



**Report to the
Colorado General Assembly**

**Task Force on 911
Oversight, Outage
Reporting, and
Reliability**

Prepared by

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Task Force on 911 Oversight, Outage Reporting, and Reliability

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This report is also available on line at:

<https://www.colorado.gov/pacific/cga-legislativecouncil/2016-task-force-911-oversight-outage-reporting-and-reliability>

Task Force Charge

Pursuant to Part 3 of Article 11 of Title 29, Colorado Revised Statutes, the Task Force on 911 Oversight, Outage Reporting, and Reliability (task force) was charged with the following tasks:

- studying and investigating other states' laws, rules, and practices concerning 911 oversight, outage reporting, and reliability;
- considering whether existing laws, rules, and practices in Colorado provide sufficient protection for the 911 needs of Colorado; and
- studying and determining whether the current funding sources and amount of funding are sufficient for providing existing 911 service and transitioning to next-generation 911 service.

Task Force Activities

The task force met three times during the 2016 interim, and studied topics relating to 911 emergency service, including the technology used in the past and existing 911 systems; Next Generation 911 technology; 911 outages, regulation, and oversight in Colorado and in other states; the federal government's 911 efforts, including the development of FirstNet and Colorado's status relating to that system; and the experiences of first responders, telephone service carriers, emergency management personnel, and individual users with the 911 system. Entities represented before the task force included:

- the Public Safety and Homeland Security Bureau at the Federal Communications Commission (FCC);
- the Minnesota Department of Public Safety;
- the Colorado Governor's Office of Information Technology;
- the Larimer Emergency Telephone Authority;
- Thompson Valley EMS;
- the Manitou Springs Police Department and the Colorado Association of Chiefs of Police;
- the Grand Junction Fire Department and the Colorado State Fire Chiefs;
- the Colorado Public Utilities Commission (PUC);
- the Colorado Office of Consumer Council (OCC);
- the American Association of Retired Persons (AARP);
- the Boulder County Office of Emergency Management;
- the Division of Homeland Security and Emergency Management, Colorado Department of Public Safety;
- the Federal Emergency Management Agency (FEMA);
- the Cellular Telecommunications Industry Association (CTIA);
- the Colorado Telecommunications Association (CTA);
- the Colorado Cable and Telecommunications Association (CCTA); and
- CenturyLink, Colorado's basic emergency service provider (BESP).

The task force heard testimony at every meeting, including remote testimony from 911 service experts from the FCC and the state of Minnesota. The following subsections provide a

glossary of terms used in the report, and discuss the 911 Task Force's activities in further detail. The report concludes with recommendations from the task force.

Glossary of Terms

Automatic location identification (ALI). Section 29-11-101 (1), C.R.S, defines automatic location identification, or ALI, as the automatic display, on equipment at the public safety answering point (PSAP, defined below), of the location of the caller's telephone number, the address for the telephone, including nonlisted and nonpublished numbers and addresses, and other information about the caller's precise location.

Automatic number identification (ANI). Section 29-11-101 (1.1), C.R.S., defines automatic number identification, or ANI, as the automatic display, on equipment at the PSAP, of the caller's telephone number.

Basic emergency service provider (BESP). Under Section 29-11-101 (1.2), C.R.S., a basic emergency service provider, or BESP, is any person authorized to undertake the aggregation and transportation of 911 calls to a PSAP. Currently, CenturyLink is the only BESP in Colorado.

Emergency services network (ESInet). ESInet is an internet protocol-based network that supports next generation 911 (NextGen 911, defined below) local, regional, state, and national emergency management communications. ESInet can route information between different platforms and over a diverse type of transmitters and receive a wide range of data from a variety of devices and technologies.

Emergency medical services (EMS). EMS is the system of emergency medical care provided by various groups, such as first responders, hospitals, and dispatchers.

Emergency notification system (reverse 911). An emergency notification system allows a public safety entity, such as an office of emergency management or law enforcement, to alert citizens of emergencies, disasters, police activity, or evacuations via telephone, mobile phone, social media, e-mail and text message. This notification system is commonly referred to as "reverse 911," which is a proprietary term that refers to a specific notification system.

