master.Site.Center
State of Colorado	Dispatch Center	SOC Montrose Dispatch (6 Positions)	SZ0D1C2D01	6		n/a	SOC.Montrose.Dispatch.Center
Garfield County	Dispatch Center	Garfield County Dispatch (7 Positions)	SZ0D1C2D05	7		2	Garfield.County.Dispatch.Center
Montrose, City of	Dispatch Center	Montrose, City of Dispatch (5 Positions)	SZ0D1C2D06	5		2	Montrose.City.Dispatch.Center
Routt County	Dispatch Center	Routt County Dispatch (4 Positions)	SZ0D1C2D08	4		2	Routt.County.Dispatch.Center
Chaffee County	Dispatch Center	Chaffee County Dispatch (2 Positions)	SZ0D1C2D10	2		2	Chaffee.County.Dispatch.Center
Grand County	Dispatch Center	Grand County Dispatch (2 Positions)	SZ0D1C2D11	2		2	Grand.County.Dispatch.Center
City of Durango, La Plata County	Dispatch Center	Durango, City of / La Plata County Dispatch (5 Positions)	SZ0D1C2D12	5		2	Durango.City.Dispatch.Center
Grand Junction Regional	Dispatch Center	Grand Junction Regional Dispatch (22 Positions)	SZ0D1C2D22	22		2	Grand.Junction.Dispatch.Center
State of Colorado	Dispatch Center	SOC Alamosa Dispatch (6 Positions)	SZ0D1C2D25	6		n/a	SOC.Alamosa.Dispatch.Center
CDOT	Dispatch Center	CDOT Hanging Lake Tunnel Dispatch (5 Positions)	SZ0D1C2D26	5		2	CDOT.Hanging.Dispatch.Center
Vail, City of	Dispatch Center	Vail, City of Dispatch (6 Positions)	SZ0D1C2D27	6		2	Vail.City.Dispatch.Center
Rio Blanco County	Dispatch Center	Rio Blanco County Dispatch (3 Positions)	SZ0D1C2D29	3		2	Rio.Blanco.Dispatch.Center
State of Colorado	Dispatch Center	SOC Craig Dispatch (6 Positions)	SZ0D1C2D30	6		n/a	SOC.Craig.Dispatch.Center
Ft. Collins, City of	Dispatch Center	Ft. Collins, City of Dispatch (9 Positions)	SZ0D1C3D02	9		3	Ft.Collins.City.of.Dispatch.Center
UNC	Dispatch Center	UNC Dispatch (1 Position)	SZ0D1C3D04	1		3	UNC.Dispatch.Center
Longmont, City of PD	Dispatch Center	Longmont, City of PD Dispatch (8 Positions)	SZ0D1C3D05	8		3	Longmont.City.of.Dispatch.Center
ADCOM	Dispatch Center	ADCOM Dispatch (10 Positions)	SZ0D1C3D06	10		3	ADCOM.Dispatch Center
Broomfield, City of	Dispatch Center	Broomfield, City of Dispatch (6 Positions)	SZ0D1C3D07	6		3	Broomfield.City.of.Dispatch.Center
Washington/Yuma Counties	Dispatch Center	Washington/Yuma Counties Dispatch (4 Positions)	SZ0D1C3D08	4		3	Washington.Yuma.Counties.Dispatch.Center
Morgan County	Dispatch Center	Morgan County Dispatch (4 Positions)	SZ0D1C3D09	4		3	Morgan.County.Dispatch.Center
Larimer County	Dispatch Center	Larimer County Dispatch (7 Positions)	SZ0D1C3D10	7		3	Larimer.County.Dispatch.Center
Boulder County	Dispatch Center	Boulder County Dispatch (10 Positions)	SZ0D1C3D11	10		3	Boulder.County.Dispatch.Center
Phillips County	Dispatch Center	Phillips County Dispatch (1 Position)	SZ0D1C3D13	1		3	Phillips.County.Dispatch.Center
Estes Park, City of PD	Dispatch Center	Estes Park, City of PD Dispatch (3 Positions)	SZ0D1C3D14	3		3	Estes.Park.City.of.PD.Dispatch.Center
UNC	Dispatch Center	UNC Dispatch (1 Position)	SZ0D1C3D24	1		3	UNC.Dispatch.Center
Thornton, City of	Dispatch Center	Thornton, City of Dispatch (8 Positions)	SZ0D1C3D25	8		3	Thornton.City.of.Dispatch.Center
Weld County	Dispatch Center	Weld County Dispatch (14 Positions)	SZ0D1C3D26	14		3	Weld.County.County.Dispatch.Center
Logan County	Dispatch Center	Sterling Emergency Dispatch (4 Positions)	SZ0D1C3D27	4		3	Sterling.Emergency.Emergency.Dispatch.Center
Loveland, City of	Dispatch Center	Loveland, City of Dispatch (10 Positions)	SZ0D1C3D28	10		3	Loveland.City.of.Dispatch.Center
Colorado Springs, City of	Dispatch Center	Colorado Springs, City of Police Fire Dispatch (16 Positions)	SZ0D1C4D1	16		4	Colorado.Springs.City.of.Police.Fire.Dispatch.Center

			Primary	Only for Transport Links	2nd	Switch Assn or	
Springs Utilities	Dispatch Center	Springs Utilities ESC Dispatch (14 Positions)	SZDD1C4D3	14		4	Springs.Utilities.ESC.Dispatch.Center
Springs Utilities	Dispatch Center	Springs Utilities Leon Young Dispatch (2 Positions)	SZDD1C4D3	2		4	Springs.Utilities.Young.Dispatch.Center
Springs Utilities	Dispatch Center	Springs Utilities SECC Dispatch (7 Positions)	SZDD1C4D4	7		4	Springs.Utilities.SECC.Dispatch.Center
El Paso County	Dispatch Center	El Paso County Sheriff Dispatch (8 Positions)	SZDD1C4D29	8		4	El.Paso.Sheriff.Dispatch.Center
Colorado Springs, City of	Dispatch Center	Colorado Springs, City of Airport Dispatch (2 Positions)		2		4	Colorado.Springs.City.of.Airport.Dispatch.Center
Colorado Springs, City of	Dispatch Center	Colorado Springs, City of OEM Dispatch (2 Positions)		2		4	Colorado.S+I1548prings.City.of.OEM.Dispatch.Center
Colorado Springs, City of	Dispatch Center	Colorado Springs, City of Radio Test Dispatch (1 Position)		1		4	Colorado.Springs.City.of.Radio.Test.Dispatch.Center
Colorado Springs, City of	Dispatch Center	Colorado Springs, City of Streets Dispatch (3 Positions)		3		4	Colorado.Springs.City.of.Streets.Dispatch.Center
