



Washoe County Regional 9-1-1 Master Plan Update Recommendations Report

Final

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Prepared by:



"Unleashing the Power of Technology"

**Federal
Engineering®**

Federal Engineering, Inc.
10560 Arrowhead Dr, Suite 100
Fairfax, VA 22030
703-359-8200

Executive Summary

Federal Engineering, Inc. (**FE**) is pleased to provide 9-1-1 consultant services in supporting the update of the County's *9-1-1 Emergency Response Five-Year Master Plan* (Plan). This document provides technical expertise, industry knowledge, public safety answering point (PSAP) operational skillsets, and policy guidance to assist the County with the update of their Plan in compliance with Nevada Revised Statutes NRS 244A.7643.

Review of legislation, budget documents, and Washoe County-provided data, helped form the foundation of the contents of this document. This collected data was accompanied by direct interviews with many stakeholders within the public safety and technical support infrastructure of Washoe County, the City of Reno, and the City of Sparks. **FE** acknowledges the valuable input by each of these stakeholders in the preparation of this document.

Regional PSAP Back-up Plans

The renovation and construction plan for each of the three emergency communications operations will create a mutually beneficial triangle back-up configuration.

FE recommends that the three PSAPs create a regional back-up plan that details the capabilities, capacities, networking/bandwidth needs, technology, and equipment needs for each of the PSAPs. As part of the transition and back-up planning for the three PSAPs, the Washoe County Sheriff's Office (WCSO), Reno, and Sparks must also consider the capacity of the regional radio system.

FE recommends expanding the back-up planning for each PSAP to include accommodating remote worksites as was demonstrated in PSAPs across the country during the early months of the pandemic.

Other critical back-up plan components include making certain that the back-up plan is exercised via drills and scheduled relocation exercises. Security for all systems, fixed and remote, should be priority and exercised/drilled, and maintained by the systems' owners' IT support.

FE recommends the regional back-up planning include consideration for the addition of a remote mobile command center designed to support the PSAP in short-term emergency back-up scenarios and for special events and incident command situations to benefit all



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the regional public safety agencies. Discussion with the PSAP leaders included potential for federal funding from the CARES Act¹ for this purpose.

Regional Computer Aided Dispatch (CAD) System

Details regarding the overall system replacement are in Section 3.2. Considerations for the 9-1-1 Committee and budget planning include the following:

The system planning activities should be guided by the 9-1-1 Committee membership with technical guidance from the user community and technical support entities. The 9-1-1 Committee develops and recommends the annual budget for the Regional Public Safety CAD and Records System (RPSCR). Interim expenditure considerations are the responsibility of the County Technology Services Director, as the contracting authority for the system.

The initial acquisition of the hardware and software associated with the RPSCR is supported by the 9-1-1 surcharge as managed by the 9-1-1 Committee and approved by County Commission. It should be noted that the associated services of provisioning, ongoing maintenance, future upgrades/updates, expansion or augmenting the future system, will have certain costs associated to this effort. As such, the 9-1-1 Committee should establish a funding plan for the long-term maintenance and localized support necessary to sustain the system(s) for the life of the selected vendor(s) contract.

Budgetary data for the CAD initial and ongoing costs are in Section 3.2.5.3 *Ten Year Cost Impacts*.

Legislative Review

Review and recommendations are focused on the impact of the expanded surcharge for supporting the Washoe County 9-1-1 ecosystem and for the non-9-1-1 use for acquiring and maintaining recording devices.

FE recommends that Washoe County consider reviewing existing legislation from Nevada to become compliant with the FCC regulations.

FE recommends that Washoe County establish a structured process for the funding of 9-1-1 programs and equipment. This would include the establishment of definitive funding Rules, a more formal application process, a system of managing awards, and an audit

¹ [Text - S.3548 - 116th Congress \(2019-2020\): CARES Act | Congress.gov | Library of Congress](#)



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process that ensures projects are completed, and that requests for reimbursement are fulfilled.

Funding Analysis

The funding analysis included a review of the revenues and expenditures for the past five years, and projected same for the coming five years. The results are not definitive as there are several key initiatives for which costs are not yet known. However, a rough order of magnitude (ROM = ~25% in range of accuracy) estimate of costs are provided in Section 3.4.4.3. for the call handling equipment (CHE), and in Section 3.2.5.3 for the regional CAD system.

FE recommends addressing 9-1-1 future budget planning through the completion of a NG Readiness Assessment with options for acquisition and deployment. A NG Plan will define current state of network, equipment, and governance/relationships, and will provide cost projections for same.

It is critical to the stewardship of the 9-1-1 revenues that once these initial and maintenance costs are known that the 9-1-1 Committee begin preparing a life cycle plan for each expenditure. None of these are one-time costs as they all require planning for ever changing technology, growth, and expansion within the user communities, as well as the expectation from the public of the service provided by the public safety agencies. The public expectation will drive much of the technology especially in the data sharing components of NG9-1-1 and recording devices. There is also a human capital expense that must be planned for, and provided to, support the changing technology, the regional systems, and relationships (through governance), and specific human resources necessary to operate the technology. Examples include data maintenance and storage related to PSAP event logging and GIS. This will require an investment in training, transitional and new hires, and additional skilled staff.



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1. Introduction

Federal Engineering, Inc. (**FE**) has been awarded a contract by Washoe County, Nevada (County) to provide 9-1-1 consultant services in supporting the update of the County's *9-1-1 Emergency Response Five-Year Master Plan* (Plan). **FE** is to provide technical expertise, industry knowledge, PSAP operational skillsets, and policy guidance to assist the County with the update of their Plan in compliance with Nevada Revised Statutes NRS 244A.7643.

1.1 Research and Analysis

- *Legislative Analysis*
 - Review the 2018 and 2019 Nevada Revised Statutes (NRS) changes.
 - Assess the impact of NRS changes to the County and prepare a pro/con analysis of implementing them.
- *Funding Analysis*
 - Conduct a 5-year analysis of 9-1-1 surcharge revenue and expenditures including 9-1-1 fund projections.
 - Based on analysis, update cost estimates for enhancing the 9-1-1 system and purchasing portable/vehicular event recording devices (body/vehicle cameras).
 - Identify proposed sources of funding.
 - Review results of research/analysis and preliminary recommendations with 9-1-1 Committee.

1.2 Draft and Final Updated 9-1-1 Master Plan

- *9-1-1 Master Plan Update Recommendations Report*
 - Prepare draft Legislative and Funding assessment portions of 9-1-1 Master Plan Update Recommendations report.
 - Review draft report with 9-1-1 Committee.
 - Incorporate changes and finalize Legislative and Funding assessment portions of final 9-1-1 Master Plan Update Recommendations report.



2. Methodology

2.1 Request for Information

The team spent five days on site and held several interview sessions with public safety communications stakeholders. The schedule of meetings including the participants and the topics discussed are found in sections 2.2 and 2.3 of this report.

During these interviews, a broad range of issues were covered. Topics included:

- Planning, budget projections, and legislative impact discussions.
- Administration over the 9-1-1 call handling equipment and portable recording devices.
- Washoe County Technical Services.
- Portable event recording devices; and Administration and Funding.
- Emergency Operations Plan content and backup planning impact.
- PSAP Management.
- Emergency Managers.
- Call Handling Equipment NG9-1-1 Planning.
- 9-1-1 Surcharge Administration.
- Responsible parties for collection, distribution, expenditures

2.2 Data Gathering and Stakeholder Interviews

The first interview and project kickoff sessions were held on February 16th, 2021, from 08:00 – 10:30, and took place at the Regional Emergency Operations Center (REOC) facility located at 5195 Spectrum Blvd, Reno, NV.

The Topics of discussion included:

- 9-1-1 Planning,
- Budget Projections, and
- Legislation impact.

In-person participants included:

- Sherri Bush – Federal Engineering
- Eric Parry – Federal Engineering
- Doug Campbell – Sparks Police IT
- Chief Chris Ketring – Truckee Meadows Fire Protection District
- Quinn Korbolic – Acting CIO, Washoe County Technology Services



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- Lisa Rose-Brown – Manager, Sparks Police PSAP
- Chief Jeff Voskamp – Reno Fire

Telephone Bridge Participants included:

- Jamie Rodriguez – Washoe County
- D/Chief Zach Thew – Reno PD
- Sara Delozier – Technology Services, Washoe County
- Alex Kukulus – Washoe County

The second interview session was held on February 16th, 2021, from 10:30 – 11:30, and took place at the Regional Emergency Operations Center (REOC) facility located at 5195 Spectrum Blvd, Reno, NV.

The Topics of discussion included:

- Administration over 9-1-1 Call handling equip, and
- Portable Event Recording Devices.

In-person participants included:

- Sherri Bush – Federal Engineering
- Eric Parry – Federal Engineering
- Lt. Blaine Beard – Administrative Division, Washoe County Sheriff's Office
- Brad Beith – Network Analyst, City of Reno
- Doug Campbell – Sparks Police IT
- Jennifer Felter – A/Director, Washoe Co. Sheriff's Office PSAP
- Quinn Korbolic – Acting CIO, Washoe County Technology Services
- Brantley Hancock - Systems Analyst, City of Reno
- Lisa Rose-Brown – Manager, Sparks Police PSAP
- Chief Jeff Voskamp – Reno Fire
- D/Chief Zach Thew – Reno PD
- Paul Wiley – Communications & Technology, City of Reno

The third interview session was held on February 16th, 2021, from 12:00 – 13:00, and took place at the Regional Emergency Operations Center (REOC) facility located at 5195 Spectrum Blvd, Reno, NV.

The Topics of discussion included:

- Portable Event Recording Devices
 - Administration, and
 - Funding.



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In-person participants included:

- Sherri Bush – Federal Engineering
- Eric Parry – Federal Engineering
- Lt. Blaine Beard – Administrative Division, Washoe County Sheriff's Office
- Brad Bieth – Network Analyst, City of Reno
- Lisa Rose-Brown – Manager, Sparks Police PSAP
- Brantley Hancock - Systems Analyst, City of Reno
- Quinn Korbolic – Acting CIO, Washoe County Technology Services

The fourth interview session was held on February 16th, 2021, from 13:15 – 14:15, and took place at the Regional Emergency Operations Center (REOC) facility located at 5195 Spectrum Blvd, Reno, NV.

The Topics of discussion included:

- 9-1-1 Call Handling (CHFE), and
- Next Generation 9-1-1 (NG9-1-1) Planning

In-person participants included:

- Sherri Bush – Federal Engineering
- Eric Parry – Federal Engineering
- Lisa Rose-Brown – Manager, Sparks Police PSAP
- Jennifer Felter – A/Director, Washoe Co. Sheriff's Office PSAP
- Quinn Korbolic – Acting CIO, Washoe County Technology Services
- Cody Shadle - City of Reno PSAP
- Chief Jeff Voskamp – Reno Fire

The fifth interview session was held on February 16th, 2021, from 14:30 – 15:30, and took place at the Regional Emergency Operations Center (REOC) facility located at 5195 Spectrum Blvd, Reno, NV.

The Topics of discussion included:

- Emergency Operations Plan Content, and
- Backup Center Planning

In-person participants included:

- Sherri Bush – Federal Engineering
- Eric Parry – Federal Engineering
- Lisa Rose-Brown – Manager, Sparks Police PSAP



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- Quinn Korbolic – Acting CIO, Washoe County Technology Services
- Cody Shadle – City of Reno PSAP
- Chief Jeff Voskamp – Reno Fire

Telephone Bridge Participants included:

- Angela Askey – System Analyst, City of Reno
- Brad Beith – Network Analyst, City of Reno
- Brantley Hancock - Systems Analyst, City of Reno
- Paul Wiley – Communications & Technology, City of Reno

The sixth interview session was held on February 16th, 2021, from 15:45 – 16:45, and took place at the Regional Emergency Operations Center (REOC) facility located at 5195 Spectrum Blvd, Reno, NV.

The Topics of discussion included:

- 9-1-1 Surcharge Administration
 - Collection,
 - Distribution, and
 - Expenditures

In-person participants included:

- Sherri Bush – Federal Engineering
- Eric Parry – Federal Engineering
- Sara Delozier – Technology Services, Washoe County
- Kari Estrada – Senior Fiscal Analyst, Washoe County
- Quinn Korbolic – Acting CIO, Washoe County Technology Services

The seventh interview session was held on February 18th, 2021, from 11:40 – 13:00, and took place at the Washoe County Administration Complex located at 1001 E 9th St, Reno, NV.