Federal Communications Commission (FCC). The FCC regulates interstate and international communications by radio, television, wire, satellite and cable in all 50 states, the District of Columbia, and U.S. territories.

First Responder Authority Network (FirstNet). According to 47 C.F.R. § 90.7, FirstNet is an independent authority within the federal National Telecommunications and Information Administration and holds a nationwide license associated with certain communication bands for use in deploying a nationwide public safety broadband network.

Geographic information systems (GIS). GIS is a computer system that assembles, stores, analyzes, and displays geographic information. NextGen 911 can utilize GIS data to provide call location validation and mapping.

Internet protocol (IP). IP is a communication network that uses the Internet to send and receive messages.

Next generation 911 (NextGen 911). NextGen 911 is an IP-based 911 system replacing a legacy, landline-based network that allows digital information to flow through the 911 system, provides network diversity, and creates greater redundancy.

Prepaid wireless service. Prepaid wireless service is a system in which the customer pays in advance for wireless service. There is no monthly bill on which to collect taxes and fees, so some states impose additional charges on the sale of prepaid services.

Public safety answering point (PSAP). Section 29-11-101 (6.5), C.R.S., defines a PSAP as a facility equipped and staffed on a 24-hour basis to receive and process 911 calls.

Public Utilities Commission (PUC). The PUC, created by Section 40-2-101, C.R.S., has exclusive regulatory power over all public utilities. The PUC has authority over the 911 system in Colorado. The PUC is housed within the Department of Regulatory Agencies (DORA).

Voice-over-internet protocol (VoIP). VoIP allows callers to use a broadband Internet connection, instead of traditional phone lines, to make voice calls.

911 Technologies

At the request of the task force co-chairs, Legislative Council Staff conducted research that provided an overview of 911 and telecommunication systems. This research was presented at the first task force meeting, and is summarized below.

911 Overview. 911 is a local service that acts as the primary way people connect with appropriate assistance during an emergency. The 911 system is comprised of many components, including service providers, BESP, PSAP, and first responders. When an individual places a landline 911 call, the carrier sends that call to the BESP, the BESP then routes the call and some basic information to a PSAP, which connects with or dispatches first responders to aid the caller. Enhanced 911 is available on landlines statewide, and most PSAPs are capable of Phase II wireless enhanced 911. Each is discussed below.

Enhanced 911. Enhanced 911 includes ANI, selective routing, and ALI technologies. ANI technology captures the number of the 911 caller, so PSAPs have access to the callback number in case of a disconnected call. In addition, under enhanced 911, calls are sent to the BESP network. The BESP's selective router and selective routing database aggregates calls and delivers the call and the ANI information to the correct PSAP based upon the caller's location. At the same time, PSAPs connect with the ALI database to find a caller's address and the corresponding emergency service jurisdiction. Landline enhanced 911 is available statewide; wireless enhanced 911 is implemented in two phases, discussed below.

Phase I and Phase II wireless. With the rise of wireless phones, people are now calling outside of buildings and possibly far from their home area code. To address a wireless phone's lack of a fixed address, the FCC initiated Phase I and Phase II wireless implementation. During Phase I, within six months of a request by a PSAP, wireless carriers needed to provide the callback number and the originating cell site's address to PSAPs. Phase II required wireless carriers to provide the longitude and latitude of the caller in ALI data sent to PSAPs. In Colorado, all PSAPs except for one in Phillips County are Phase II wireless capable.

VoIP service. VoIP allows callers to use a broadband Internet connection, instead of traditional analog phone lines, to make voice calls. This led to some VoIP providers excluding

911 capabilities from their service. After customer confusion, the FCC required that all VoIP providers automatically provide 911 service to customers and make customers aware of the 911 service limitations with VoIP. Under current rules, VoIP providers must be able to transmit all 911 calls, including information on the callback number and the caller's location, to the appropriate emergency service. Currently, many VoIP phones are connected to traditional landline locations, such as a residence or business. If the VoIP phone is connected to a fixed point at one of these locations, ALI and ANI information will be available to the BESP and PSAPs. However, if the VoIP phone is mobile, information regarding the caller is harder to obtain.