Colorado Springs, City of	Dispatch Center	Colorado Springs, City of Traffic Dispatch (1 Position)		1		4	Colorado.Springs.City.of.Traffic.Dispatch.Center
Colorado Springs, City of	Dispatch Center	Colorado Springs, City of Transit Dispatch (2 Positions)		2		4	Colorado.Springs.City.of.Transit.Dispatch.Center
Fountain Springs, City	Dispatch Center	Fountain Springs, City of Dispatch (2 Positions)		2		4	Fountain.Springs.City.of.Dispatch.Center
Memorial Hospital	Dispatch Center	Memorial Hospital Main Dispatch (2 Positions)		2		4	Memorial.Hospital.Main.Dispatch.Center
Memorial Hospital	Dispatch Center	Memorial Hospital North Dispatch (1 Position)		1		4	Memorial.Hospital.North.Dispatch.Center
Woodland Park, City of	Dispatch Center	Woodland Park, City of PD Dispatch (1 Position)		1		4	Woodland.Park.City.of.PD.Dispatch.Center
El Paso County	Dispatch Center	El Paso County Teller Dispatch (6 Positions)		6		4	El.Paso.Teller.Dispatch.Center
State of Colorado	Transport - uW	DTB (Denver Transfer Building)	103	Littleton	160	AA	DTB.Denver.Transfer.Building.to.Littleton.Transport.Link
State of Colorado	Transport - uW	ADCOM	1C2	Broomfield, City of	1J5	CW	ADCOM.to.Broomfield.City.of.Transport.Link
IGC	Transport - Fiber	Broomfield, City of	1J5	PRPA (Ft. Collins)	3B2	CWf	Broomfield.City of.to.PRPA.Ft.Collins.Transport.Link
State of Colorado	Transport - uW	ADCOM	1C2	Long Peak	386	CN	ADCOM.to.Long.Peak.Transport.Link
IGC	Transport - Fiber	Long Peak	386	PRPA (Ft. Collins)	3B2	CNf	Long Peak.to.PRPA.Ft.Collins.Transport.Link
State of Colorado	Transport - uW	ADCOM	1C2	Thronton, City of	1J6	CC	ADCOM.to.Thronton.City.of.Transport.Link
State of Colorado	Transport - uW	Thronton, City of	1J6	Commerce, City of	161	CC	Thronton.City of.to.Commerce.City.of.Transport.Link
State of Colorado	Transport - uW	Commerce, City of	161	ADCOM	1C2	CC	Commerce.City.of.to.ADCOM.Transport.Link
State of Colorado	Transport - uW	ADCOM	1C2	Lady Bird Hill	198	CE	ADCOM.to.Lady.Bird.Hill.Transport.Link
State of Colorado	Transport - uW	Lady Bird Hill	198	Hoyt	3B4	CE	Lady.Bird.Hill.to.Hoyt.Transport.Link
State of Colorado	Transport - uW	Hoyt	3B4	Ft. Morgan	315	CE	Hoyt.to.Ft.Morgan.Transport.Link
State of Colorado	Transport - uW	Long Peak	386	Gunbarrel Hill	1K8	CNB	Long.Peak.to.Gunbarrel.Hill.Transport.Link
Boulder County	Transport - uW	Gunbarrel Hill	1K8	Boulder, City of PD	1K7	CNB	Gunbarrel.Hill.to.Boulder.City.of.Transport.Link
State of Colorado	Transport - uW	Boulder, City of PD	1K7	Betasso	1J1	CNB	Boulder.City.of.PD.to.Betasso.Transport.Link
State of Colorado	Transport - uW	DTB (Denver Transfer Building)	103	Hwy-E. Colfax	146	DD	DTB.Denver.Transfer.Building.to.Hwy.Colfax.Transport.Link
State of Colorado	Transport - uW	Hwy-E. Colfax	146	DRDC	187	DD	Hwy.E.Colfax.to.DRDC.Transport.Link
State of Colorado	Transport - uW	Limon	203	Limon Correction	277	DEH	Limon.to.Limon.Correction.Transport.Link
State of Colorado	Transport - uW	Limon Correction	277	Hugo	253	DEH	Limon.to.Hugh.Transport.Link
State of Colorado	Transport - uW	Boyero	209	Punkin Center	1D3	DEP	Boyero.to.Punkin.Center.Transport.Link
State of Colorado	Transport - uW	Smoky Hill	1E3	Zap	1E4	DEA	Smoky.Hill.to.Zap.Transport.Link
Arapahoe County	Transport - uW	Smoky Hill	1E3	Arapahoe County Justice Center	1E9	DEM	Smoky.Hill.to.Arapahoe.County.Justice.Center.Transport.Link.
State of Colorado	Transport - uW	Arapahoe County Justice Center	1E9	Military Affairs	1E8	DEM	Arapahoe.County.Justice.Center.to.Military.Affairs.Transport.Link
State of Colorado	Transport - uW	DTB (Denver Transfer Building)	103	Smoky Hill	1E3	DE	DTB.Denver.Transfer.Building.to.Smoky.Hill.Transport.Link
State of Colorado	Transport - uW	Zap	1E4	Ramah	1D8	DE	Zap.to.Ramah.Transport.Link
State of Colorado	Transport - uW	Ramah	1D8	Limon	203	DE	Ramah.to.Limon.Transport.Link
State of Colorado	Transport - uW	Limon	203	Boyero	209	DE	Limon.to.Boyero.Transport.Link
State of Colorado	Transport - uW	DTB (Denver Transfer Building)	103	690 Kipling	147	DK	DTB.Denver.Transfer.Building.to.690 Kipling.Kipling.Transport.Link
State of Colorado	Transport - uW	South Metro Fire	1H8	690 Kipling	147	SL	South.Metro.Fire.to.690 Kipling.Kipling.Transport.Link
State of Colorado	Transport - uW	DTB (Denver Transfer Building)	103	Ft Logan MH	139	DL	DTB.Denver.Transfer.Building.to.Ft Logan MH.Transport.Link
State of Colorado	Transport - uW	DTB (Denver Transfer Building)	103	SSB (State Service Building)	102	DM	DTB.Denver.Transfer.Building.to.SSB.State Service Building.Transport.Link
State of Colorado	Transport - uW	SSB (State Service Building)	102	Camp George West	148	DMA	SSB.State.Service.Building.to.Camp George West.Transport.Link
State of Colorado	Transport - uW	Auraria-King Center	1H9	Centennial Building	191	MK	Auraria.King.Center.to.Centennial.Building.Transport.Link