The Topics of discussion included a recap of the discussions and findings from the previous sessions as well as a discussion of the current PSAP facilities.

Participants included:

- Sherri Bush – Federal Engineering
- Eric Parry – Federal Engineering
- Quinn Korbolic – Acting CIO, Washoe County Technology Services



2.3 PSAP Tours

The first PSAP tour took place from 15:40 – 16:00, on February 17th, 2021, at the Washoe County/Reno PSAP located at the Regional Emergency Operations Center (REOC), 5195 Spectrum Blvd, Reno, NV.

The Topics of discussion included a discussion of the various PSAP facilities and functions.

Participants included:

- Sherri Bush – Federal Engineering
- Eric Parry – Federal Engineering
- Jennifer Felter – A/Director, Washoe Co. Sheriff's Office PSAP
- Cody Shadle – City of Reno PSAP

The second PSAP tour took place from 17:00 - 18:00 on February 17th, 2021 at the City of Sparks PSAP located at 1701 East Prater Way, Sparks, NV.

The Topics of discussion included a discussion of the various PSAP facilities and functions.

Participants included:

- Sherri Bush – Federal Engineering
- Eric Parry – Federal Engineering
- Lisa Rose-Brown – Manager, Sparks Police PSAP



3. 9-1-1 Master Plan Update Assessment

3.1 Assess PSAP Locations and Identify Back-up PSAP Options

The current PSAPs for the Washoe Sheriff's Office (WCSO) and the City of Reno (Reno) are co-located on the second floor above the County's Emergency Management Operations Center located the Regional Emergency Operations Center, 5195 Spectrum Blvd, in Reno. The configuration of the emergency communications operations for the WCSO and Reno currently has Reno occupying half of the operations floor for call-taking and dispatching, and the front office spaces for administration, supervisors, training, and quality assurance. The Sheriff's Office occupies the other half of the operations floor and a few back offices for administration and supervisors.

The City of Sparks (Sparks) has a PSAP occupying approximately 930 square feet of the upper floor of the Sparks Police Department Headquarters located at 1701 East Prater Way, Sparks. This space has adjacent offices for administration, supervisors, training, and quality assurance.

The current back-up plans for the three PSAPs is to relocate WCSO/Reno at Sparks, and Sparks to relocate at the WCSO/Reno facility. The issue as stated in previous reviews is that Sparks in the current state cannot accommodate the capacity necessary to have both WCSO and Reno PSAP operations for a short- or long-term period. The crux of the issue is that if the WCSO/Reno shared facility were to be compromised it would more than likely impact both WCSO and Reno PSAPs, as they are sharing the same space and some technology.

During on-site interviews with PSAP leadership and staff, plans to separate WCSO and Reno were shared, with Sparks indicating that they also have plans to improve their back-up site.

The City of Reno is planning a new police facility that will house the emergency communications center for the City. This plan includes up to 30 equipped console positions allowing space for growth and for accommodating back-up needs for the WCSO and the City of Sparks.

The identified threat to the proposed Reno PSAP location is flooding from a nearby river, as well as being in the flightpath of helicopters traveling to/from a nearby hospital. Also of



note is that the new facility was first envisioned to house only the Reno Police, and second consideration to the housing of the PSAP.

The WCSO will expand within the facility they currently occupy once Reno vacates the facility. The additional space will accommodate additional WCSO administrative, supervisor, training, and quality assurance offices. The space will also accommodate growth within the WCSO emergency communications operation and will provide back-up needs for Reno and Sparks. Leaving the formerly occupied console positions from the Reno occupation, adding the technology, and confirming bandwidth, will accommodate both Reno and Sparks as needed.

There were no identified threats or vulnerabilities to the WCSO facility.

The City of Sparks has a space in their lower level that was temporarily outfitted to accommodate their emergency communications operation during renovations. This back-up space is planned to be expanded to accommodate approximately six equipped console positions to provide back-up needs for the WCSO and Reno. Sparks is also planning a renovation and expansion of their existing PSAP operations area and adjacent offices that will increase their console positions to ten. This expansion will result in 16 positions located at Sparks providing adequate space and technology, and bandwidth as planned. To accommodate the transition during renovation, Sparks doubled their bandwidth infrastructure inside and to/from this facility. This expansion will remain in place to accommodate back-up needs of WCSO and Reno.

The identified threats to the Sparks facility are a nearby tank farm that is in the flight path of the airport, as well as an operating rail line that may pose a threat if there were to be a train derailment.

3.1.1 Recommendations

The renovation and construction plan for each of the three emergency communications operations will create a mutually beneficial triangle back-up configuration.

FE recommends that the three PSAPs create a regional back-up plan that details the capabilities, capacities, networking/bandwidth needs, technology, and equipment needs for each of the PSAPs. This back-up plan should describe how the transition from primary to back-up will occur and under what circumstances. For example, short-term relocation to long-term housing of one or more PSAPs in the same facility. Once the full physical



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and technological capacities are known/finalized for each of the three PSAPs, then the regional plan must be updated to include any restrictions or additional growth plans.

During the regional back-up plan development, each PSAP must confirm their back-up space, console, and bandwidth requirements.

As part of the transition and back-up planning for the three PSAPs, the WCSO, Reno, and Sparks must consider the capacity of the regional radio system. The current system capacity will reportedly be exhausted once Sparks completes their expansion of console positions. The system vendor, Harris, is proposing an expansion of talkgroups to occur with, or following, the Reno transition to a new facility.

The WCSO emergency communications leadership described a pending transition of 9-1-1 trunks from CAMA² to SIP³. **FE** recommends expanding the back-up planning for each PSAP to include accommodating remote worksites as was demonstrated in PSAPs across the country during the early months of the pandemic. Laptops that can accept 9-1-1 calls via SIP trunks, have CAD application, and IP access to the radio system for dispatch, provide complete functionality in a remote environment. To that end, bandwidth from remote locations, e.g., work from home, is critical to data-sharing, and voice exchange for phones and radio. Per WCSO leadership, handheld radios have Wi-Fi (radio over internet – RoIP) capability to accommodate access only limited by coverage and bandwidth.

Other critical back-up plan components include making certain that the back-up plan is exercised via drills and scheduled relocation exercises. Security for all systems, fixed and remote, should be priority and exercised/drilled, and maintained by the systems' owners' IT support. Call routing, future SIP, and network access to CAD and logging recorders, will require design and regional support.

FE recommends the regional back-up planning include consideration for the addition of a remote mobile command center designed to support the PSAP in short-term emergency back-up scenarios and for special events and incident command situations to benefit all

² Centralized Automated Message Accounting - A type of in-band analog transmission protocol that transmits telephone number via multi-frequency encoding. Originally designed for billing purposes.

[https://nenawiki.org/wiki/CAMA_\(Centralized_Automated_Message_Accounting\)](https://nenawiki.org/wiki/CAMA_(Centralized_Automated_Message_Accounting))

³ Session Initiation Protocol - An IETF defined protocol (RFC3261) that defines an application-layer control (signaling) protocol for creating, modifying, and terminating sessions with one or more participants. These sessions include Internet telephone calls, multimedia distribution, and multimedia conferences.[1] Used as the call signaling protocol in VoIP, i2 and i3.

[https://nenawiki.org/wiki/SIP_\(Session_Initiation_Protocol\)](https://nenawiki.org/wiki/SIP_(Session_Initiation_Protocol))



the regional public safety agencies. Discussion with the PSAP leaders included potential for federal funding from the CARES Act⁴ for this purpose.

3.2 Assess Existing CAD Technology and Cost Impacts of Upgrades

The Computer Aided Dispatch (CAD) system is one of the most important tools used by the public safety agencies who provide vital protection to the communities that they serve. Most modern CAD systems include a tightly integrated mobile data system as part of its core functionality. The CAD and mobile data systems work jointly and are two of the primary components of a fully integrated modern public safety solution. The other three core components of a public safety solution are Law Records Management System (LERMS), Fire Records Management System (FRMS) and a Jail Management System (JMS).

This report concentrates on the CAD and mobile data components of the replacement public safety system, but the overall replacement project also includes replacement of the current LERMS and JMS solutions. Those two components are planned to be funded by alternative means.

Within the CAD system, all reported incidents are entered, dispatched, managed, and tracked, making it a mission critical system. Working in conjunction with CAD, an effective and functional mobile data system provides silent dispatch, message switching, status changes, mapping, routing, CJIS/database queries, premise information, and alerts/hazards to the end users out in the field. For law enforcement, the mobile system also provides access to LERMS field-based reporting functionality.

The agencies participating in the Reno/Sparks/Washoe (RSW) CAD/RMS/JMS Replacement Project that included the 9-1-1 Emergency Response Committee, regional law records consortium and the Washoe County Sheriff's Office Detention Center, all recognized the need to replace the current Public Safety System.

3.2.1 Regional CAD Assessment

One of the first three phases of the RSW CAD/RMS/JMS Replacement Project was to complete a thorough needs assessment process that placed emphasis on current operational practices and the needs and wants of the CAD and mobile data system users.

⁴ [Text - S.3548 - 116th Congress \(2019-2020\): CARES Act | Congress.gov | Library of Congress](#)



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FE completed a review of documentation provided by the participating agencies, observed operations, and conducted several separate interviews and focus group sessions. All of these were to gather input and gain a better understanding of each agency's operations, identify existing system challenges or shortcomings; and capture needs / functional requirements for the new public safety solution.

Currently all three communication centers share the same Central Square (originally Tiburon) CAD system. The Tiburon CAD system was originally installed and went 'live' in 1999 and the City of Sparks was added to the system in October 2015. In February 2015, TriTech Software Systems announced the purchase of Tiburon and took over management of their existing client sites. In September of 2018, Central Square Technologies (CST) was formed when they announced the merger of three public safety software companies: Superior, TriTech Software Systems, Zuercher Technologies, and Aptean, a well-known healthcare business application.

Within a year after CST was formed, they made the corporate decision that they would no longer provide the Tiburon solution as part of their current product offerings. Even though CST stated that they would continue to support and maintain the Tiburon system, there would be no more application development or enhancements made to the software. In our experience, once the 'end of sale' is announced it is not long before a system 'end of life' could be announced. 'End of life' means the vendor would no longer provide any type of support and maintenance services for the system. In addition, as time went on, the agencies started to see a decline in the number of CST employees who were familiar or had experience with the Tiburon application and they were not familiar with solution installed for the RSW system. This is problematic when users have questions, report issues, or need assistance with the application.

Early in the interviews, it became quite apparent that each of the participating agencies, their workgroups and stakeholders had common challenges related to limitations with the current system. The operational environment had several issues with system functionality. The current system did not include some common industry standard functionality or best practice features. Some of the most basic operations had issues that were being caused by the lack of a working interface or the interface not providing the level of functionality needed. This was especially evident regarding the performance and integration between the Tiburon CAD and mobile data systems.



3.2.1.1 Recommendations Based on Assessment and Gap Analysis

FE conducted a Needs Assessment and recommended that the project participants continue to move forward with a competitive procurement process for an integrated public safety solution. The outcome of the procurement will be an integrated CAD and Mobile system, that meets the primary requirements of each stakeholder agency.

The replacement public safety solution should be based upon public safety best practices and industry standards to provide the participating Reno, Sparks, Washoe County and secondary/tertiary agencies and any future vendor with clearly defined functional requirements and performance metrics. The results of this assessment and subsequent documents will provide recommendations for improvements and work process changes that the participating agencies should also consider and that could be impacted by the replacement public safety solution. These recommendations provide the basis for the required functional criteria that will be incorporated into a competitive procurement.

The current industry practice for public safety systems is to provide a highly configurable Commercial-off-the-Shelf (COTS) system rather than the earlier practice of customizing a system to meet customer needs. Initially, customization can be costly as well as when system updates are released because the custom feature must often be updated separately by the vendor at additional cost. Most major vendors do not want to provide custom installations due to long term support and maintenance implications posed by these systems. Current technology systems are highly user configurable COTS systems that can be adapted to meet most user requirements; however, some operational workflow changes may be needed.

As an alternative to local, server-based systems, some vendors are starting to offer hosted, or cloud-based solutions for some of their products. Common-place in the Information Technology (IT) industry, migration to cloud-based solutions have been slow in the mission critical public safety industry, particularly for agencies with the size and scope of the agencies and jurisdictions participating in this project. These cloud-based solutions have allowed smaller agencies that may have limited or no IT support to gain the benefits of full-featured systems. That said, **FE** suggests that the Request for Proposal (RFP) be prepared to allow the widest range of vendors to respond, offering integrated solutions that have a proven performance and implementation track record to take advantage of local, server-based, or hosted, cloud-based, and other emerging technologies to provide the best solution for the participating stakeholders.