Text-to-911 service. With the advent of text messaging, the FCC now requires wireless carriers and providers of interconnected text messaging applications to provide text-to-911 service to PSAPs that request it. Currently, 76.5 percent of Colorado's population, encompassing 34.3 percent of the state, is able to text 911.

Next Generation 911. NextGen 911 replaces legacy enhanced 911 systems with digital broadband networks. NextGen 911 works by creating an IP-based network, called an ESInet, which replaces the BESP. An interconnected ESInet interfaces with external entities, transports information, and supports advanced abilities. ESInet can route information between different platforms and over a diverse type of transmitters: fiber optic cable; coaxial cable; twisted copper cable; or the radio spectrum. The system utilizes GIS and GIS data to replace the ANI and ALI functions. ESInet and GIS data provide call routing, location validation, and mapping. Since NextGen 911 is IP-based, ESInet can receive a wide range of data from a variety of devices and technologies: voice; text; video; image; medical records; etc. In addition, NextGen 911 allows greater communication and automatic re-routing between callers, PSAPs, dispatchers, and first responders due to the interconnected nature of the IP-based system. Some Colorado counties have equipment that is NextGen 911 capable, but there is no IP-based network to provide NextGen 911 services in Colorado.

911 Outages

Legislative Council Staff prepared a memo for the task force on 911 outages and presented the memo to the task force at its October 11th meeting. The memo outlined the causes of outages and the process for reporting and repairing them. Major causes of 911 outages described in the memo include accidental cable cuts, system failures, natural disasters and weather events, and damage from wildlife. The memo described the duties service providers have in reporting outages to various entities, including the FCC and the PUC, and in repairing outages. Generally, the carrier that owns the portion of the network where the failure occurred will repair the outage. Repairing an outage can entail unearthing and splicing fiber optic cable, repairing downed above-ground cable lines, or replacing equipment in a central office. Finally, it gave a general overview of the ways in which outages can be mitigated and described the implications of a switch to NextGen 911 technology on outages, including increased network diversity and redundancy.

911 Regulation in Other States

50-state survey on 911 regulation. In furtherance of the first charge of the task force, the Office of Legislative Legal Services (OLLS) reviewed 911 laws in all 50 states by reviewing state statutes and agency websites. OLLS looked at: (1) whether each state had statewide oversight of 911 systems; (2) if a state has statewide oversight, how the state oversees 911 systems;

(3) the oversight activities engaged in at the state level; and (4) the relationship between local 911 providers and state actors providing oversight. OLLS also reviewed the extent to which a state has deregulated telecom, if at all, and where each state is in the process of planning, preparing for, or implementing NextGen 911 systems. This information is summarized in the chart entitled 911 State Oversight: A 50 State Survey, which was provided to the task force at its September 14th meeting, and is available on the task force website.

Of the 50 states, 2 states have no state involvement in 911; 13 states have standalone boards or commissions with 911 oversight; 17 states have a regulatory entity that falls under the umbrella of an existing public safety, homeland security, or emergency management agency; 5 states regulate 911 through their public utilities commission; and the remaining states regulate 911 through various state agencies, including a state department of revenue, a state information technology agency, and a state department of military and veterans affairs.

The amount of 911 oversight at the state level varies from states that merely act as a liaison between state agencies and local 911 providers; states that regulate only the funding aspect of 911 systems; and a number of states that regulate two or more aspects of 911 systems such as the funding, operations, staffing, technology, policy, and enforcement of 911 systems. Of the latter states, the states that appear to have the most robust regulation of 911 systems at the state level engage in one or more of the following activities: (1) setting operational standards for local 911 systems and reviewing local 911 systems' compliance with those standards; (2) imposing reporting requirements on local 911 systems; (3) inspecting or auditing local 911 systems; and (4) initiating legal action against any alleged violation of 911 laws or regulations.