Jefferson County	Transport - uW	Camp George West	148	Jefferson County Shop	1C6	DMJ	Camp George West.to.Jefferson.County.Shop.Transport.Link
State of Colorado	Transport - uW	Buckhorn	305	Ft. Collins	306	NF	Buckhorn.to.Ft.Collins.Transport.Link
State of Colorado	Transport - uW	Squaw Mt.	111	Mead	308	DN	Squaw.Mt.to.Mead.Transport.Link
State of Colorado	Transport - uW	Mead	308	Buckhorn	305	DN	Mead.to.Buckhorn.Transport.Link
State of Colorado	Transport - uW	Buckhorn	305	Greeley	313	DN	Buckhorn.to.Greeley.Transport.Link
State of Colorado	Transport - uW	DTB (Denver Transfer Building)	103	Franktown	109	DS	DTB.Denver.Transfer.Building.to.Franktown.Transport.Link
State of Colorado	Transport - uW	Franktown	109	Cheyenne Mt.	205	DS	Franktown.to.Cheyenne.Mt.Transport.Link
State of Colorado	Transport - uW	Cheyenne Mt.	205	Pueblo	204	DS	Cheyenne.Mt.to.Pueblo.Transport.Link
State of Colorado	Transport - uW	Cheyenne Mt.	205	Austin Bluffs	2H9	SC	Cheyenne.Mt.to.Austin.Bluffs.Transport.Link
PPRCN	Transport - uW	Austin Bluffs	2H9	Colorado Springs	215	SC	Austin.Bluffs.to.Colorado.Springs.Transport.Link
State of Colorado	Transport - uW	DTB (Denver Transfer Building)	103	Squaw Mt.	111	DW	DTB.Denver.Transfer.Building.to.Squaw.Mt.Transport.Link
State of Colorado	Transport - uW	Squaw Mt.	111	Mines Peak	112	DW	Squaw.Mt.to.Mines.Peak.Transport.Link
State of Colorado	Transport - uW	Mines Peak	112	Grouse Mt.	411	DW	Mines.Peak.to.Grouse.Mt.Transport.Link
State of Colorado	Transport - uW	Grouse Mt.	411	Castle Peak	405	DW	Grouse.Mt.to.Castle.Peak.Transport.Link
State of Colorado	Transport - uW	Castle Peak	405	Sunlight Peak	416	DW	Castle.Peak.to.Sunlight.Peak.Transport.Link
State of Colorado	Transport - uW	Sunlight Peak	416	Grand Mesa	410	DW	Sunlight.Peak.to.Grand.Mesa.Transport.Link
State of Colorado	Transport - uW	Grand Mesa	410	Grand Junction	400	DW	Grand.Mesa.to.Grand.Junction.Transport.Link
Grand County	Transport - uW	Hot Sulphur Springs	412	Grouse Mt.	411	WH	Hot.Sulphur.Springs.to.Grouse.Mt.Transport.Link
State of Colorado	Transport - uW	Eagle	424	Castle Mt.	405	WE	Eagle.to.Castle.Mt.Transport.Link
State of Colorado	Transport - Fiber	Glenwood Springs	4A5	Cinnamon Creek	474	GHf	Glenwood.Springs.to.Cinnamon.Creek.Transport.Link
State of Colorado	Transport - uW	Cinnamon Creek	474	Sunlight Peak	416	WC	Cinnamon.Creek.to.Sunlight.Peak.Transport.Link
State of Colorado	Transport - uW	Grand Mesa	410	Grand Mesa Radar	4C2	WR	Grand.Mesa.to.Grand.Mesa.Radar.Transport.Link
State of Colorado	Transport - uW	Squaw Mt.	111	Castle Rock	1F9	WS	Squaw.Mt.to.Castle.Rock.Transport.Link
State of Colorado	Transport - Fiber	Grand Junction	400	Craig Justice Center	4D7	GCf	Grand.Junction.to.Craig.Justice.Center.Transport.Link
State of Colorado	Transport - uW	Akron	304	Reirdon	310	GS	Akron.to.Reirdon.Transport.Link
State of Colorado	Transport - uW	Reiradon	310	Sterling	314	GS	Reiradon.to.Sterling.Transport.Link
State of Colorado	Transport - uW	Sterling	314	Sterling CF	370	GSC	Sterling.to.Sterling.CF.Transport.Link
State of Colorado	Transport - uW	Akron	304	Yuma	3A5	GW	Akron.to.Yuma.Transport.Link
State of Colorado	Transport - uW	Yuma	3A5	Wray	311	GW	Yuma.to.Wray.Transport.Link
State of Colorado	Transport - uW	Wray	311	Idalia	3B3	GW	Wray.to.Idalia.Transport.Link
State of Colorado	Transport - uW	Idalia	3B3	Bethune	272	GW	Idalia.to.Bethune.Transport.Link
State of Colorado	Transport - uW	Bethune	272	Burlington	247	GW	Bethune.to.Burlington.Transport.Link
State of Colorado	Transport - uW	Greeley	313	Point of Rocks	309	GE	Greeley.to.Point.of.Rocks.Transport.Link
State of Colorado	Transport - uW	Point of Rocks	309	Ft. Morgan	315	GE	Point.of.Rocks.to.Ft.Morgan.Transport.Link

			Primary	Only for Transport Links	2nd	Switch Assn or	
State of Colorado	Transport - uW	Ft. Morgan	315	Akron	304	GE	Ft.Morgan.to.Akron.Transport.Link
State of Colorado	Transport - uW	Akron	304	Anton	303	GE	Akron.to.Anton.Transport.Link
State of Colorado	Transport - uW	Anton	303	Boyero	209	GE	Anton.to.Boyero.Transport.Link
State of Colorado	Transport - uW	Reiradon	310	Wildhorse	374	RW	Reiradon.to.Wildhorse.Transport.Link
State of Colorado	Transport - uW	Ft. Morgan	315	Pawnee	3B7	FF	Ft.Morgan.to.Pawnee.Transport.Link
State of Colorado	Transport - uW	Pawnee	3B7	Ft. Morgan	315	FF	Pawnee.to.Ft.Morgan.Transport.Link
IGC	Transport - Fiber	Greeley	313	PRPA (Ft. Collins)	3B2	GPf	Greeley.to.PRPA.Ft.Collins.Transport.Link
State of Colorado	Transport - uW	Reiradon	310	Peetz	3B8	RP	Reiradon.to.Peetz.Transport.Link
State of Colorado	Transport - uW	Anton	303	Last Chance	389	GL	Anton.to.Last.Chance.Transport.Link
Yuma County	Transport - uW	Yuma	3A5	Yuma	330	YY	Yuma.to.Yuma.Transport.Link
State of Colorado	Transport - uW	Grand Junction	400	Grand Junction	409	JM	Grand.Junction.to.Grand.Junction.Transport.Link