The new public safety solution should be tightly integrated among the various modules and applications to reduce possible points of failure or functional disconnects and be supported by a vendor(s) capable of providing sustained long-term system support, enhancement, and maintenance.

3.2.2 *Integration of Systems*

With a new system, integration among as many systems as possible to ease information sharing and improve the overall comprehensiveness of information available on individuals, vehicles, and locations is necessary. This integration will be specified to include the CAD, mobile data, field-based reporting, law enforcement records management, and jail management system.

The participating agencies are currently using multiple third-party siloed applications, and as they move forward with the replacement project, they will be looking to integrate as much of the current functionality into a new single system as possible. One of the most common requests heard during the data collection process was the need for a single fully integrated system that provides as many modules or components as possible to reduce the overall number of software applications the users need to access or manage the system.

The participating agencies are interested in an integrated public safety solution that provides seamless access to information, independent of the component or module that they are logged into and using.

3.2.3 *Next Generation 9-1-1 Features and Applications*

The participating agencies have included NG9-1-1 considerations as they move forward in procuring the replacement system that will have new equipment, hardware, software, and interfaces. The new technology must be able to accept and process additional information that will be provided by future NG9-1-1 applications, such as text messages, streaming video, fixed or still images and other data possibly related to a caller's location or type of emergency. There will be a planned interface to the new public safety system and associated modules so that this additional information can be captured and utilized by dispatch staff, local emergency responders and agency support staff.

NENA and other organizations continue to work on new or update existing NextGen 9-1-1 (NG9-1-1) standards, CAD system interoperability and the exchange of information between those applications. As these standards continue to evolve, they should be



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monitored, considered, and incorporated in any new interfaces between the replacement CAD system, 9-1-1 answering equipment, and any future NG9-1-1 applications.

The new replacement system that will be procured will include asking the potential vendors how their solution will interface to NG9-1-1 and if it includes the following:

- Ability to receive IP-based 9-1-1 embedded and reference location data.
- Ability to attach all data to a CAD system event, including streaming and fixed video and audio, telemetric and other data.
- Capability to utilize 9-1-1 call data included in the Presence Information Data Format Location Object (PIDF-LO)
- Ability to transfer all incident record attachments to a mobile data device.
- Capability to parse XML data provided as a component of the 9-1-1 request for service.
- Capability to establish a CAD-to-CAD interface and ability to perform two-way XML data exchange via a CAD-to-CAD interface when required to transfer to another PSAP or system.
- Capability to use links to additional information, to retrieve that information from other systems.
- Establishment of security measures to all input data streams.

The replacement system functional requirements that **FE** has provided for the project includes all the above. In addition, the project team will continue to monitor the work and progress being made by several organizations that are working on NG9-1-1 standards development, specifically CAD system interoperability and the exchange of information between those applications.

These include:

- National Emergency Number Association (NENA) i3 Technical Standards
- Internet Engineering Task Force (IETF) Request for Comment (RFC) 1539
- National Information Exchange Model (NIEM)



- Department of Homeland Security SAFECOM Project
- APCO Project 36

Most of the major CAD system vendors are still assessing their need to interface and accept the additional information that NG9-1-1 systems will provide. Most have already addressed text to 9-1-1. The vendors are trying to determine the true cost that will be encountered as the needed functionality is developed, deployed, and made available. The new CAD and mobile data system procurement documents will include the language needed in the functional specifications portion of that documentation to solicit a response from vendors on their status as it relates to NG9-1-1 data.

The participating agencies should continue to monitor any Next Generation progress being initiated by the State of Nevada or any regional agencies.

3.2.4 Regional Governance Structures

As part of the CAD replacement project, **FE** was asked to share our knowledge/experience and provide recommendations for a regional governance structure that could be used for the project. These recommendations were developed based on **FE's** experience, understanding, and knowledge with other regional projects that have successfully been implemented in similar sized jurisdictions within the United States. The project team worked with the participating agency stakeholders to create recommendations for a local IT governance structure and service level agreements to maintain system reliability and fast response to service requests and workflow to assure prompt reaction for regional technical support that will meet the expectations of internal and external customers.

The following sections provide guidance for a governance framework as memorialized within the content of an interlocal agreement (ILA) or memorandum of understanding (MOU) that will meet the current and future needs of the City of Reno (Reno), City of Sparks (Sparks), and Washoe County (Washoe County). Note that legal counsel for the Cities and County will and should have additional terms and conditions relative to their specific needs within a long-term regional relationship.

3.2.4.1 Formal Agreement

The Cities and County have the authority to form Cooperative agreements between political subdivisions for performance of governmental functions; budget for expenses



(NRS 277.045). This cooperative agreement and interlocal contract would be like the existing agreements between the Cities of Reno and Sparks, and Washoe County, via the GIS Interlocal Agreement and the Nevada Shared Radio System (NSRS) Contract.

3.2.4.2 Agreement Parties, Roles and Responsibilities

The CAD/Mobile CAD and LERMS primary users are the founding entities of the governance framework, and therefore the central parties to an ILA/MOU. The roles and responsibilities of the Cities and Counties (Parties) are as owners, operators, and stewards of the system. The specific responsibilities to be committed to in the execution of an ILA/MOU include management of vendor contract(s), system planning and provisioning, system budgeting and funding, system vendor management, and data ownership.

The first decision of the Parties is to either establish the 9-1-1 Committee as the general oversight of the RPSCR; or establish a separate regional Board, Commission, or Committee that provides a platform for input and oversight by and on behalf of the Parties' public safety agencies.

The first responsibility of the Parties will be to draft and finalize an ILA or MOU that forms and empowers a system governance structure.

3.2.4.3 Purpose of the Agreement

The purpose of the agreement should be explicit and establish the boundaries of the relationships and the legal standing of the framework.

The Agreement should state the framework of governance beginning with the body that will provide the direct oversight at the decision-making level, the advisory and planning oversight, the perpetual or daily technical support of the system, and the operational use and access of the system.

The County Commission should retain overall decision-making oversight for contracting and funding matters since they are the source of funding.

Each Party to this agreement should contribute financially or in-kind services to a centralized sub-committee of the 9-1-1 Committee. The sub-committee should be comprised of technical expert staff from each of the Parties. This sub-committee should



act in an advisory and support role to the core County technical services in the maintenance and monitoring of the system.

The daily monitoring of the system should be a combined effort of the contracted support service level agreement with the vendor(s) and assigned County and Cities' technical staff. Based on the system(s) acquired by the Parties, the selected and assigned support staff should have specific focus on different aspects of the system.

If a combined on-premises server and cloud-based/software as a service (SaaS) is acquired as the best solution for the Parties, then the assigned staff from the Parties must have expertise and vendor provided training to be able to provide first level (Tier 1) support for the system components, features, and functions.

A staffing allocation review will be necessary to determine the resources necessary for support at the County and the contributing support of the Cities.

3.2.4.4 Legislation, Ordinances, Authority

The Agreement should include citation of the Nevada Revised Statutes (NRS) and local ordinances that give approval and authority to the Parties to enter an Interlocal Agreement (ILA) through which the system will be governed to include ownership, maintenance, life cycle and support management, and data management.

Other citations that must be incorporated by reference in the Agreement is the acknowledgement by the Parties of all constraints, restrictions, and requirements for access, use, compilation, reporting, storage, and distribution of public safety information and data inclusive of, and not limited to, those requirements specified by the following:

- Criminal Justice Information System (CJIS)
- Health Insurance Portability and Accountability Act of 1996 (HIPAA)
- Nevada Chapter 603A Security and Privacy of Personal Information
- Nevada Mental Health Sec. 433A.360 Clinical records: Contents; confidentiality (including Nevada Administrative Code § 458.163, and NRS § 458.055)
- Jeanne Clery Act for transparency in campus crime reporting.



3.2.4.5 Administration

The administrator of the systems and Agreement will be Washoe County unless otherwise changed by the County Commission following the advice of the 9-1-1 Committee as in all things relative to emergency communications in the County and Cities. The administrative support for the system should be the County with contributing support by the Cities. Administrative support includes project management coordination with the Cities' designated contacts for the planning and implementation of the system.

The County and Cities should maintain records of all staff hours and resources applied to the support of the system. This can then be submitted either as an invoice for services to the 9-1-1 Committee annually, or to document in-kind services contributed to the upkeep of the systems. If invoiced, the amount can be reduced from the individual Party's share of costs of ownership as will be detailed in the contract(s) planned with a selected vendor(s).

3.2.4.5.1 Bylaws

The interlocal operating procedures should be captured in a set of Bylaws specific to the system and may be separate and apart from the 9-1-1 Committee Bylaws. Note that the system interlocal operating procedure should be incorporated by reference into the ILA/MOU.

3.2.4.5.2 Change Management

Change management applies to the operational and technical aspects of the system. In the provisioning of the systems, the Parties' appropriate agency representatives and technical support staff will partner with the selected vendor(s) to develop and apply the system configuration to meet their needs. In the provisioning planning phases, the Parties should collect and maintain not only the system data and documentation but develop (and include in the Bylaws) a change management plan.

3.2.4.6 Entering and Terminating Agreements

If other local governments or agencies seek to join the system, the founding Parties are first cautioned to wait until after their system is completely implemented and operational. The Parties should require any new participants to submit a written request proposal that contains their requirements and expectations in the use and access of the system, and the commitment to the agreement existing terms and conditions. The Parties must



determine the impact of the new Party to the system as it relates to provisioning, data sets, partitioning of access to data, cost/value associated with onboarding and ongoing support.

To withdraw from the ILA, a member agency must present written notice of intention to withdraw at least six months prior to an annual automatic renewal date and such withdrawal should be effective on an automatic renewal date.

A member seeking to terminate and withdraw from the ILA should be required to submit the request in writing and include the specific data elements that are to be removed and/or deemed not for use by the remaining members.

The ILA may be terminated in its entirety or amended at any time by unanimous vote of the 9-1-1 Committee with recommendation to the County Commission for approval.

3.2.4.7 System Ownership

The system will be owned by the collective Parties. The County should be the contracting entity that establishes the relationship with the vendor(s). The City of Reno and City of Sparks desire to have individual contracts with the vendor(s) for their hardware, connectivity, interfaces, unique modules (if licensed or priced in that manner), licensing and any other system components that the other Parties have declined.

As this will be a complicated and possibly impossible parsing of contracted elements and services, the Parties should allow the County to hold the vendor contract on behalf of all Parties. Then, the Cities should either 1) utilize the planned ILA to define the relationship with the County for contracting the vendor products and services, or 2) execute independent interlocal agreements with the County acknowledging and defining the unique County and City roles and responsibilities.

3.2.4.8 Data Sharing Requirements

The ILA and associated Bylaws may contain data sharing requirements, or the Parties may elect to develop and execute a separate or individual data sharing agreements. Data sharing requirements should be included in the ILA or Bylaws or executing a separate data sharing agreement that includes all parties.



3.2.4.8.1 *Data Ownership*

The Parties of the ILA will be committing to the shared ownership and governance of the system as a multi-agency and multi-jurisdictional CAD, Mobile CAD, LERMS, and data management system. The individual public safety agencies will operate and maintain their CAD, Mobile CAD, and LERMS data within their own organizations to include a pre-defined error correction process.

3.2.4.8.2 *Use and Access*

The ILA and associated Bylaws should contain explicit security requirements and designate the County Technology Services as oversight to compliance with these requirements. The most recent security features and functions will be available in the new system and should be documented and enforced within the ILA and associated Bylaws.

3.2.4.8.3 *Planning*

The system planning activities should be guided by the 9-1-1 Committee membership with technical guidance from the user community and technical support entities. A collaborative technical support group provides technical information, advice, and recommendations to the 9-1-1 Committee membership. The technical support group also conducts or recommends the technical planning and implementation functions and duties for the 9-1-1 Committee in the oversight of the system.

The 9-1-1 Committee develops and recommends the annual budget for the RPSCR. Interim expenditure considerations are the responsibility of the County Technology Services Director, as the contracting authority for the system.

3.2.4.8.4 *Funding and Budget*

The initial acquisition of the hardware and software associated with the RPSCR is supported by the 9-1-1 surcharge as managed by the 9-1-1 Committee and approved by County Commission. The associated services of provisioning, ongoing maintenance, future upgrades/updates, expansion or augmenting the future system, will have costs associated. The 9-1-1 Committee should establish a funding plan for the long-term maintenance and localized support necessary to sustain the system(s) for the life of the selected vendor(s) contract.