With respect to implementing NextGen 911, 18 states were identified on a map prepared by the National Emergency Number Association as already implementing NextGen 911, either statewide or at a sub-state level.

911 regulation in Minnesota. The task force heard remote telephone testimony from Dana Wahlberg, 911 Program Manager within the Minnesota Department of Public Safety, who provided information on Minnesota's 911 service, oversight, and regulations. Current 911-related projects in Minnesota include working within the existing network to connect all PSAPs in the state so that emergency phone calls can be transferred to any PSAP in Minnesota, and working with North Dakota so that wireless calls can be transferred across state lines when necessary. In addition to connectivity, Minnesota is engaged in current projects to improve 911 service in the state, including adopting text-to-911 service statewide, and the creation of the GIS center line. Minnesota is currently studying the adoption of NextGen 911 technology, but has not yet implemented it in any areas.

Minnesota's state government has multiple divisions with work that involves emergency communications. Each of the emergency communications divisions are housed in the Minnesota Department of Public Safety, and a separate statewide emergency communications board that established priorities and provides a technical roadmap to develop interoperability procedures and standards. The board is comprised of public safety and emergency response entities.

Minnesota's emergency system does not receive any money from the state's general fund. Instead, it is funded by a 95-cent per phone fee on any wireline, wireless, prepaid, or VoIP phone line. Presently, there is no way to verify whether carriers are remitting that money from their customers. In regard to the state's relationship with the federal government, Minnesota is planning to implement FirstNet (see below), and the state reports all necessary information to the FCC. Minnesota does not have any additional PSAP reporting requirements other than

when it is reported to the FCC. Prior to the FCC implementing those requirements, carriers in Minnesota reported to its system integrator (CenturyLink; similar to a BESP in Colorado), who then sent information to PSAPs.

Federal 911 Efforts

FCC. The 911 Task Force heard remote testimony from Rear Admiral (Ret.) David Simpson, Bureau Chief, Public Safety and Homeland Security Bureau at the FCC. Rear Admiral Simpson provided the task force with the following information concerning emergency service.

In 1999, Congress established 911 as the nationwide emergency number. The federal government interacts with 911 primarily through supporting state and local efforts in improving 911 systems and technology, such as the implementation of Phase I and II wireless capabilities. In addition, the FCC works with stakeholders to address cybersecurity threats to public safety networks such as 911. Finally, FCC enforces several outage regulations regarding 911. FCC rules require that service providers aggregate and route 911 calls to PSAPs. Also, FCC rules require reporting of certain outages and various follow-up outage reports. FCC continues to work on providing current, timely, and relevant information to local authorities regarding outages without exposing confidential provider information.

Rear Admiral Simpson also highlighted states' roles in the support and oversight of 911 systems in order to ensure that there are no "seams" in the federal government's and states' collective oversight of the 911 system. Because 911 service must be available to all Americans, timely notification of outages is important, and any federal action on outage reporting does not preclude the possibility of states asserting their own authority in this area. Additionally, as states transition to NextGen 911, it is important that the state play an active role in the planning, deployment, and governance of that transition.

FirstNet. The task force heard from Brian Shepherd, Governor's Office of Information Technology, concerning the implementation of FirstNet in Colorado. In 2012, Title VI of the federal Middle Class Tax Relief and Job Creation Act of 2012, sought to create a single, nationwide, broadband network for public safety communications. The network will be a public-private partnership that gives first responders priority across the broadband network in emergency situations to send voice calls, text messages, images, video, and location information in real time. The nationwide network will enable multi-jurisdictional and multi-discipline information sharing that will interact best with NextGen 911. When not in use for public safety communications, the private partner can use the spectrum for commercial use. \$2.5 million in federal funds has been awarded to Colorado to plan and implement FirstNet. FirstNet is still in the planning stages in Colorado, but the FirstNet governing body is currently conducting education and local outreach in all Colorado counties.