GJRCC	Transport - uW	Grand Junction	400	Grand Junction Water Plant	4K3	WP	Grand.Junction.to.Grand.Junction Water Plant.Transport.Link
GJRCC	Transport - uW	Grand Junction	400	Whitewater	418	JS	Grand.Junction.to.Whitewater.Transport.Link
State of Colorado	Transport - uW	Whitewater	418	Montrose	425	JS	Whitewater.to.Montrose.Transport.Link
State of Colorado	Transport - uW	Montrose	425	Storm King	415	JS	Montrose.to.Storm.King.Transport.Link
State of Colorado	Transport - uW	Storm King	415	North Mt.	413	JS	Storm.King.to.North.Mt.Transport.Link
State of Colorado	Transport - uW	North Mt.	413	Lamonte	506	JS	North Mt.to.Lamonte.Transport.Link
State of Colorado	Transport - uW	Lamonte	506	Missionary	510	JS	Lamonte.to.Missionary.Transport.Link
State of Colorado	Transport - uW	Missionary	510	Durango	509	JS	Missionary.to.Durango.Transport.Link
Garfield County	Transport - uW	Whitewater	418	Mt. Callahan	4F7	JX	Whitewater.to.Mt.Callahan.Transport.Link
Garfield County	Transport - uW	Mt. Callahan	4F7	Monument	4H9	JX	Mt. Callahan.to.Monument.Transport.Link
Garfield County	Transport - uW	Monument	4H9	Sunlight - Graco	4J5	JX	Monument.to.Sunlight.Sunlight.Graco.Transport.Link
Garfield County	Transport - uW	Sunlight - Graco	4J5	Glenwood Springs (Lookout)	4K5	JX	Sunlight.Graco.to.Glenwood.Springs.Lookout.Transport.Link
Garfield County	Transport - uW	Glenwood Springs (Lookout)	4K5	New Castle	4L8	JX	Glenwood.Springs.Lookout.to.New.Castle.Transport.Link
Pitkin County	Transport - uW	Crown Mt.	4M9	Ajax Mt.	4K4	JXA	Crown.Mt.to.Ajax.Mt.Transport.Link
GJRCC	Transport - uW	Sunlight - Graco	4J5	Rifle - Garco Comm Center	4E9	JXB	Sunlight.Graco.to.Rifle.Garco Comm Center.Transport.Link
Bureau of Reclamation	Transport - uW	Sunlight - Graco	4J5	Sunlight - WAPA	4M1	JXG	Sunlight.Graco.to.Sunlight.WAPA.Transport.Link
Bureau of Reclamation	Transport - uW	Sunlight - WAPA	4M1	Hangerman Pass	2G7	JXG	Sunlight.WAPA.to.Hangerman.Pass.Transport.Link
Bureau of Reclamation	Transport - uW	Hangerman Pass	2G7	Granite	5A6	JXG	Hangerman Pass.to.Granite.Transport.Link
State of Colorado	Transport - uW	North Mt.	413	Dolores	530	JSC	North.Mt.to.Dolores.Transport.Link
State of Colorado	Transport - uW	Dolores	530	Cortez	533	JSC	Dolores.to.Cortez.Transport.Link
State of Colorado	Transport - uW	Whitewater	418	Delta	430	JD	Whitewater.to.Delta.Transport.Link
GJRCC	Transport - uW	Lee's Point	4H7	Uncompahgre Butte	4K8	JL	Lee's.Point.to.Uncompahgre.Butte.Transport.Link
GJRCC	Transport - uW	Uncompahgre Butte	4K8	Mesa Point	4H8	JL	Uncompahgre.Butte.to.Mesa.Point.Transport.Link
GJRCC	Transport - uW	Mesa Point	4H8	Grand Junction Water Plant	4K3	JL	Mesa Point.to.Grand.Junction.Water.Plant.Transport.Link
GJRCC	Transport - uW	Grand Junction Water Plant	4K3	Grand Junction Regional Communications	4E1	JL	Grand.Junction.Water.Plant.to.Grand.Junction.Regional.Communications.Transport.Link
GJRCC	Transport - uW	Grand Junction Regional Communications	4E1	Grand Junction	400	JL	Grand.Junction.Regional.Communications.to.Grand.Junction.Transport.Link
GJRCC	Transport - uW	Grand Junction Water Plant	4K3	Blackridge	4H5	JL	Grand.Junction.Water.Plant.to.Blackridge.Transport.Link
GJRCC	Transport - uW	Black Ridge	4H5	Rabbit Valley	4MB	JL	Blackridge.to.Rabbit.Valley.Transport.Link
Montrose County	Transport - uW	NUCLA	421	Gobbler's Knob	4G3	JN	NUCLA.to.Gobbler's.Knob.Transport.Link
Montrose County	Transport - uW	Gobbler's Knob	4G3	Last Dollar	4G5	JN	Gobbler's.Knob.to.Last.Dollar.Transport.Link
State of Colorado	Transport - uW	Last Dollar	4G5	Raspberry	4G8	JN	Last.Dollar.to.Raspberry.Transport.Link
Montrose County	Transport - uW	Raspberry	4G8	Montrose	4H3	JN	Raspberry.to.Montrose.Transport.Link
State of Colorado	Transport - uW	Montrose	4H3	Montrose	425	JN	Montrose.to.Montrose.Transport.Link
State of Colorado	Transport - uW	Last Dollar	4G5	Grayhead Mt.	4A1	JN	Last.Dollar.to.Grayhead.Mt.Transport.Link
State of Colorado	Transport - uW	Grayhead Mt.	4A1	Coonskin	4K9	JN	Grayhead.Mt.to.Coonskin.Transport.Link
State of Colorado	Transport - uW	Gobbler's Knob	4G3	Uravan	4M5	JN	Gobbler's.Knob.to.Uravan.Transport.Link
GJRCC	Transport - uW	Grand Junction	400	Mesa Point	4H8	JR	Grand.Junction.to.Mesa.Point.Transport.Link
State of Colorado	Transport - uW	Mesa Point	4H8	Raspberry	4G8	JR	Mesa Point.to.Raspberry.Transport.Link
State of Colorado	Transport - uW	Raspberry	4G8	North Mt.	413	JR	Raspberry.to.North.Mt.Transport.Link
State of Colorado	Transport - uW	Raspberry	4G8	Egner Mt.	5C4	JR	Raspberry.to.Egner.Mt.Transport.Link
State of Utah	Transport - uW	North Mt.	413	Abajo Peak	5A9	JU	North.Mt.to.Abajo.Peak.Transport.Link
State of Colorado	Transport - uW	Montrose	4H3	Water Dog	4H4	MS	Montrose.to.Water.Dog.Transport.Link
State of Colorado	Transport - uW	Waterdog	4H4	Sheep's Knob	4G4	MS	Water.Dog.to.Sheep's.Knob.Transport.Link