3.2.4.8.5 Vendor Management

The Parties should form a project management team led by the County Technology Services Director or designee that includes contracted professional services as needed.

A project management plan is needed and will include monitoring and tracking of issues, risks, communication, responsible parties, contact information, testing plan, training plan (users and administrators), acceptance plan, and cutover plan. The County Technology Services Director or designee should be directly responsible for vendor management and oversight of the implementation. There should be individual project management team leaders within each agency with direct responsibility and reporting to/from individual department project management team members.

3.2.5 Regional CAD Cost Impacts

This section of the report addresses the Regional CAD Cost Impacts based on the alternative solutions available for a new system, a premises-based Commercial off-the-Shelf solution and a Cloud-Based and Software as a Service (SaaS) Solution.

FE provides the following cost estimates to the Washoe County 9-1-1 Emergency Response Committee based on knowledge of the industry and interaction with most of the major Computer Aided Dispatch (CAD) and Mobile Data System (MDS) vendors in the Public Safety domain, many of which could be offering a proposal to the RFP that is currently being developed. However, the cost information provided is subject to change based on the state of the economy, geographic proximity for certain vendors and competitive positioning among vendors within the industry. The following cost parameters constitutes a Rough Order of Magnitude (ROM) estimate as requested by the 9-1-1 Emergency Response Committee as a component of their five-year master plan.

As part of the CAD Assessment and Gap Analysis **FE** recommended that the regional partners participating in the CAD and Mobile Data replacement project consider both Cloud-based/SaaS and On-Premises Solution so the ROM includes pricing for both. This is necessary because of the differences in how the systems initial and ongoing costs are calculated.

3.2.5.1 Premises-Based Commercial Off-the-Shelf (COTS) Solution

This ROM estimate represents current approximations for traditional on-premises-based systems that have been procured and are of similar size, functional features, and

enhancements. To account for pricing that may be offered by vendors that conduct business in different tiers (large, medium, and small operations), the actual cost of the system is given a range of +/- 30%. Note that the degree of data conversion and custom interfaces required of the selected vendor can also have a considerable impact on final system cost.

In addition to the cost estimate(s) shown in this section, **FE's** experience is that in any project of this complexity, unexpected and/or unanticipated costs are likely to be incurred. For example, as the project progresses, the County and Cities may choose to make an investment in emerging technology to maximize the return on investment or achieve efficiency or functionality gains not previously available. Establishing a project contingency envelope of 10 to 20 percent of the overall project value is a prudent approach to prevent funding shortfalls during project execution.

The pricing in this section of the report represents a high-availability solution, with 99.999% uptime, no single point of failure and a proven geo-diverse disaster recovery design. This includes automatic fail-over from primary to back-up/secondary server(s) and a geographically diverse hardware solution that incorporates the current benefits of network virtualization.

3.2.5.1.1 CAD, Integrated Mapping and Mobile Data

The estimate below includes the costs associated with the CAD system, mapping, mobile data, system integration services, standard interfaces, and CAD/file maintenance training. It does not include any cost for data conversion, or any special interfaces identified by the County or Cities that may not be available from the Vendor but would have to be developed if determined to be a critical requirement based on the County and Cities operational needs.

- CAD System Software
- CAD Client Positions
- Integrated Mapping
- Integrated Mobile Data
 - AVL
 - Mapping



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- Messaging
- Query (CJIS/NCIC)
- Routing
- Silent Dispatch
- Status Changes
- Standard System Interfaces
 - Active Directory
 - Alarm Tracking (PM AM and CryWolf)
 - Automated Secure Alarm Protocol (ASAP)
 - Automatic License Plate Reader
 - Body Camera (Axon)
 - Dispatch Protocol Software Interface (ProQA)
 - E9-1-1
 - ePCR
 - Email
 - Emergency Notification System (CodeRed and AlertSense)
 - Fire RMS (Zoll and First Due)
 - Fire Station Alerting (WestNet and Zetron)
 - In-Car Camera
 - CJIS/NCIC Interface
 - Logging Recorder Interface
 - Master Time Interface



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- Next Generation 9-1-1 Interface
- Pictometry Interface
- PulsePoint
- Radio System GPS Interface
- Radio Tone Encoding
- RapidSOS
- Rip and Run
- Text Paging/Notification Interface
- Video Management System
- WebCAD
- Data Exchange
 - Crime Analysis/Incident Management (GeoShield)
 - External Database Interface
- File Maintenance
- System Integration Services
- Training

Subtotal Cost Estimate – \$2,043,036

3.2.5.1.2 On-Premises System Hardware

The cost below is an estimate of system hardware costs to implement the replacement CAD and Mobile Data System. These hardware costs include all required backroom equipment such as server hardware, operating system software, database licenses and virtual environment hypervisor necessary to stand up the system. They do not include any end-user CAD workstation, mobile data hardware for the field units or LERMS field-based-reporting functionality.



Hardware costs will vary among vendors since their software is typically benchmarked against specific hardware configurations, utilizing a variety of components offered by distinct manufacturers. As an option, the Regional Partners may elect to purchase this hardware separately, based on vendor provided specifications. Based on **FE's** recent experience, most clients choose to procure their own system hardware as they have existing current relationships with computer suppliers and the ability to get discounted pricing. Any hardware purchased through the vendor will likely include a markup.

As should be requested in any Request for Proposal (RFP), vendor proposals are required to provide minimum and/or optional specifications and requirements for all hardware components. They must also certify that the end solution is configured to meet the recommended performance configuration and specifications to support the applications proposed. The vendors must provide support to their clients during the hardware configuration process, and they are responsible for configuring and installing their own software.

3.2.5.1.3 *On-Premises Estimated Hardware Cost:*

- System Hardware
- System Software
- Servers
- Hypervisor Software
- Network Components
- Network / Communications Infrastructure
- Miscellaneous Equipment
- Redundancy and Scaling
- Shipping and Insurance
- Hardware Maintenance

Subtotal Cost Estimate – \$464,640



In the absence of a complete understanding of the configuration and architecture of the software solutions that would be proposed, it is difficult to estimate the possible costs for any improvements or modifications the Regional Partner's network and infrastructure might require. Depending on the standard(s) selected, for example those published by the Institute of Electrical and Electronics Engineers (IEEE) for mission critical networks or by the National Fire Protection Association (Standard 1221-2019), achieving compliance, or the intent of those standards can result in additional costs ranging between \$10,000 and \$100,000 to upgrade network capabilities. Since the need for network upgrades is unknown at this time, this cost has not been included in this estimate.

3.2.5.1.4 On-Premises System Enhancements and Non-Standard Interfaces

FE defines system enhancements and non-standard interfaces as those items requiring vendor development and result in charges that exceed what would be included in their base product or with a standard interface. These items are typically: a) not currently in development, b) not identified as future product enhancements, and c) are not scheduled for delivery in any planned release of the vendor's product road map. During the Needs Assessment process, only a few interfaces were identified by **FE** as possible non-standard interfaces that would likely require new development.

FE does not recommend that any client mandate software customizations specific to their procurement unless the vendor agrees to incorporate that same functionality in their base software package. This ensures that future vendor-issued software updates account for existing functionality across all client locations and any new programming or software updates or patches do not impact or cause problems for that functionality. The newer COTS systems tend to be highly configurable and the need for localized customizations is rarely present anymore.

Based on **FE's** experience, custom interfaces can range from \$10,000 to \$200,000 for a single interface, depending on the functional complexity and whether the desired interface is bi-directional or one-way only. Software customizations to a vendor's standard product can range from \$25,000 to \$100,000 for each customization based on complexity and functionality needed, but as stated above, it is highly recommended that this be avoided. No costs for system enhancements were included, but **FE** did identify some existing interfaces that may be considered "non-standard". Those have been included in this estimate.



3.2.5.1.5 *On-Premises Estimated Non-Standard Interface Pricing:*

Non-standard interfaces identified that may require new vendor development work:

- CAD-to-CAD (REMSA)
- Time and Attendance (SAP)

Subtotal Cost Estimate – \$140,000

3.2.5.1.6 *On-Premises Data Conversion*

The price for converting data can vary substantially between vendors. This often depends on prior experience the vendor may have with the existing system data. Based on **FE's** experience, a vendor is often reluctant to engage in converting data because of the potential difficulty in obtaining information and support from the existing system supplier. Therefore, a vendor will provide a price for converting existing data but will be highly dependent on the Partner Agencies to assist them in getting them information and access to existing data. Once the data is converted, all responsibility will be placed on the Partner Agency staff to verify the converted data for both completeness and accuracy. This typically requires significant effort and can be time consuming.

Based on our experience the most common CAD data that is included in conversion is:

- CAD Events
- Common Places
- Premise Alerts/Caution Notes

The cost for CAD data conversion has been included in the current estimate.

Subtotal Cost Estimate – \$75,000

3.2.5.1.7 *On-Premises Support and Maintenance*

The cost shown below is the budgetary estimate for vendors to provide 24/7 software support and maintenance for the CAD and Mobile Data modules. The timing for the first invoice for annual maintenance varies between vendors. This date is typically determined during final contract negotiations and can affect Total Cost of Ownership over system life. The cost estimate is for first year of support and maintenance only. The current industry standard averages a 5% annual increase, to be negotiated with the selected vendor.



Subtotal Cost Estimate – \$326,252

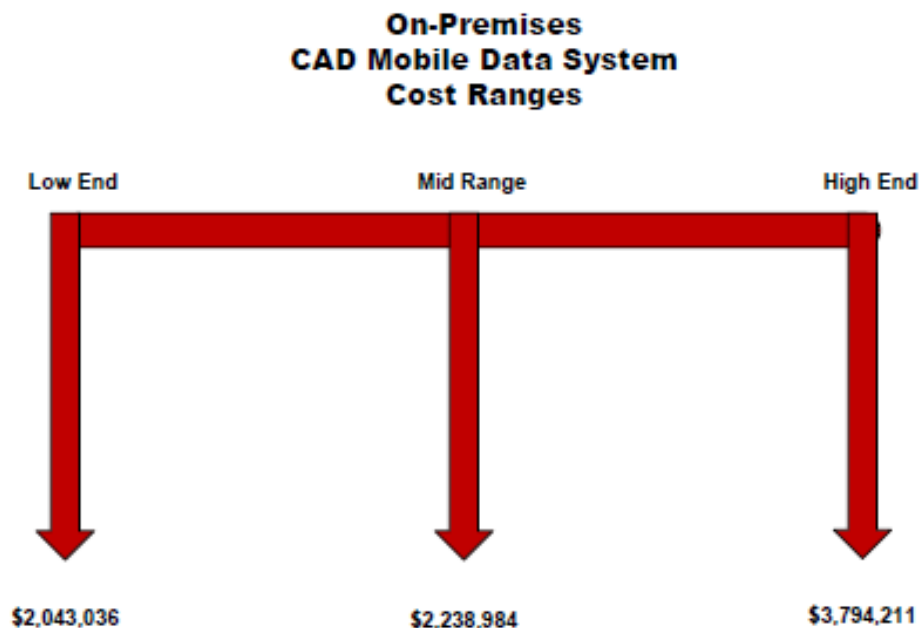
The annual cost for support and maintenance is not included in the total public safety systems cost estimate based on the unknown timing of the first invoice. Typically support and maintenance is not due until cutover which could be more than a year after contract execution. In addition, many agencies do not see this as a capital cost but as more of an annual operational cost.

3.2.5.1.8 Cost Range – On-Premises System

Figure 1 provides the anticipated cost impact for the replacement CAD and Mobile Data System. This estimate provides a 30 percent high and low range (+/-30%) from the typical mid-range price the 9-1-1 Emergency Response Committee is likely to encounter in proposals received. The cost range includes initial procurement software and system hardware costs. It also includes the cost range for data conversion and non-standard interfaces but does not include maintenance and support in subsequent out-years.

They do not include any end-user CAD workstation, mobile data hardware for the field units or LERMS field-based-reporting functionality.

Figure 1 – Cost Range – On-Premises System



3.2.5.2 Cloud-Based and Software as a Service (SaaS) and On-Premises Solutions Cost Estimates

This ROM estimate represents current costs based on Cloud-based or SaaS systems which are gaining interest in the public safety market. This estimate has been developed based on staff research, in reviewing limited project documentation and other related resources. The estimated cost of the system includes a range of plus or minus 30 (+/- 30%) percent. This is based on differences in vendor pricing structure, base product features and discounts offered.