911 Funding

The task force heard from Scott Mackey, KSE Partners LLP, who provided an overview of 911 funding, including a discussion of 911 funding issues. Fees that fund 911 service have been levied on landlines for decades, on wireless lines since the mid-1990s, and more recently on VoIP and prepaid phones. Fees are collected by service providers, who then remit the fees to the state or another appropriate entity. Permissible uses for these fees have expanded since the fees' inception.

The total amount of fees collected may be declining because of the move by consumers away from wireline services towards wireless phone and other services that use an Internet connection for phone service. Wireless service may be linked to an out-of-state address that prevents Colorado from receiving 911 fees from those lines. Other services, such as wireless phone or tablet applications that permit users to make phone calls over Internet connections may not create a billing relationship that allows a provider to collect fees and taxes to fund 911 services. Because of Colorado's population growth, collected fees are staying level, while other states are seeing declines in fees.

In Oklahoma, the state replaced its county-based wireless fee with a single statewide fee. Oklahoma has also created a new board to oversee 911 service. According to Mr. Mackey, by levying the statewide fee, fees can remain lower in rural areas, but still fund the adoption of new technologies in the areas that could not afford these technologies under the old fee structure. Indiana, Kansas, Pennsylvania, and Tennessee have also instituted statewide fees, with many of those states making the changes revenue neutral. Common reform themes from other states include initiating statewide fees with rates set by a board or oversight authority and guidance from the state legislature; creating a board comprised of political appointees and representatives from PSAPs, law enforcement, and public safety that oversees 911 service statewide; and creating incentives for PSAP consolidation.

Finally, states have primarily taken three approaches to funding the transition to NextGen 911 technologies. First, some states have begun saving to build up a surplus of 911 surcharge money to be used for the transition. Other states have enacted temporary rate increases that will expire once money has been raised to fund the transition to NextGen 911. Finally, some states have enacted permanent rate increases.

Experiences with 911 Service

First responders. The task force heard from a panel of first responders, including a police chief, a fire chief, and representatives of Thompson Valley EMS and the Larimer Emergency Telephone Authority. The panelists discussed their experiences with 911 services in emergency situations, highlighting the value of 911 in providing information to first responders. They also noted that the 911 system can be used by emergency personnel as an emergency notification system to alert consumers of emergencies (often referred to by the proprietary term “reverse 911”). The panel also highlighted some funding issues, explaining that the current 911 surcharge is not sufficient to fund 911 services, and noting that people with out-of-state cell phone numbers do not pay the Colorado 911 surcharge. In respect to 911 governance and oversight, the panel believed that statewide, centralized oversight was beneficial, but each panelist suggested that more time be devoted to studying the issue. Some suggested a task force or study group related specifically to governance and oversight reorganization be convened for a year or more to study oversight issues and make recommendations.

Emergency management. The task force heard from a panel of emergency management professionals, including representatives from the Colorado Department of Public Safety, the Boulder Office of Emergency Management, and FEMA. Panelists discussed how emergency management offices work together and with 911 systems to respond to emergencies. Local emergency management agencies use 911 systems to notify consumers of emergencies, and when local agencies are aware of 911 outages, they can deploy secondary systems to continue notifications to consumers.

911 systems are also important because consumers can utilize these systems to report issues, which can be addressed by emergency management sooner, limiting the scope of the event. Information gained through 911 systems also provides state emergency management personnel with situational awareness that, when combined with communication between the state and PSAPs, allows the state to properly allocate resources during emergencies. 911 systems also support counterterrorism efforts by allowing consumers to report suspicious activity.

Federal emergency management personnel work with the states by communicating with emergency response systems personnel. Federal managers can provide support to states in the event of an emergency through the use of secondary communication systems, including voice, data, and video communications.

The panel also commented that better network diversity will help prevent outages. Further, the placement of network cables should be studied to ensure they are not placed in geographic areas prone to natural disasters that may cause an outage. In the event of an outage, emergency managers deploy secondary systems that can work to provide some 911 system support in an emergency state. However, these secondary systems should not be relied on to provide general support in the event of a 911 system failure in a normal user state.