State of Colorado	Transport - uW	Waterdog	4H4	Log Hill	4G2	MS	Water.Dog.to.Log.Hill.Transport.Link
State of Colorado	Transport - uW	Missionary	510	Smelter Mt.	581	JSD	Missionary.to.Smelter.Mt.Transport.Link
City of Durango	Transport - uW	Smelter Mt.	581	Durango Dispatch	5B7	JSD	Smelter.Mt.to.Durango.Dispatch.Transport.Link
State of Colorado	Transport - uW	Smelter Mt.	581	Durango Shop	503	JSD	Smelter.Mt.to.Durango.Shop.Transport.Link
State of Colorado	Transport - uW	Grassy	5C6	Missionary	506	JSG	Grassy.to.Missionary.Transport.Link
State of Colorado	Transport - uW	Missionary	506	Rico	582	JSR	Missionary.to.Rico.Transport.Link
Southern Ute	Transport - uW	Ute Mt.	5C5	Lamonte	506	JSU	Ute.Mt.to.Lamonte.Transport.Link
State of Colorado	Transport - uW	Igancio	5D3	Smelter Mt.	581	JSS	Igancio.to.Smelter.Mt.Transport.Link
Delta County	Transport - uW	Montrose	415	Sunset Mesa	4F4	JST	Montrose.to.Sunset.Mesa.Transport.Link
Garfield County	Transport - uW	Sunset Mesa	4F4	Tank Hill	4M4	JST	Sunset.Mesa.to.Tank.Hill.Transport.Link
Garfield County	Transport - uW	Monument	4H9	Sunlight	4J5	JX	Monument.to.Sunlight.Transport.Link
State of Colorado	Transport - uW	Sunlight	4K5	Glenwood Springs	4K5	JX	Sunlight.to.Glenwood.Springs.Transport.Link
Bureau of Reclamation	Transport - uW	Sunlight	4J5	Crown Mt.	4M9	JXA	Sunlight.to.Crown.Mt.Transport.Link
State of Colorado	Transport - T1	Hangerman Pass	2G7	Granite	5A6	JXG	Hangerman.Pass.to.Granite.Transport.Link
State of Colorado	Transport - uW	Grand Junction	400	Grand Junction NWS	4E7	JWq	Grand.Junction.to.Grand.Junction.NWS.Transport.Link
State of Colorado	Transport - uW	Lakewood	147	Squaw Mt.	111	LW	Lakewood.to.Squaw.Mt.Transport.Link
State of Colorado	Transport - uW	Squaw Mt.	111	Wildlife	152	LW	Squaw.Mt.to.Wildlife.Transport.Link
State of Colorado	Transport - uW	Pueblo	204	Greenhorn	207	PA	Pueblo.to.Greenhorn.Transport.Link
State of Colorado	Transport - uW	Greenhorn	207	Walsenburg	214	PA	Greenhorn.to.Walsenburg.Transport.Link
State of Colorado	Transport - uW	Walsenburg	214	Laveta	507	PA	Walsenburg.to.Laveta.Transport.Link
State of Colorado	Transport - uW	Laveta	507	Alamosa	519	PA	Laveta.to.Alamosa.Transport.Link
State of Colorado	Transport - uW	Walsenburg	214	Bowen Marker	267	PAT	Walsenburg.to.Bowen.Marker.Transport.Link
State of Colorado	Transport - uW	Bowen Marker	267	Trinidad CF	E3A	PAT	Bowen.Marker.to.Trinidad.CF.Transport.Link
State of Colorado	Transport - uW	Laveta	507	Cordova Pass	2F5	PAR	Laveta.to.Cordova.Pass.Transport.Link
State of Colorado	Transport - uW	Cordova Pass	2F5	Raton Pass	2G6	PAR	Cordova.Pass.to.Raton.Pass.Transport.Link
State of Colorado	Transport - uW	Alamosa	519	Saguache	543	PAN	Alamosa.to.Saguache.Transport.Link
State of Colorado	Transport - uW	Monte Vista	583	Pool Table	513	PAM	Monte.Vista.to.Pool.Table.Transport.Link

			Only for Transport Links				
			Primary		2nd	Switch Assn or	
State of Colorado	Transport - uW	Alamosa	519	San Antonio Peak	5A1	PAS	Alamosa.to.San.Antonio.Peak.Transport.Link
State of Colorado	Transport - uW	San Antonio Peak	5A1	San Luis	578	PAS	San.Antonio.Peak.to.San.Luis.Transport.Link
State of Colorado	Transport - uW	Alamosa	519	Alamosa CSP	587	PA	Alamosa.to.Alamosa.CSP.Transport.Link
State of Colorado	Transport - uW	Alamosa CSP	587	Pool Table	513	PA	Alamosa.CSP.to.Pool.Table.Transport.Link
State of Colorado	Transport - uW	Pool Table	513	Wolf Creek	5B9	PA	Pool.Table.to.Wolf.Creek.Transport.Link
State of Colorado	Transport - uW	Wolf Creek	5B9	Oak Brush	545	PA	Wolf.Creek.to.Oak.Brush.Transport.Link
State of Colorado	Transport - uW	Oak Brush	545	Missionary	510	PA	Oak.Brush.to.Missionary.Transport.Link
State of Colorado	Transport - uW	Sandoval	5C2	Wolf Creek	5B9	PAV	Sandoval.to.Wolf.Creek.Transport.Link
Pueblo County	Transport - uW	Pueblo	204	Pueblo Chem Depot	2G4	PE	Pueblo.to.Pueblo.Chem.Depot.Transport.Link
State of Colorado	Transport - uW	Pueblo Chem Depot	2G4	Fowler	206	PE	Pueblo.Chem.Depot.to.Fowler.Transport.Link
State of Colorado	Transport - uW	Fowler	206	Valley	213	PE	Fowler.to.Valley.Transport.Link
State of Colorado	Transport - uW	Valley	213	Haswell	221	PE	Valley.to.Haswell.Transport.Link
State of Colorado	Transport - uW	Haswell	221	Boyero	209	PE	Haswell.to.Boyero.Transport.Link
State of Colorado	Transport - uW	Valley	213	Toonerville	211	ES	Valley.to.Toonerville.Transport.Link
State of Colorado	Transport - uW	Toonerville	211	Springfield	218	ES	Toonerville.to.Springfield.Transport.Link
Baca Sheriff's Office	Transport - uW	Springfield	218	Springfield Extension	2F7	ES	Springfield.to.Springfield.Transport.Link
State of Colorado	Transport - uW	Springfield	27F	Mt. Carmel	2F6	ES	Springfield.to.Mt.Carmel.Transport.Link
State of Colorado	Transport - uW	Fowler	206	Ordway	256	EO	Fowler.to.Ordway.Transport.Link