3.2.5.2.1 Cloud-Based/Software as a Service (SaaS) Solutions and On-Premises Solutions Fee Structures

FE's exposure to Cloud-based or SaaS solution fee structures has been limited to reviewing a small number of executed contracts. Many of these contracts include high level costs with no line-item module pricing. As of the date of this report, **FE** has only had one SaaS Vendor submit a response to one of our client's RFPs. Because this vendor did not make that project's short-list due to a lack of standard functionality, the client rejected their cost proposal in accordance with purchasing rules. Most of the SaaS vendors are not yet responding to published RFPs, due to direct marketing efforts and the ability to negotiate sole-source contracts.

Based on the research we have conducted, along with limited discussions and/or vendor webinars and trade show presentations, **FE** has learned that the method by which these solutions are priced is not standard with all vendors and can vary greatly even between opportunities. Some vendors provide their CAD pricing based on the amount of public safety answering point (PSAP) telecommunicator console positions, while others price their solution based on the number of sworn law enforcement officers. The same is true for mobile data where pricing is either based on the number of staff or the number of mobile units. Annual subscription prices for the applications can vary based on the size of the agency(ies); it is not uncommon to see significant subscription cost discounts for the larger agencies with multiple users.

Operations demand that solutions accommodate existing interfaces and provide mobile data/AVL functionality. Based on the limited documentation available, it appears the interface model is mostly standard across the vendors and includes E9-1-1, master clock and text/email notification for little to no cost. Also, a common thread between SaaS solutions and traditional on-premises solutions is that they both have the same high costs for custom interfaces.



FE recommended and will ask for detailed line-item pricing in the RFP proposals from the Cloud-based SaaS providers. Available pricing that **FE** has been able to review has been based on annual or monthly subscription costs with very few details. Often items, interfaces, modules, and local hardware costs, were listed as a 'lump sum' cost with no supporting details on specific functionality.

3.2.5.2.2 *SaaS Solution CAD, Integrated Mapping and Mobile Data Estimate*

The estimate below includes the costs associated with the CAD system, mapping, mobile data, system integration services, standard interfaces, system administrator, CAD user, and file maintenance training. This will include CAD user training and train-the-trainer for the mobile data users.

It does not include any cost for data conversion (or legacy system data access), or any special interfaces identified by the City or Regional Partners that require custom development to meet a critical requirement based on the agency's operational needs.

- CAD System Software
- CAD Client Positions
- Integrated Mapping
- Integrated Mobile Data
 - AVL
 - Mapping
 - Messaging
 - Query (CJIS/NCIC)
 - Routing
 - Silent Dispatch
 - Status Changes
- Standard System Interfaces



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- Active Directory
- Alarm Tracking (PM AM and CryWolf)
- Automated Secure Alarm Protocol (ASAP)
- Automatic License Plate Reader
- Body Camera (Axon)
- Dispatch Protocol Software Interface (ProQA)
- E9-1-1
- ePCR
- Email
- Emergency Notification System (CodeRed and AlertSense)
- Fire RMS (Zoll and First Due)
- Fire Station Alerting (WestNet and Zetron)
- In-Car Camera
- CJIS/NCIC Interface
- Logging Recorder Interface
- Master Time Interface
- Next Generation 9-1-1 Interface
- Pictometry Interface
- PulsePoint
- Radio System GPS Interface
- Radio Tone Encoding
- RapidSOS



- Rip and Run
- Text Paging/Notification Interface
- Video Management System
- WebCAD
- Data Exchange
 - Crime Analysis/Incident Management (GeoShield)
 - External Database Interface
- File Maintenance
- System Integration Services
- Training

Subtotal Cost Estimate – \$1,962,616

3.2.5.2.3 SaaS System Hardware

The price below is an estimate of the limited system hardware costs that would be needed to implement a Cloud or SaaS solution. It is expected that there will be a need for some local hardware (servers and system software) to accommodate local interfaces and some of the required mobile data/AVL functionality.

Some vendors are recommending internet bandwidth connection of at least 2+ Mbps, per concurrent user and a backup Internet Service Provider connection that provides geographic diversity and is capable of automatic failover.

Subtotal Cost Estimate – \$137,940

3.2.5.2.4 SaaS Solution System Enhancements and Non-Standard Interfaces

FE defines system enhancements and non-standard interfaces as those items requiring vendor development resulting in costs that exceed what is normally included in their base product or with a standard interface. These items are typically: a) not currently in



development, b) not identified as future product enhancements, and c) are not scheduled for delivery in any planned release of the vendor's product road map. During the Needs Assessment process, only a few interfaces were identified by **FE** as possible non-standard interfaces that would likely require new development.

As with the COTS solution, **FE** *does not recommend that the participating agencies mandate software customization specific to their procurement unless the vendor agrees to include this feature or function in their base software package*. This ensures that future vendor-issued software updates account for existing functionality across all client locations and any new programming or software updates or patches do not impact functionality.

Based on research **FE** conducted, it appears that these vendors have limited experience with custom interfaces. This may account for estimated costs that are slightly higher than traditional COTS vendors. As **FE** identified some existing interfaces considered to be "non-standard", they are included in this estimate.

Non-standard interfaces identified that may require new vendor development work:

- CAD-to-CAD (REMSA)
- Time and Attendance (SAP)

Because Cloud/SaaS solutions are still so new to providing CAD systems for large sized agencies, it is expected that many of the standard interfaces currently provided by the COTS vendors may still have to be developed and engineered by the SaaS vendors.

Subtotal Cost Estimate – \$175,000

3.2.5.2.5 SaaS Solution Data Conversion or Access

Our research identified very little reference or documentation regarding data conversion. Again, this is most likely because the SaaS vendors have had limited interactions with existing COTS systems and little experience with data conversion.

At least one vendor documented the process by which the data is extracted by the vendor, then placed in cloud storage for access via the new SaaS system through a search function. The stored data is then imported as needed into any new data record. No cost was documented for this specific data access solution.

The cost for CAD data conversion has been included in the current estimate.



Subtotal Cost Estimate – \$75,000

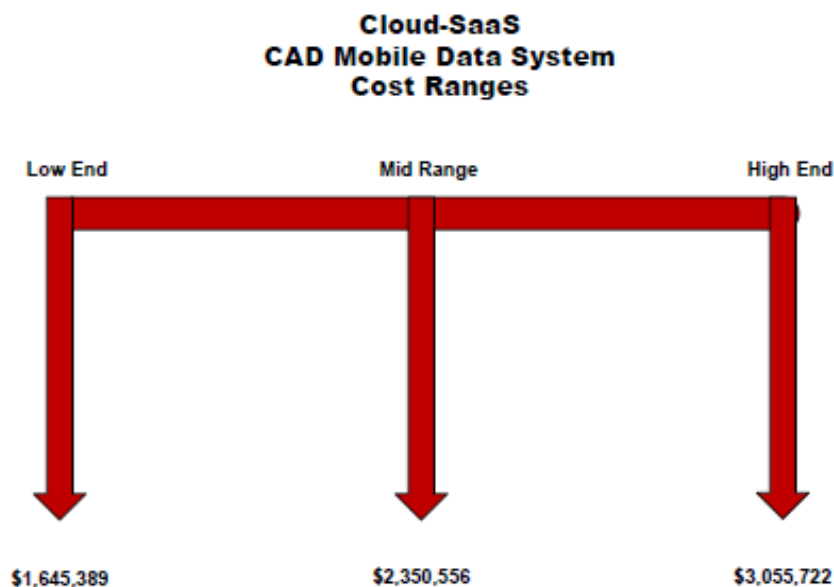
3.2.5.2.6 Cloud-based and SaaS Service Fees

To provide this high-level ROM cost estimate for a cloud-based or SaaS solution, **FE** used a telecommunicator per seat, per mobile unit and per officer model. Based on our research this format is consistent to how these vendors are determining pricing. One-time costs associated with interfaces, hardware, and data conversion/access typically are included in the service fees costs invoiced between contract execution and system cutover. Annual subscription costs begin at cutover and/or system acceptance.

3.2.5.2.7 Cost Range – Cloud-based and SaaS System

Figure 2 provides the anticipated cost impact for the replacement CAD and Mobile Data System with a Cloud-based SaaS system. This estimate provides a 30 percent high and low range (+/-30%) from the typical mid-range price the 9-1-1 Emergency Response Committee is likely to encounter in proposals received. The cost range includes initial procurement software and system hardware costs. It also includes the cost range for data conversion and non-standard interfaces but does not include the annual service fees for the subsequent out-years.

Figure 2 – Cost Range – Cloud-based and SaaS System



3.2.5.3 Ten-year Cost Impacts

The following two tables depict the ten-year cost impact of both types of systems. *Table 1* provides the anticipated ten-year cost for the replacement CAD and Mobile Data System with an On-Premise's solution.

Table 1 – Ten-year Cost Impact – On-Premises

On-Premises - Ten Year Cost of Ownership			
Year	Low Range	Mid-Range	High End
Initial Cost	\$2,043,036	\$2,918,624	\$3,794,211
Year 1	\$228,376	\$326,252	\$424,128
Year 2	\$239,796	\$342,565	\$445,335
Year 3	\$251,785	\$359,693	\$467,601
Year 4	\$264,375	\$377,678	\$490,981
Year 5	\$277,593	\$396,562	\$515,531
Year 6	\$291,473	\$416,390	\$541,307
Year 7	\$306,047	\$437,210	\$568,373
Year 8	\$321,350	\$459,071	\$596,792
Year 9	\$337,418	\$482,025	\$626,633



On-Premises - Ten Year Cost of Ownership			
Year	Low Range	Mid-Range	High End
Year 10	\$354,288	\$506,126	\$657,964
Total	\$4,915,536	\$7,022,196	\$9,128,855

Table 2 provides the anticipated ten-year cost for the replacement CAD and Mobile Data System with a Cloud-based SaaS solution.

Table 2 – Ten-year Cost Impact – Cloud-based SaaS

SaaS - Ten Year Cost of Ownership			
Year	Low Range	Mid-Range	High End
Initial Cost	\$1,645,389	\$2,350,556	\$3,055,722
Year 1	\$200,539	\$286,484	\$372,429
Year 2	\$205,552	\$293,646	\$381,740
Year 3	\$210,691	\$300,987	\$391,283
Year 4	\$215,958	\$308,512	\$401,066
Year 5	\$221,358	\$316,225	\$411,093



SaaS - Ten Year Cost of Ownership			
Year	Low Range	Mid-Range	High End
Year 6	\$226,892	\$324,131	\$421,370
Year 7	\$232,564	\$332,234	\$431,904
Year 8	\$238,378	\$340,540	\$442,702
Year 9	\$244,338	\$349,054	\$453,770
Year 10	\$250,446	\$357,780	\$465,114
Total	\$3,892,104	\$5,560,149	\$7,228,193

3.3 Review of 2019 Legislation and Use of 9-1-1 Surcharge Funds

3.3.1 Background

As the Master Plan is to serve as a guidebook for the 9-1-1 Committee for the use of the 9-1-1 surcharge and include legislative analysis, the following section focuses on a review of the 2019 Legislation and the impact of the revisions to NRS 244A that increase the surcharge and affix a portion for funding recording devices.

3.3.2 Senate Bill 176

In 2017, the Nevada Legislature introduced Senate Bill (SB 176) that changed NRS 244A.7643 to allow the use of 9-1-1 surcharge funds to purchase bodycams. It should be noted here that SB 176 was successfully passed on May 25th, 2017.



3.3.2.1 NENA Comments

The CEO of the National Emergency Number Association (NENA), Brian Fontes, sent a letter to Honorable David R. Parks, Chairman, Senate Government Affairs Committee (Nevada) that read as follows:

“Please be aware that SB 176 would foreclose Nevada’s ability to secure federal grant funding to improve its 9-1-1 infrastructure. In 2004, Congress passed legislation, which was amended in 2012, to authorize federal grants to assist states and local governments in implementing E9-1-1 and NG 9-1-1. In the legislation, the diversion of 9-1-1 funds is specifically addressed, in the respect that applicants for federal grants must certify at the time of their request and annually thereafter that no portion of *any* designated 9-1-1 charges imposed by the state or other taxing jurisdiction is being obligated or expended for any other purpose. (47 U.S.C. § 942(c)(2)).”