Consumers. The task force heard from a panel concerning the experiences of consumers. Panelists included representatives of the PUC, the OCC, and AARP. The PUC provided an overview of rulemaking authority and processes, including information regarding pending lawsuits. Also, the PUC stated that local entities may be reluctant to support a statewide 911 oversight board. The panel discussed centralized oversight, including the agency to best have such oversight authority. The panel informed the task force that the population, including senior citizens, is increasingly using cellular phones exclusively, and not using wireline services.

The PUC provided an overview of outage reporting requirements and suggested that the best way to limit outages is to increase network diversity. AARP commented that it is better for consumers to have outages reported to a local authority instead of the FCC.

The panel discussed outage reporting. The OCC does not hear complaints about 911 because it no longer has authority relating to 911 service. When the OCC receives a complaint related to 911 service, they refer the complainant to the appropriate contact at the PUC. When the OCC had telecommunications authority, it would still refer complainants to the PUC, so there is no change for the individual consumer complainant. The AARP continues to refer people to the OCC to make complaints regarding 911 service.

The panel suggested that outages could be better prevented and responded to if people called 811, the utility notification service, before digging so as to avoid cutting telephone and data cables, and that increased reporting would assist law enforcement in patrolling areas undergoing an outage. Additionally, increased network resiliency should be required of providers by law, regardless of any oversight requirements by the state.

Providers. The task force heard from a panel of service providers, including CTIA, CTA, CCTA, and CenturyLink. A representative of wireless providers explained that such providers are regulated by the federal government, and that all wireless phones, whether activated or not, must be capable of calling 911. Some providers also suggested that reporting requirements should be based on an evaluation of who needs to know, and when they need to know the information. There was also the suggestion that reporting and notification requirements takes time away from efforts to restore service.

The representative from CenturyLink explained a difference between reporting requirements and notification requirements. Reporting is a long-term requirement that may occur well after an outage occurs and has been resolved, while notification relates to informing citizens and other interested parties of an existing outage. CenturyLink also considers there to be different types of outages: a 911 outage is when a citizen can make calls, but they cannot connect to 911; whereas an instance when a consumer cannot make any calls should not be considered a 911 outage. The representative from CenturyLink suggested that more time spent studying 911-related issues would not lead to learning any new information.

Panelists stated that there is uncertainty concerning the PUC's jurisdiction over certain aspects of 911, which affects the PUC's rulemaking process. The panelists also commented on the cost of working through the PUC's process because it is legal in nature. The panel discussed remittance of 911 service fees. According to CTIA, prepaid customers pay the 911 surcharge at the point of sale and the sellers remit that money to the Department of Revenue. When a provider collects the 911 surcharge from monthly post-paid service bills, they remit it to the relevant agencies. Providers do not receive any money from the surcharge.

Public Comment

The task force opened the floor for public testimony at its September 14th and October 25th meetings. At the September 14th meeting, the task force heard from representatives of AARP, the Colorado 9-1-1 Resource Center, the 911 Advisory Task Force within the Colorado PUC, the Boulder Regional Telephone Service Authority, the Larimer Emergency Telephone Authority, a private citizen, and a member of the FCC's Task Force on Optimal Public Safety Answering Point Architecture.

At the October 25th meeting, the task force heard from representatives of 911 Solutions, Inc., BRETSA Boulder County, Denver 911, and the Colorado Press Association and Colorado Broadcasters Association. Additionally, the task force heard from witnesses who also testified at the September 14th meeting.

Summary of Recommendations

The 911 task force did not have time to address all aspects of 911 service, but did identify several major issues, including, but not limited to:

- other states' laws, rules, and practices concerning 911 service;
- 911 funding;
- 911 oversight in Colorado; and,
- 911 outages in Colorado.

As a result of the 911 Task Force's work, the task force makes the following recommendations to the General Assembly:

1) Address immediate issues concerning 911 service.