State of Colorado	Transport - uW	Haswell	221	Lamar	208	EL	Haswell.to.Lamar.Transport.Link
State of Colorado	Transport - uW	Lamar	208	Carlton	249	EL	Lamar.to.Carlton.Transport.Link
State of Colorado	Transport - uW	Carlton	249	Holly	2J1	EL	Carlton.to.Holly.Transport.Link
State of Colorado	Transport - uW	Valley	213	Ft. Lyon	2E7	EF	Valley.to.Ft.Lyon.Transport.Link
State of Colorado	Transport - uW	Haswell	221	First View	250	HS	Haswell.to.First.View.Transport.Link
State of Colorado	Transport - uW	First View	250	Sheridan Lake	2G2	HS	First.View.to.Sheridan.Lake.Transport.Link
State of Colorado	Transport - uW	Pueblo	204	Pueblo State Hospital	226	PIA	Pueblo.to.Pueblo.State.Hospital.Transport.Link
State of Colorado	Transport - Fiber	Pueblo State Hospital	226	Pueblo San Carlos	2B8	PIAf	Pueblo.State.Hospital.to.Pueblo.San.Carlos.Transport.Link
Park County	Transport - uW	Fairplay	534	Sacramento	576	PK	Fairplay.to.Sacramento.Transport.Link
State of Colorado & Park County	Transport - uW	Sacramento	576	Badger	544	PK	Sacramento.to.Badger.Transport.Link
State of Colorado	Transport - uW	Badger	544	West Creek	168	PK	Badger.to.West.Creek.Transport.Link
State of Colorado	Transport - uW	West Creek	168	Bailey	1G8	PK	West.Creek.to.Bailey.Transport.Link
State of Colorado	Transport - uW	Pueblo	204	Mt. Pittsburg		PN	Pueblo.to.Mt.Pittsburg.Transport.Link
PPRCN	Transport - uW	Pittsburg		Fountain Valley		PN	Mt.Pittsburg.to.Fountain.Valley.Transport.Link
State of Colorado	Transport - uW	Fountain Valley		Ski Summit		PN	Fountain.Valley.to.Ski.Summit.Transport.Link
PPRCN	Transport - uW	Ski Summit		Colorado Springs POC	2H8	PN	Ski.Summit.to.Colorado.Springs.POC.Transport.Link
State of Colorado	Transport - uW	Pueblo	204	Twin Mt.	210	PW	Pueblo.to.Twin.Mt.Transport.Link
State of Colorado	Transport - uW	Twin Mt.	210	Coaldale	505	PW	Twin.Mt.to.Coaldale.Transport.Link
State of Colorado	Transport - uW	Coaldale	505	Bald Mt.	504	PW	Coaldale.to.Bald.Mt.Transport.Link
State of Colorado	Transport - uW	Bald Mt.	504	Salida	514	PW	Bald.Mt.to.Salida.Transport.Link
State of Colorado	Transport - uW	Salida	514	Monarch Pass	511	PW	Salida.to.Monarch.Pass.Transport.Link
State of Colorado	Transport - uW	Monarch Pass	511	Cupola Hill	407	PW	Monarch.Pass.to.Cupola.Hill.Transport.Link
State of Colorado	Transport - uW	Cupola Hill	407	Storm King	415	PW	Cupola.Hill.to.Storm.King.Transport.Link
State of Colorado	Transport - uW	Twin Mt.	210	East Canon	254	PCA	Twin.Mt.to.East.Canon.Transport.Link
State of Colorado	Transport - uW	East Canon	254	Canon City	216	PCB	East.Canon.to.Canon.City.Transport.Link
State of Colorado	Transport - uW	Bald Mt.	504	Buena Vista	508	PB	Bald.Mt.to.Buena.Vista.Transport.Link
WAPA	Transport - uW	Twin Mt.	210	Deer Peak	2E8	PV	Twin.Mt.to.Deer.Peak.Transport.Link
State of Colorado	Transport - uW	Deer Peak	2E8	Verdemont	2G3	PV	Deer.Peak.to.Verdemont.Transport.Link
State of Colorado	Transport - uW	Salida	514	Poncha Springs	5C1	PWP	Salida.to.Poncha.Springs.Transport.Link
State of Colorado	Transport - uW	Twin Mt.	210	Tenderfoot II	2C6	PWT	Twin.Mt.to.Tenderfoot.II.Transport.Link
State of Colorado	Transport - uW	Cupola Hill	407	Comstock	4J6	PWC	Cupola.Hill.to.Comstock.Transport.Link
State of Colorado	Transport - uW	Comstock	4J6	Crested Butte	4J5	PWC	Comstock.to.Crested.Butte.Transport.Link
State of Colorado	Transport - uW	Cupola Hill	407	Tenderfoot	476	PWR	Cupola.Hill.to.Tenderfoot.Transport.Link
State of Colorado	Transport - uW	Walton Mtn	476	Rose Ridge	4K7	PWR	Walton.Mtn.to.Rose.Ridge.Transport.Link
State of Colorado	Transport - uW	Rose Ridge	4K7	Hill 71	556	PWR	Rose.Ridge.to.Hill.Hill 71.Transport.Link
State of Colorado	Transport - uW	Grouse Mt.	411	Walton Mt.	417	WA	Grouse.Mt.to.Walton.Mt.Transport.Link
State of Colorado	Transport - uW	Walton Mtn	417	Cedar Mt.	406	WA	Walton.Mt.to.Cedar.Mt.Transport.Link
State of Colorado	Transport - uW	Cedar Mt.	406	Craig Justice Center	4D7	WA	Cedar.Mt.to.Craig.Justice.Center.Transport.Link
State of Colorado	Transport - uW	Craig Justice Center	4D7	Craig	402	WAC	Craig.Justice.Center.to.Craig.Transport.Link
State of Colorado	Transport - uW	Cedar Mt.	406	Wilson Creek	419	WC	Cedar.Mt.to.Wilson.Creek.Transport.Link
State of Colorado	Transport - uW	Wilson Creek	419	Cathedral Bluffs	478	WC	Wilson.Creek.to.Cathedral.Bluffs.Transport.Link
Rio Blanco County	Transport - uW	Cathedral Bluffs	478	Douglas Pass	4N7	WC	Cathedral.Bluffs.to.Douglas.Pass.Transport.Link
Rio Blanco County	Transport - uW	Douglas Pass	4N7	Grand Junction Water Plant	4K3	WC	Douglas.Pass.to.Grand.Junction.Water.Plant.Transport.Link
Rio Blanco County	Transport - uW	Cathedral Bluffs	478	Mellen Hill	436	WCM	Cathedral.Bluffs.to.Mellen.Hill.Transport.Link
State of Colorado	Transport - uW	Cedar Mt.	406	Juniper Mt.	422	WAB	Cedar.Mt.to.Juniper.Mt.Transport.Link