“The federal legislation also precludes states that receive 9-1-1 funds from using the grants for any purpose other than for E9-1-1 or NG9-1-1 enhancements. If a state awarded federal 9-1-1 funding is found to have misrepresented or misused any 9-1-1 funds, then *all* the federal grant funds it received must be returned. (47 U.S.C. §942(c)(3)). At least one state (Arizona) has had to return its federal grant money after it passed legislation that transferred 9-1-1 surcharge funds to the state General Fund.”

In short, Senate Bill 176⁵ was enacted, NRS 244A.7643 was amended, and bodycams were subsequently purchased in 2018 for use in Washoe County. This procurement using \$430K of 9-1-1 surcharge funds. Although there has been other procurement of Event Recording Devices across the state, it appears that Washoe is the only county to have directly used 9-1-1 surcharge funds to purchase this equipment. Note that the FCC Twelfth Annual 9-1-1 Fee Report⁶ indicates that two Nevada municipalities, Carson City and Churchill County, in self-reporting use of 9-1-1 surcharge in 2019 that the FCC determined to be a diversion of said fee. This report has very limited information from Nevada as the state does not report statewide but as individual counties or cities. It has not been substantiated that additional municipalities in Nevada have followed the legislated allowance of use of 9-1-1 surcharge for recording devices.

⁵ [SB176.pdf \(state.nv.us\)](#)

⁶ [12thannual911feereport2020.pdf | Federal Communications Commission \(fcc.gov\)](#)



3.3.2.2 NASNA Comments

It should be noted here that the FCC tracks states that divert 9-1-1 funds to inappropriate expenditures. As such, the FCC's Public Safety and Homeland Security Bureau opened PS Docket No. 20-291⁷.

In response to this Docket, the National Association of State 9-1-1 Administrators (NASNA) filed the following comments:

"NASNA opposes the diversion and re-appropriation of 9-1-1 funds to state general fund programming or to a use not designated by that state's own statute or rules applicable to that funding source. It is important to clarify at the outset also, that when the revenue from 9-1-1 fees is diverted and applied to a state's general fund or to a use not designated by that state's applicable statute or rules, that decision and action is not made by the local 9-1-1 systems nor is it made by that state's 9-1-1 programming office, but rather it is the state's legislature that makes the decision and action."

Note that in NASNA's statement, the clarification of "...or to a use not designated by that state's own statute or rules applicable to that funding source." NRS 244A explicit includes recording devices as an eligible expense of the surcharge. The intent of the NASNA statement however is to mirror that of the FCC regarding diversion of fees for non-9-1-1 expenditures.

3.3.3 Lift America Act of 2021

On March 11, 2021, members of the Energy and Commerce Committee introduced the Leading Infrastructure for Tomorrow's America Act, or LIFT America Act ([Lift America Act](#)).

This legislation intends to modernize the nation's infrastructure, rebuild the economy, combat climate change, and protect public health and the environment. The legislation invests more than \$312 billion in clean energy, energy efficiency, drinking water, broadband, and health care infrastructure.

This legislation, if approved, allows for the awarding of \$15 billion in grants for the deployment and implementation of Next Generation 9-1-1 services across the country to protect American lives through more accessible, interoperable, effective, and resilient 9-

⁷ [Public Safety and Homeland Security Bureau opens PS Docket No. 20-291 | Federal Communications Commission \(fcc.gov\)](#)



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1-1 services that allow callers to send text messages, images, or videos to 9-1-1 in times of emergency.

In short, Nevada would not be eligible for any of this funding.

It should also be noted that in Nevada, the majority of 9-1-1 operations are funded through local government using general revenue funds.

Historically, federal grant monies have only been able to offer far less than actual needs. With the passage of the Lift America Act, there would be an unprecedented amount of funding available for 9-1-1 infrastructure toward NG9-1-1 transitions. This makes any fee diversion by any Nevada county or city have the statewide impact of disallowing federal funding to all Nevada 9-1-1 centers.

3.3.4 9-1-1 Revenues in Washoe County

As there has never been a State-Level 9-1-1 Program Manager, there has been no formal organization of the 9-1-1 system throughout the state, with local entities operating independently from each other.

In 2018 Washoe County passed an increase to the local 9-1-1 fee which increased the surcharge from \$.25 cents to \$.85 cents per access line. This resulted in a significant increase in the available funds – from a budget of \$1.7M to \$5.7M. The new surcharge has greatly increased the availability of funds. The funding of 9-1-1 systems and equipment will assist the operation of PSAPs.

Initially, there were concerns Washoe County would have a lot of unknown costs associated with bodycams, so the Board set the surcharge an extra \$.10 to cover any unanticipated costs, as such, it was not anticipated that they would reach the statutory cap within five years, where in fact it was reached in two years.

Camera costs have been relatively stable because of the annual SaaS costs.

Typical 9-1-1 surcharge spending included Intrado services, GIS salaries, travel, and training, CodeRED, language interpretive services, PSAP headsets and other related PSAP equipment.

The new budget includes backup handheld portable radios, the radio interfaces, CAD, logging recorder systems, and remote call-taking and dispatch equipment.

The budgeting process needs to be standardized and planned out for a five-year period to better manage the fund within the \$5M cap on fund balance. This means that



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distribution and use must be structured and planned to maintain the regulated limit, or the surcharge must be reduced to align with actual and future projections. As stated previously, consideration should be given to the impact of fee diversion on Washoe and the State of Nevada.

3.3.5 *Evaluation of the 2019 Legislation*

3.3.5.1 *Section 1. Chapter 244A*

In this section of 244A, Senate Bill 12⁸ allowed for the use of 9-1-1 surcharge funds to pay for the engagement of an independent auditor to review the surcharges collected by a telecommunications provider.

FE supports this change and believes it is an appropriate use of 9-1-1 surcharges.

3.3.5.2 *Section 1.3 NRS 244A.7645*

In section 3(a), Senate Bill 12⁹ allowed for the use of 9-1-1 surcharge funds to pay for costs of adopting and reviewing the five-year master plan for the enhancement of the telephone system for reporting emergencies in the county that is required pursuant to NRS 244A.7643. **FE** supports this change and believes it is an appropriate use of 9-1-1 surcharges.

In section 3(c) sub-sections 1, 2, 3, Senate Bill 12¹⁰ allowed for the use of 9-1-1 surcharge funds to pay for a variety of costs associated to portable event recording devices., In section 4, Senate Bill 12¹¹ allowed for the use of 9-1-1 surcharge funds to assist in the establishing of priorities as well as the further auditing of expenditure for the use of funds expended on the portable event recording device program. **FE** does not support these changes and believes they are an inappropriate use of 9-1-1 surcharges.

3.3.6 *Legislative Changes*

Nevada is at a crossroads when considering the long-range implications of the diversion of 9-1-1 funds. In the case of Washoe County, the diversion of funds has already

⁸ [Senate Bill 12](#)

⁹ *ibid*

¹⁰ *ibid*

¹¹ *ibid*



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occurred. The current legislation, if unchanged, disqualifies the State of Nevada, and all PSAPs in Nevada, from being eligible for any Federal grants.

This is particularly concerning as there are a broad range of PSAP operations throughout the state that would benefit substantially from being able to access the critical funding needed to migrate to NG9-1-1.

If NRS 244A.7641, 244A.7645 and remain unchanged, and if entities within the state continue to divert 9-1-1 fees as defined by the FCC, Nevada's 9-1-1 community will suffer.

3.3.7 FCC Ending 9-1-1 Fee Diversion Now Strike Force Report and Recommendations

Congress directed the FCC to establish the *Ending 9-1-1 Fee Diversion Now Strike Force* within the *Don't Break Up the T-Band Act of 2020*¹². The Strike Force report and recommendations for stopping the use of 9-1-1 fees for non-9-1-1 purposes by state and local governments were adopted on September 17, 2021. The Strike Force report included clarification of the FCC's definition of fee diversion, recommendations for individual agency accountability for fee diversion, and more authority for the FCC regarding the reporting on the use of fees.

The impact of this Strike Force report on Washoe County may be that the FCC engages direct enforcement against 9-1-1 fee diversion through fines, FCC licensing restrictions, and even criminal action. The Strike Force report makes these enforcement recommendations with the caveat that the impact of these actions be studied first. It is **FE's** professional interpretation of the Strike Force recommendations as it relates to Washoe County, that the state will be the first to be checked by the FCC for the lack of reporting. The next FCC pass review will be of the individual county and city governments and regional authorities for use of 9-1-1 fees. Should the FCC enforce against fee diversion in Nevada under the current Nevada legislation, then some or all Nevada counties, cities, and regional 9-1-1 authorities may be deemed ineligible for federal funding.

The Strike Force recommended that the definition of fee diversion clearly state that 9-1-1 fees are to be used for direct support of 9-1-1 communications between the 9-1-1 call/contact and first responders. This includes all activities and technologies that allows for the delivery of voice and data to/from the 9-1-1 system. This specifically excludes

¹² [Text - H.R.451 - 116th Congress \(2019-2020\): Don't Break Up the T-Band Act of 2020 | Congress.gov | Library of Congress](#)



using the fees for any use outside of the 9-1-1 system and associated voice and data between 9-1-1 and first responders.

3.3.8 *The Role of Washoe County*

Washoe County is in a unique position to influence sweeping change in 9-1-1 funding across the state.

FE believes that there is an opportunity for Washoe County to consider and provide feedback to the State on establishing and funding a state 9-1-1 program. This would allow Nevada to fall in line with most other states, as well as begin a move towards a formalization of a statewide migration to Next Generation 9-1-1 for all Nevada PSAPs, as well as fall in line with the recently released FCC Report and Order on the diversion of 9-1-1 fees.

As the telco's decommission the legacy E9-1-1 equipment, and as the traditional 9-1-1 systems transition to an Internet Protocol (IP) environment, the need to migrate Nevada's PSAP community to the new technology cannot be overstated.

If the choice of Nevada's legislators remains status quo, and steps are not undertaken to revise and update current 9-1-1 legislation, many Nevada PSAPs will not be able to take advantage of federal funding that would enable migration to NG9-1-1 and realize the benefits of the new technology. Washoe County and regional partners, despite not having access to federal grants, do have funding options (through the 9-1-1 surcharge) and ability to continue migration to NG9-1-1.

3.3.9 *Recommendations*

FE recommends that Washoe County consider an effort to revise existing legislation to be compliant with the FCC regulations.

FE recommends that Washoe County establish a structured process for the funding of 9-1-1 programs and equipment. This would include the establishment of funding Rules, a formal application process, a system of managing awards, and an audit process that ensures projects are completed, and that requests for reimbursement are fulfilled.

3.4 Funding Analysis

3.4.1 Review of Five-Year Analysis Revenue & Expenditures

This section provides a five-year analysis of Revenue and Expenditures including 9-1-1 fund balance projections for 2021 to 2026. Note that there are some unknowns in the ever-changing evolution of 9-1-1 in Washoe County. Namely there are four key expenditures that have, or will have, significant impact on the 9-1-1 funding mechanism, regional relationships related to funding, and the ability to accurately project funding needs into the foreseeable future. These unknown costs are:

1. The renegotiation of the contract with Axon
2. The replacement and new acquisition of body camera holsters for current and future users
3. The in-progress procurement of a replacement regional CAD system
4. The upgrade or replacement of the 9-1-1 call handling equipment (CHE) at the three PSAPs.

Items 1 and 2 are not fully known, nor can they yet be confidently estimated. Plus, these costs will require life cycle planning for the existing technology, and for future features and functionality that may require upgrades and replacements within the five years that this Plan is in action.

Item 3 is addressed in Section 3.2 with projected, or anticipated costs associated with the options available within the procurement of a new regional CAD system.

Item 4 is addressed in Section 3.4.4 with projected, or estimated costs associated with upgrades or replacement of CHE.

As was experienced by the 9-1-1 Committee in 2019, the use of the fund and the support structures for same, are changing rapidly. The increase in revenue and the impact of the expansion of the use of the 9-1-1 fee revenue for non-9-1-1 expenditures have revealed the need to introduce and implement standards to the budgeting and funding process that exceed what has been in place to date.

3.4.2 Revenues and Expenditures

Table 3 provides the revenues and expenditures and differences pre- and post-surcharge increase as impacted by the addition of recording devices as an expenditure; and the difference in revenue and expenditures before the surcharge increase, in FY17 and FY18, and after the increase.