The task force recognizes that some issues need to be addressed immediately, and so the General Assembly should consider whether 911 service oversight is a matter of statewide concern. The General Assembly should also consider issues surrounding 911 system outages and reliability.

2) Consider establishing a 911 service study committee.

The General Assembly could consider authorizing a 911 service study committee to examine a number of topics of concern. The study committee could have a specific deadline to report any findings to the General Assembly, which may be sufficient for the committee to study the necessary issues, but that also recognizes the urgency of the issues being examined. The study committee might be charged with examining the following topics.

a) Study the establishment of a statewide 911 oversight board. The study committee could examine whether a statewide 911 oversight board would benefit 911 service in Colorado. The study committee could examine the specific oversight and other authority that the oversight board should possess, including any regulatory and fee collection authority, and which agency could house the oversight board. The study committee may include in its examination the organizational structure of oversight in other states, as well as input from Colorado-based first responders and emergency management personnel. Any recommendation or legislation offered by the study committee may include specific information, including board authority, specific board membership, and staffing requirements.

b) Agency regulation of 911 services. Regardless of whether a statewide oversight board is recommended, the study committee may decide to consider whether DORA or another state agency, such as the Division of Homeland Security and Emergency Management within the Colorado Department of Public Safety, is the appropriate agency to regulate 911 service. The study committee could include in its examination the organizational structure of regulation in other states.

c) 911 funding issues. The study committee may consider examining all issues related to 911 service funding, including the following:

- determining whether Colorado would benefit from a single statewide 911 service fee that would not vary based on location;
- examining other possible sources of 911 funding;
- determining the funding mechanisms that are needed to fund the implementation of NextGen 911 services;
- evaluating collection systems that would ensure all Colorado residents, including those who use out-of-state cell phone plans, Internet-based calling applications, and prepaid wireless phones, contribute to funding 911 services; and
- studying the collection and remittance procedures for 911-related fees, including auditing procedures.

d) Cooperation with the federal government. The study committee may consider examining processes for sharing information between Colorado's regulatory and oversight authorities and the FCC in order to increase information sharing, allowing Colorado to best utilize information collected by the FCC, and ensure the confidentiality of any public safety-related information that is shared.

The General Assembly could consider granting the study committee either the authority to recommend legislation, or requiring that the study committee's final report include specific recommendations that the General Assembly may implement.

Resource Materials

Meeting summaries are prepared for each meeting of the task force and contain all handouts provided to the task force. The summaries of meetings and attachments are available at the Division of Archives, 1313 Sherman Street, Denver (303-866-2055). The listing below contains the dates of task force meetings and the topics discussed at those meetings. Meeting summaries are also available on our website at:

<https://www.colorado.gov/pacific/cga-legislativecouncil/interim-committees>

Meeting Date and Topics Discussed

September 14, 2016

- ◆ Overview of 911 technology by Legislative Council Staff
- ◆ Presentation of a 50-state survey of 911 regulations in other states by the Office of Legislative Legal Services
- ◆ Presentation of Minnesota's 911 system, oversight, and regulation by Ms. Dana Wahlberg, 911 Program Manager within the Minnesota Department of Public Safety
- ◆ Public testimony

October 11, 2016

- ◆ Presentation on federal 911 efforts by Rear Admiral (Ret.) David Simpson, Bureau Chief, and David Furth, Deputy Chief, Public Safety and Homeland Security Bureau at the FCC
- ◆ Presentation on FirstNet by Brian Shepherd, Governor's Office of Information Technology
- ◆ Panel discussion concerning first responders' use of the 911 system
- ◆ Presentation on 911 outages by Legislative Council Staff

October 25, 2016

- ◆ 911 funding issues
- ◆ Panel discussion concerning consumers and 911
- ◆ Panel discussion concerning emergency management interaction the 911 system
- ◆ Panel discussion concerning providers' collaboration with the 911 system
- ◆ Public testimony
- ◆ Discussion of the task force report