State of Colorado	Transport - uW	Juniper Mt.	422	Vermillion Bluffs	479	WAB	Juniper.Mt.to.Vermillion.Bluffs.Transport.Link
State of Colorado	Transport - uW	Juniper Mt.	422	Harper Hill	4J1	WAB	Juniper.Mt.to.Harper.Hill.Transport.Link
State of Colorado	Transport - uW	Cedar Mt.	406	Bakers Peak	4K6	WAD	Cedar.Mt.to.Bakers.Peak.Transport.Link
State of Colorado	Transport - uW	Walton Mtn	417	Mt. Werner	4J9	WAF	Walton.to.Mt.Werner.Transport.Link
Rio Blanco County	Transport - uW	Mt. Werner	4J9	Farwell	4H6	WAF	Mt. Werner.to.Farwell.Transport.Link
Routt County	Transport - uW	Wilson Creek	419	Lobo	420	WM	Wilson Creek.to.Lobo.Transport.Link
Rio Blanco County	Transport - uW	Lobo	420	Monument	478	WM	Lobo.to.Monument.Transport.Link
Rio Blanco County	Transport - uW	Lobo	420	Pollard	4N5	WM	Lobo.to.Pollard.Transport.Link
Rio Blanco County	Transport - uW	Pollard	4N5	Marvine Hill	4N4	WM	Pollard.to.Marvine.Hill.Transport.Link
State of Colorado	Transport - uW	Grouse Mt.	411	Blue Ridge	4A6	WL	Grouse.Mt.to.Blue.Ridge.Transport.Link
State of Colorado	Transport - uW	Blue Ridge	4A6	Lake Hill	459	WL	Blue.Ridge.to.Lake.Hill.Transport.Link
Summit County	Transport - uW	Lake Hill	459	Tyrolean	4L4	WL	Lake.Hill.to.Tyrolean.Transport.Link
Summit County	Transport - uW	Tyrolean	4L4	Peak Ten	4L6	WL	Tyrolean.to.Peak.Ten.Transport.Link
Summit County	Transport - uW	Peak Ten	4L6	Copper Mt.	4D2	WL	Peak.Ten.to.Copper.Mt.Transport.Link
Summit County	Transport - uW	Lake Hill	459	Wilderness	4L5	WL	Lake Hill.to.Wilderness.Transport.Link
Jefferson County	Transport - T1	West Creek	168	Castle Rock	1F9	WS03	West.Creek.to.Castle.Rock.WS03.Transport.Link
Jefferson County	Transport - T1	Smoky Hill	1E3	Castle Rock	1F9	DEA13	Smoky.Hill.to.Castle.Rock.DEA13.Transport.Link
Jefferson County	Transport - T1	Riley Peak	1E2	Smoky Hill	1E3	DEA01	Riley.Peak.to.Smoky.Hill.DEA01.Transport.Link

			Primary	Only for Transport Links	2nd	Switch Assn or	
Jefferson County	Transport - T1	Smoky Hill	1E3	West Creek	168	DEA04	Smoky.Hill.to.West.Creek.DEA04.Transport.Link
Jefferson County	Transport - T1	Lookout	1H1	Smoky Hill	1E3	DEA09	Lookout.to.Smoky.Hill.DEA09.Transport.Link
Jefferson County	Transport - T1	Lookout	1H1	Smoky Hill	1E3	DEA15	Lookout.to.Smoky.Hill.DEA.15.Transport.Link
Jefferson County	Transport - T1	Smoky Hill	1E3	Castle Rock	1F9	DEA21	Smoky.Hill.to.Castle.Rock.DEA21.Transport.Link
Jefferson County	Transport - T1	Lookout	1H1	Smoky Hill	1E3	DEA05	Lookout.to.Smoky.Hill.DEA05.Transport.Link
Jefferson County	Transport - T1	Smoky Hill	1E3	Castle Rock	1F9	DEA26	Smoky.Hill.to.Castle.Rock.DEA26.Transport.Link
Jefferson County	Transport - T1	Smoky Hill	1E3	West Creek	168	DEA14	Smoky.Hill.to.West.Creek.DEA14.Transport.Link
Jefferson County	Transport - T1	Smoky Hill	1E3	West Creek	168	DEA18	Smoky.Hill.to.West.Creek.DEA18.Transport.Link
Jefferson County	Transport - T1	Smoky Hill	1E3	West Creek	168	DEA25	Smoky.Hill.to.West.Creek.DEA25.Transport.Link
Jefferson County	Transport - T1	Lookout	1H1	Smoky Hill	1E3	DEA17	Lookout.to.Smoky.Hill.DEA17.Transport.Link
Jefferson County	Transport - T1	Smoky Hill	1E3	Castle Rock	1F9	DEB07	Smoky.Hill.to.Castle.Rock.DEB07.Transport.Link
Jefferson County	Transport - T1	Lookout	1H1	Smoky Hill	1E3	DEA19	Lookout.to.Smoky.Hill.DEA19.Transport.Link
Jefferson County	Transport - T1	Smoky Hill	1E3	West Creek	168	DEA22	Smoky.Hill.to.West.Creek.DEA22.Transport.Link
Jefferson County	Transport - T1	Smoky Hill	1E3	West Creek	168	DEA02	Smoky.Hill.to.West.Creek.DEA02.Transport.Link
Jefferson County	Transport - T1	Smoky Hill	1E3	West Creek	168	DEA24	Smoky.Hill.to.West.Creek.DEA24.Transport.Link
WAPA	Transport - uW	Deer Peak	2E8	Methodist	585		Deer.Peak.to.Methodist.Transport.Link
WAPA	Transport - uW	Twin Mt.	210	Verdemont	2G3		Twin.Mt.to.Verdemont.Transport.Link
State of Colorado	Transport - T1	Kiowa	1K9	Castle Rock PD			Kiowa.to.Castle.Rock.PD.Transport.Link
Grand County	Transport - uW	Santoy		Blue Ridge	4A6		Santoy.to.Blue.Ridge.Transport.Link
Grand County	Transport - uW	North Cottonwood		Table Mountain	4A6		North.Cottonwood.to.Table.Mountain.Transport.Link
PPRCN	Transport - uW	Austin Bluffs		Black Forest			Autsin.Bluffs.to.Black.Forest.Transport.Link
PPRCN	Transport - uW	Austin Bluffs		Stanley Canyon			Autsin.Bluffs.to.Stanley.Canyon.Transport.Link
PPRCN	Transport - uW	Stanley Canyon		Badger			Stanley.Canyon.to.Badger.Transport.Link
PPRCN	Transport - uW	Badger		Woodland Park			Badger.to.Woodland.Park.Transport.Link
PPRCN	Transport - uW	Colorado Springs POC		Cedar Heights			Colorado.POC.to.Cedar.Heights.Transport.Link
PPRCN	Transport - uW	Cedar Heights		Calhan			Cedar.Heights.to.Calhan.Transport.Link
PPRCN	Transport - uW	Calhan		Truckton			Calhan.to.Truckton.Transport.Link
PPRCN	Transport - uW	Truckton		Pittsburg			Trukcton.to.Pittsburg.Transport.Link
PPRCN	Transport - uW	Fountain Valley		Alport			Fountain.Valley.to.Airport.Transport.Link