Table 3 – FY17 through FY21 Revenue and Expenditures

<i>Fiscal Year</i>	<i>Revenue Actual/Projected</i>	<i>Expenditures</i>	<i>Difference</i>	<i>Fund Balance*</i>
FY21	\$5,834,699	\$5,432,659	\$402,040	\$5,065,101
FY20	\$5,935,675	\$4,037,965	\$1,897,710	\$3,167,391
FY19	\$5,523,535	\$3,155,016	\$2,368,519	\$798,872
FY18	\$2,010,955	\$1,747,059	\$263,896	\$534,976
FY17	\$1,597,694	\$1,669,713	(\$71,253)	\$606,230

* Fund balance at the beginning of the specified fiscal year.

Table 4 provides figures for the coming five years (2021-2026) for revenues and expenditures based on existing contracts, and expenses related, recommendations of this plan and probable expenses for which Rough Order of Magnitude (ROM) pricing is available. This includes anticipated changes of increasing or decreasing revenues and expenditures. The projected revenue is based on population trend identified as an average annual increase of 1.8%. From FY21-FY26, Washoe County can anticipate an approximate total growth rate over the planning period of 9%, reaching a population base of approximately 520,000 in 2026¹³. Table 4 shows increasing revenue growth of 1.8% annually. The expenses are based on known and existing contracts and potential but not yet approved expenses related to the City of Reno Public Safety Center, the Computer Aided Dispatch upgrade, and buildout of a regional Emergency Services IP network (ESInet) as recommended in this report. The full list of existing contracts and expenditures is included in Appendix A.

The expenses listed in table 4 under *Additional Expenses* are rough order of magnitude (ROM) estimates. Accurate details regarding the procurement, life cycle, and future acquisitions, in support of the NG9-1-1/ESInet build out, the City of Reno Public Safety Center, and CAD are not available at this time; while other estimates for Mobile Data Computers and Fire Station Alerting systems are projections based on previous expenses or quotes.

¹³ [Nevada County Population Projections 2021 to 2040, Nevada State Demographer, Nevada Department of Taxation, October 2021.](#)



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Table 4 – FY21 through FY26 Revenues, Expenditures, & Fund Balance

9-1-1 Current and projected revenues and expenses	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY2024-2025	FY 2025-2026	Total 5-Year Revenue/Expenses
Projected Revenue	\$5,929,500	\$5,982,000	\$6,092,000	\$6,111,000	\$6,155,000	\$30,269,500
Existing Approved Expenses and Contracts	\$5,401,015	\$4,166,846	\$4,211,846	\$4,246,846	\$4,286,846	\$22,313,401
Additional Expenses The lines below include new expense estimates not currently included in as an approved or contracted expense. These expenses have not been, but may be, approved by the 911 Emergency Response Advisory Committee and are included for illustrative purposes.						
Regional Projects						
- Computer Aided Dispatch and Implementation	\$316,862	\$1,413,400	\$1,413,400	\$343,000	\$360,000	\$3,846,662
- NG 911 Technology Assessment & Emergency Services IP Network (ESI Net)	\$170,000	\$0	\$650,000	\$250,000	\$250,000	\$1,320,000
- MDT Replacement Program and Data Expenses ¹⁴	\$204,200	\$220,000	\$318,000	\$465,000	\$701,000	\$1,908,200
- 911 Surcharge Audit	\$0	\$0	\$250,000	\$0	\$0	\$250,000
Reno Includes Public Safety Center Dispatch Consoles	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$2,000,000
Sparks Includes Fire Station Alerting	\$401,785	\$0	\$0	\$0	\$0	\$401,785
Washoe County	\$0	\$0	\$0	\$0	\$0	\$0
Truckee Meadows Fire & Rescue Includes Fire Station Alerting, Dispatch Consoles, Phone & Data lines	\$1,144,159	\$45,000	\$45,000	\$45,000	\$45,000	\$1,324,159
Total Approved and Potential Expenses	\$7,638,021	\$5,845,246	\$6,888,246	\$6,349,846	\$6,642,846	\$33,364,207
Fund Balance at beginning of fiscal year	\$5,467,141	\$3,758,620	\$3,645,373	\$3,099,127	\$2,860,280	(\$3,094,707)

¹⁴ Individual agency reimbursement for MDTs shall not exceed one fifth of each respective agency's MDT fleet annually.



3.4.2.1 Spending Scenarios

To plan for future 9-1-1 funding capacity, the following scenarios are provided to illustrate the potential impact on the fund balance for years FY22-FY26. Included are scenarios with all planned mobile computer (MDC, Table 6), fire station alerting (FSA, Table 7), and combined expenses (Table 8). Table 5 provides a baseline that includes expenditures related to recommendations or topics (e.g., CAD) in this plan including the Reno Public Safety Center, NG911 Technology Assessment, ESI Net buildout, and CAD implementation and related project management costs. The Baseline scenario does not include Mobile Data Computers, Fire Station Alerting or any expenses related to TMFR's dispatch expansion.

Table 5 – Baseline Plan

<i>Fiscal Year</i>	<i>Revenue Projected</i>	<i>Expenditures Planned/Projected</i>	<i>Difference</i>	<i>Fund Balance</i>
FY26	\$6,155,000	\$5,873,646	\$281,357	\$7,336,820
FY25	\$6,111,000	\$5,186,646	\$294,354	\$7,042,466
FY24	\$6,092,000	\$6,252,046	(\$160,046)	\$7,202,512
FY23	\$5,982,000	\$5,557,046	\$424,954	\$6,777,558
FY22	\$5,929,500	\$4,619,083	\$1,310,417	\$5,467,141

Table 6 – Baseline Plus Mobile Data Computers

<i>Fiscal Year</i>	<i>Revenue Projected</i>	<i>Expenditures Projected</i>	<i>Difference</i>	<i>Fund Balance</i>
FY26	\$6,155,000	\$6,574,646	(\$419,646)	\$6,129,620
FY25	\$6,111,000	\$6,281,646	(\$170,646)	\$6,300,266
FY24	\$6,092,000	\$6,570,046	(\$478,046)	\$6,778,312
FY23	\$5,982,000	\$5,777,046	\$204,954	\$6,573,358
FY22	\$5,929,500	\$4,823,283	\$1,106,217	\$5,467,141

Table 7 – Baseline Plus Fire Station Alerting

<i>Fiscal Year</i>	<i>Revenue Projected</i>	<i>Expenditures Projected</i>	<i>Difference</i>	<i>Fund Balance</i>
FY26	\$6,155,000	\$4,873,646	\$1,281,354	\$5,951,395
FY25	\$6,111,000	\$4,816,646	\$1,294,354	\$4,657,041
FY24	\$6,092,000	\$6,252,046	(\$160,046)	\$4,817,087
FY23	\$5,982,000	\$5,557,046	\$424,954	\$4,392,133
FY22	\$5,929,500	\$7,004,508	(\$1,075,008)	\$5,467,141



Table 8 – Baseline with MDCs & FSA

<i>Fiscal Year</i>	<i>Revenue Projected</i>	<i>Expenditures Projected</i>	<i>Difference</i>	<i>Fund Balance</i>
FY26	\$6,155,000	\$6,574,646	(\$419,646)	\$3,744,195
FY25	\$6,111,000	\$6,281,646	(\$170,646)	\$3,914,841
FY24	\$6,092,000	\$6,570,046	(\$478,046)	\$4,392,887
FY23	\$5,982,000	\$5,777,046	\$204,954	\$4,187,933
FY22	\$5,929,500	\$7,208,708	(\$1,279,208)	\$5,467,141

The scenarios presented in tables 5-8 illustrate how various expenditures would impact the annual 9-1-1 budget and the 9-1-1 fund balance. Each scenario except the Fire Station Alerting (table 7) and combined (MDCs and FSA, table 8) scenarios, 9-1-1 fund balance remains over the \$5 million statutory maximum. The Committee should keep in mind when reviewing these scenarios that there may additional and expanded costs that could be associated with the rollout of a regional ESINet and NGCS that will not be known until the County makes key decisions. These decisions will include whether there will be partnerships with other counties related to the ESI Net and whether the network and services will be owned and maintained by the County or will be hosted by a vendor(s). In decisions regarding the other scenarios there will be fluctuations to the impact on the fund balance based on procurement and support decisions made by the County. For example, hosted or cloud-based solutions or hybrid solutions may have lower capital and recurring costs in the short term, than ownership and county-provided upkeep for on-premises solutions.

3.4.2.2 Fund Distribution and Requests for Reimbursement

The Washoe County 9-1-1 Emergency Response Advisory Committee was created with the intent to develop a plan for the enhancement of the County's 9-1-1 emergency response system and make recommendations to the County Commission concerning the expenditures of the money collected through the telephone line surcharge.

The historical method of the disbursement of 9-1-1 surcharge revenues consists of two parts – a call volume formula division of funds that PSAPs receive monthly, as well as a system of application for funds known as a Request for Reimbursement presented in the form of a Staff Report.

As previously stated, revenue from the 9-1-1 surcharge has created a significant increase in the available funds. The surcharge revenues collected have increased from \$1.7M to \$5.8M.



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There are no current boundaries set on past requests for project approval - each request is evaluated on its own merit. There is no set method for tracking the status or projects or whether funds have been expended. Agencies are on the honor system to report the status of their respective projects, and whether they have submitted for reimbursement or completed or progressed the initiative.

The 9-1-1 Committee review and approval is a mechanism for navigating the request to the County Commissioners who receive these requests at commission meetings subsequent to the 9-1-1 Committee meeting at which the requests were approved.

With the responsibility of funding a growing and evolving expanse of needs, operational and technical, and with the increased fund balance, there is a need to create structure in the reimbursement request process. This structure should be detailed and enforced via updated Bylaws for the Committee that include administrative rules governing use of the surcharge, formal and detailed process for requesting reimbursements, review/audit process by which PSAPs are confirmed to be expending the funds in line with requirements.

The expansion and evolution of eligible expenditures include body worn cameras (BWCs) for all Law Enforcement, School District Officers, and in-car video cameras (fleet cameras) in Reno and Sparks Marshall's vehicles. The inclusion of Marshals and School District Officers in this funding was added to NRS 244A in 2019. In 2018 the acquisition of recording devices for all initial agencies was for \$1.5M as accessed via a state contract originally established by Nevada Highway Patrol (NHP).

3.4.3 9-1-1 Purchasing Balance Projections

The budget authority was expanded to provide for the ability to replace the regional CAD system, cover recording devices, replace/upgrade CHE, and portable radios, along with other agency-specific emergency communications needs. The anticipated expenditures in coming years as shown in the baseline spending scenario (*Table 5*) allows for expenditures to be less than the expected revenue. The proposed budget would grow the fund balance by approximately \$1.3 million in FY22 and by another \$1.8 million by FY26. Despite the positives that come with a growing fund balance, the statutory maximum balance of \$5 million must be maintained. Therefore, the 9-1-1 Committee and staff must identify necessary expenses that will result in maintaining a fund balance under \$5 million. Projects identified in Table 4, including Regional Fire Station Alerting System and costs associated with Reno's Public Safety Center would reduce the fund balance below the \$5



million maximum while additional on-going costs related to the CAD will help maintain the balance at statutorily acceptable levels.

Staff and the 9-1-1 Committee will also need to work together to identify expenses one, two, or three years in advance so projected expenditures can be best planned for, and their impacts on the 9-1-1 fund balance can be calculated. The CAD project as a capital long life cycle event will split the upfront costs between FY22, FY23 and FY24, and will also require annual maintenance or subscription costs. Planning and budgeting for upkeep, maintenance, emerging technology, additional interfaces, and future replacement or upgrades, should be part of the capital expense planning on a five-to-ten-year schedule for the CAD and associated components.

Other costs that are yet to be fully defined include the addition of approximately 400 law enforcement, commissioned, and newly graduating deputies for outfitting body worn cameras and associated equipment, in-car video cameras and associated equipment to include magnetic holders as example. Note that the WCSO Detention Center had 300 cameras deployed recently. Upkeep and replacement of same will require budgeting annually.

The current cameras are contracted with Axon (formerly Taser). This contract is due for re-negotiation this fiscal year. This means that the coming fiscal year and recurring annual costs are not known.

Non-9-1-1 future budget planning will be impacted as there is a need for human capital/personnel costs associated with camera systems management and evidentiary redaction. The current practice of assigning one fulltime employee or equivalent (FTE) is not enough to maintain the records, manage access and use, prepare evidentiary packages, redact, and secure data, and manage the ever-growing database. These costs are not currently an approved use of the 9-1-1 surcharge; however, these are significant costs that may lead agencies to request funding in the future.