PPRCN	Transport - uW	Airport		Ski Summit			Airport.to.Ski.Summit.Transport.Link
State of Colorado	Transport - uW	Wilson Creek	419	TeePee Park	4N8		Wilson Creek.to.TeePee.Park.Transport.Link
Tri State	Transport - uW	Storm King Tri State		TV Hill	4G1		Stromking.Tri.state.to.TV.Hill.Transport.Link
State of Colorado	Transport - uW	Storm King Tri State		Storm King	415		Storm.King.Tri.State.to.Storm.King.Transport.Link
GJRCC	Transport - uW	Grand Junction Regional Communications	4E1	Grand Mesa Mesa County	4E2		GJRCC.to.Grand.Mesa.Co.Transport.Link
GJRCC	Transport - uW	Grand Mesa Mesa County	4E2	Collbran	4P8		Grand.Mesa.Co.to.Collbran.Transport.Link
GJRCC	Transport - uW	Grand Junction Water Plant	4K3	Redlands	4P7		Grand.Junction.Water.Plant.to.Redlands.Transport.Link
State of Colorado	Transport - uW	Walton	417	Buffalo Pass	458		Walton.to.Buffalo.Pass.Transport.Link
Eagle County	Transport - uW	Sunlight - Graco	4J5	Blowout	4G6		Sunlight.Garco.to.Blowout.Transport.Link
Eagle County	Transport - uW	Blowout	4G6	Castle Peak	4K2		Blowout.to.Castle.Peak.Transport.Link
Eagle County	Transport - uW	Castle Peak	4K2	Vail Jct	4N2		Castle.Peak.to.Vail.Jct.Transport.Link
Eagle County	Transport - uW	Vail Jct	4N2	Lower Dowd	4G7		Vail.Jct.to.Lower.Dowd.Transport.Link
Eagle County	Transport - uW	Vail Jct	4N2	Beaver Creek	4H1		Vail.Jct.to.Beaver.Creek.Transport.Link
Eagle County	Transport - uW	Beaver Creek	4H1	Wolcott	4J8		Beaver.Creek.to.Wolcott.Transport.Link
Leased Copper from Vail Assoc.	Transport - T1	Beaver Creek	4H1	Lower Beaver Creek	4P6		Beaver.Creek.to.Lower.Beaver.Creek.Transport.Link
Eagle County	Transport - uW	Beaver Creek	4H1	King	4J3		Beaver.Creek.to.King.Transport.Link
Leased T1 from Century Link	Transport - T1	Vail PD	440	East Vail	4N3		Vail.PD.to.East.Vail.Transport.Link
Leased T1 from Century Link	Transport - T1	Vail PD	440	Vail	4N6		Vail.PD.to.Vail.Transport.Link
Eagle County	Transport - uW	Vail PD	440	Vail Jct	4N2		Vail.PD.to.Vail.Jct.Transport.Link
Grand County	Transport - uW	Blue Ridge	4A6	Santoy	4P5		Blueridge.to.Santoy.Transport.Link
Grand County	Transport - uW	North Cottonwood	4P4	Table Mtn	4F5		North.Cottonwood.to.Table.Mtn.Transport.Link
WAPA	Transport - uW	Blue Ridge	4A5	Table Mtn	4F5		Blue.Ridge.to.Table.Mtn.Transport.Link
Routt County	Transport - uW	Routt County Dispatch	4M3	Emerald Mtn	4L9		Routt.County.Dispatch.to.Emerald.Mtn.Transport.Link
Routt County	Transport - uW	Emerald Mtn	4L9	Hayden	4J2		Emerald.Mtn.to.Hayden.Transport.Link
Routt County	Transport - uW	Hayden	4J2	Oak Creek	4L2		Hayden.to.Oak.Creek.Transport.Link
Routt County	Transport - uW	Oak Creek	4L2	Mt Werner	4J9		Oak.Creek.to.Mt.Werner.Transport.Link
Routt County	Transport - uW	Mt Werner	4J9	Routt County Dispatch	4M3		Mt.Werner.to Routt.County.Dispatch.Transport.Link
Routt County	Transport - uW	Oak Creek	4L2	King	4J3		Oak.Creek.to.King.Transport.Link
State of Colorado	Transport - uW	Missionary Ridge	510	Coalbank	5C3		Missionary.Ridge.to.Coalbank.Transport.Link
State of Colorado	Transport - uW	Coalbank	5C3	Silverton	5C7		Coalbank.to.Silverton.Transport.Link
Garfield County	Transport - uW	Parachute	4N1	Mt. Callahan	4F7		Parachute.to.Mt.Callahan.Transport.Link
Holy Cross	Transport - uW	Sunlight holy Cross	4N9	Ajax Mt.	492		Sunlight.Holy.Cross.to.Ajax.Mt.Transport Link
State of Colorado and Garfield County	Transport - Fiber	Sunlight - Graco	4J5	Sunlight Peak	416		Sunlight.Garco.to.Sunlight.Peak.Transport.Link
State of Colorado and Pitkin County	Transport - Fiber	Sunligh+C1610t Peak	416	Sunlight Holy Cross	4N9		Sunlight.Peak.to Sunlight.Holy.Cross.Transport.Link
Holy Cross	Transport - Fiber	Ajax - Holy Cross		Ajax Mt.	492		Ajax.Holy.Cross.to.Ajax.Mt.Transport.Link
State of Colorado / CDOT	Transport - T1	Glenwood Springs	468	Glenwood Springs	4A5		Glenwood.Springs.to.Glenwood.Springs.Transport.Link
Holy Cross	Transport - uW	Beacon Hill	4K1	Sunlight Holy Cross	4N9		Beacon.Hill.to.Sunlight.Holy.Cross.Transport.Link
Leased T1 from Century Link	Transport - T1	Marble	4P2	Glenwood Spr Holy Cross	4P1		Marble.to.Glenwood.Springs.Holy.Cross.Transport.Link
Holy Cross	Transport - uW	Glenwood Spr Holy Cross	4P1	Sunlight Holy Cross	4N9		Glenwood.Springs.Holy.Cross.to.Sunlight.Holy.Cross.Transport.Link
Century Link T1	Transport - T1	Meeker Dispatch	4P3	White River Electric			Meeker.Dispatch.to.White.River.Electric.Transport.Link
White River Electric	Transport - Fiber	White River Electric		Lobo	420		White.River.Electric.to.Lobo.Transport.Link
Dougas County	Simulcast Prime Site	Douglas County North Simulcast Prime Site (Site 14, Zone 1)	14			1	Douglas.County.North.Simulcast.Prime.Site
Dougas County	Simulcast Prime Site	Douglas County South Simulcast Prime Site (Site 52, Zone 1)	52			1	Douglas.County.South.Simulcast.Prime.Site