FE recommends addressing 9-1-1 future budget planning through the completion of a NG Readiness Assessment with options for acquisition and deployment. A NG Plan will define current state of network, equipment, and governance/relationships, and will provide cost projections for same.

3.4.4 Enhancement of Phone System

This section provides high-level budgetary information for the replacement/upgrade of the call handling equipment (CHE). The network components for a regional ESInet and the



required next generation core services (NGCS) will be addressed in detail in a planned future NG9-1-1 strategic plan. This future planning effort should serve the region PSAPs with expansion capabilities for adjacent and intra- and inter-state connections as the evolution of 9-1-1 in the state and across the nation progresses.

Note that all systems, network, and equipment, should be reviewed annually for life cycle adjustments, emerging technologies, expansion planning, and associated costs.

Impacts on enhancements to the 9-1-1 phone system include relationship and service changes such as any transition of services to/from the three primary PSAPs of WCSO, Reno, and Sparks. These changes will have an impact from other systems such as CAD.

3.4.4.1 Funding Impacts

The recent legislative impact on the revenues and expenditures in NRS 244A have increased the surcharge as previously noted, and opened opportunities for expenditures that include the following:

- Recording devices as legislated
- Improvements to the facilities, systems, and equipment of the PSAPs
- CAD replacement
- CHE replacement
- NG9-1-1 ESInet buildout and interconnectivity
- Radio equipment for PSAP use
- Back-up outfitting
- Life cycle planning for upgrades and replacement of all technology

Much of the costs for these funding needs are not yet known. It is critical to the stewardship of the 9-1-1 revenues that once these initial and maintenance costs are known that the 9-1-1 Committee begin preparing a life cycle plan for each expenditure. None of these are one-time costs as they all require planning for ever changing technology, growth and expansion within the user communities, and expectation from the public of the service provided by the public safety agencies. The public expectation will drive much of the technology especially in the data sharing components of NG9-1-1 and



recording devices. There is also a human capital expense that must be planned for and provided to support the changing technology, the regional systems and relationships (through governance), and specific human resources necessary to operate the technology, such as storage maintenance of recordings, access, use, provision, and redaction of data from recordings both in the field (body worn cameras, in-car video) and in the PSAPs (logging recorders that incorporate all data associated with an event). This will require an investment in training, transitional and new hires, and additional skilled staff.

3.4.4.2 Current Conditions

The three primary communication centers in the County are using a shared Intrado hosted Viper IP-based call-taking solution. The system was installed in 2012 and the contract for the system is owned and managed by the County.

The equipment is Phase II compliant, capable of rebids, and can display a Wireless Phase II caller's location on the interfaced CAD mapping. The system is interfaced to the system's Verint voice logging recorder that was acquired as part of the procurement. The logger is currently maintained by the County Technical Services and IT staff from the respective jurisdictions. The 9-1-1 answering solution includes Intrado's Power Management Information System (MIS) for telephone statistics.

The 9-1-1 network provider is AT&T, and the Automatic Location Identification (ALI) database is provided by West/Intrado via two redundant ALI circuits. The Centers have switches, that when flipped, automatically transfers their 9-1-1 calls to their respective back-up centers. Since the system is IP-based the software application is mobile and routable with a configuration change.

The centers have an integrated Text-to-9-1-1 solution.

There is a CAD interface to the 9-1-1 answering equipment that allows ANI/ALI data to be transferred for CAD event entry. The interface provides the display of Wireless Phase II data on the CAD map.

3.4.4.3 Telephony Cost Impacts

FE provides the following cost estimates to the Washoe County 9-1-1 Emergency Response Committee based on knowledge of the industry and routine interaction with all the major 9-1-1 Call Handling vendors in the Public Safety domain. Utilizing Next Generation 9-1-1 terms this equipment is commonly referred to as the Call Handling



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Functional Element (CHFE) and characterized as the call handling equipment (CHE) in this document. The cost information provided is subject to change based on the state of the economy, geographic proximity for certain vendors and competitive positioning among vendors within the industry. The following costing constitutes a Rough Order of Magnitude (ROM) estimate as requested by the 9-1-1 Emergency Response Committee as a component of their five-year master plan.

This ROM estimate represents current approximations for a similar hosted environment that is in place in the County. To account for pricing that may be offered by vendors that conduct business in different ways, actual cost of the system is given a range of plus or minus 25 (+/-25%) percent. Cost(s) will vary for each system based on local requirements, competition and the status of certain vendors who have existing facilities in the region.

The cost includes the following project components:

- Call Handling Answering Positions including Mapping
- Furnishing and installing new system equipment and ancillary facilities
- Engineering and system design
- Project management
- Software installation and programming
- Training
- System and Acceptance testing
- Cutover plan and execution
- Certification
- Support and Maintenance

The monthly cost for ALI management and a managed IP network is included in the total cost estimate.

Table 8 – Cost Range – 9-1-1 Call Handling System

Cost Range - 9-1-1 Call Handling Replacement		
Low Range	Mid-Range	High End
\$825,000	\$1,100,000	\$1,375,000



3.4.4.4 Recommendations

- Prior to any procurement of a new call handling system the County should conduct a NG9-1-1 Readiness Assessment. That will provide the County with the status of PSAPs' readiness to transition to NG9-1-1 along with recommendations on how to proceed.
- The Call Handling Functional Element is an integral component of a NG9-1-1 network. Prior to replacing the current call handling existing equipment, the County needs to verify the new solution will be compliant with any current NENA i3 NG9-1-1 standards. This will ensure it is compatible with any future ESInet and Next Generation Core Services (NGCS).
- The County may want to combine the implementation of a NENA i3 compliant ESInet and NGCS with the replacement of the hosted call handling system.

3.4.5 Sources of 9-1-1 Revenues

The sources for revenue for 9-1-1 have shifted over the last decade to wireless surcharge from wireline. Most states' legislation allows for surcharge to attach to pre-paid wireless devices, VoIP, MagicJack (or similar devices), and other communications devices that can reach 9-1-1. Many of these states have transitioned completely to a Universal Service Fee (or similarly named and defined) method of capturing all possible communications devices in the market now and in the foreseeable future.

Most 9-1-1 programs across the nation continue to be funded by access line surcharges, and this is likely to continue. NASNA continues to explore other sources of funding 9-1-1, and strongly supports Federal grant award programs that greatly assist in this regard. See previous discussions regarding the LIFT America Act and the FCC 9-1-1 fee diversion report. The FCC, NASNA, and NENA are aware of the proliferation of 9-1-1 centric applications (apps) that allow users to access 9-1-1 in non-traditional ways. It should be expected that users or providers of these apps will be required to remit some form of fee to 9-1-1.

The funding of 9-1-1 in Washoe County continues to use the traditional wireline and wireless approach; however, there are other sources of revenue that other states have adopted that bear consideration by the County. These include, but are limited to, the following:

- Prepaid tax on pay-as-you-go phones (e.g., TracFone, Cricket Wireless, etc.).



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- Static VoIP providers (e.g., Comcast, Spectrum, etc.), and
- Nomadic VoIP providers (e.g., MagicJack, Zoom Phone, etc.)

Any device that can access 9-1-1 is eligible for the application of a 9-1-1 surcharge.

3.4.6 **Audit**

Some states have initiated line-count (subscriber) audits of their respective telcos. These audits also include a review of all dedicated PSAP circuits that determines whether such circuits exist, whether they or not are still required, and if such circuits are active or dark. Without exception, such audits **FE** has performed in this regard have yielded significant savings to state and PSAP programs.

NRS 244A.7648 Engagement of auditor to analyze or audit surcharge states that a county "...may, as part of its review of the 5-year master plan adopted pursuant to NRS 244A.7643 for the enhancement of the telephone system for reporting emergencies in the county or for the purpose of purchasing and maintaining portable event recording devices and vehicular event recording devices, as applicable, engage a qualified independent auditor to perform an analysis or audit of the surcharges collected by telecommunications providers in the county."

3.4.7 **Recommendations**

FE recommends a review of potential sources of revenue and establish a system of 9-1-1 surcharges applied to any device or system that accesses 9-1-1.

FE recommends that Washoe County consider initiating an in-depth audit of telecommunications subscriber counts, as well as a countywide review of dedicated circuits used in the delivery of 9-1-1 calls and associated data.



4. Attachments

4.1 Attachment A – Letter from Brian Fontes



NENA

The 9-1-1 Association

1700 Diagonal Road | Suite 500 | Alexandria, VA 22314

April 17, 2017

Honorable David R. Parks
Chairman, Senate Government Affairs Committee
401 S. Carson Street
Carson City, NV 89701-4747

Re: Senate Bill 176

Dear Chairman Parks:

On behalf of the National Emergency Number Association (NENA: The 9-1-1 Association), please accept this letter detailing our concerns with SB 176, which proposes to authorize counties in Nevada to use the proceeds from 9-1-1 fees/surcharges collected from consumers for purposes other than 9-1-1. As explained below, in addition to general public policy concerns regarding use of 9-1-1 fees, we believe the proposed legislation may preclude Nevada from securing millions of dollars in federal grant funding to modernize its 9-1-1 infrastructure.

Decades of government leadership and steady technological progress have provided citizens with a reliable 9-1-1 system that they can trust. Funds the public remits in good faith specifically for 9-1-1 purposes should be used to further 9-1-1's most basic purpose: to ensure that 9-1-1 callers can quickly be located in emergency situations and receive an effective emergency response. Any diversion of 9-1-1 fees not only puts one of the nation's most critical systems in jeopardy, but also risks breaking the trust established with the public, to the extent 9-1-1 monies are used for purposes that differ from what consumers have understood.

9-1-1 surcharges in Nevada currently are used for the enhancement of 9-1-1 emergency systems. SB 176 would authorize counties to use 9-1-1 fees for a purpose other than the support of emergency communications operations, maintenance, or enhancement. While NENA strongly supports the efforts of law enforcement, NENA urges against treating designated 9-1-1 funds as a revenue source available to be diverted for use in non-9-1-1 programs. According to the Federal Communications Commission, thousands of lives are saved every year thanks to America's 9-1-1 systems. A practice of diverting 9-1-1 funds, however, would negatively affect 9-1-1 center resources and slow the transition to new and improved 9-1-1 systems, such as Next Generation 9-1-1 (NG 9-1-1). Efforts are underway in Congress to provide federal funding for the upgrade of our nation's 9-1-1 centers to allow better communications between the public calling 9-1-1 and field responders using the advanced wireless technology of FirstNet. Communities across the country are paying for the operations of legacy 9-1-1 systems, while building the financial reserve to assist in the transition to NG9-1-1 service.

Please be aware that SB 176 would foreclose Nevada's ability to secure federal grant funding to improve its 9-1-1 infrastructure. In 2004, Congress passed legislation, which was amended in 2012, to authorize federal grants to assist states and local governments in implementing E9-1-1 and NG 9-1-1. In the legislation, the diversion of 9-1-1 funds is specifically addressed, in the respect that applicants for federal grants must certify at the time of their request and annually thereafter that no portion of *any* designated 9-1-1 charges imposed by the state or other taxing jurisdiction is being obligated or expended for any other purpose. (47 U.S.C. § 942(c)(2)).

The federal legislation also precludes states that receive 9-1-1 funds from using the grants for any purpose other than for E9-1-1 or NG 9-1-1 enhancements. If a state awarded federal 9-1-1 funding is found to have misrepresented or misused any 9-1-1 funds, then *all* of the federal grant funds it received must be returned. (47 U.S.C. § 942(c)(3)). At least one state (Arizona) has had to return its federal grant money after it passed legislation that transferred 9-1-1 surcharge funds to the state General Fund.

Congress is currently circulating draft legislation to extend the grant program for NG 9-1-1. Draft versions of the legislation indicate that Congress will retain the statutory language concerning states' uses of 9-1-1 charges. Therefore, the enactment of SB 176 could foreclose Nevada's ability to secure federal grant funding.

The Federal Communications Commission (FCC) is also concerned with states' diversion of 9-1-1 funds. Just last month, FCC Commissioner O'Rielly expressed his strong opinion against the diversion of 9-1-1 funding, calling it "unconscionable." NENA agrees that funding diversions undermine the ability of local public safety emergency call centers to modernize. The practice of diverting 9-1-1 funds has several negative impacts on the 9-1-1 system overall. When states divert funds dedicated to the 9-1-1 system, it becomes difficult for 9-1-1 authorities to pay all of the technical and operational costs of current system, let alone prepare for the modernization of the 9-1-1 system. This makes it difficult to keep up with consumer technologies and public expectations, including the emergency communications needs of individuals with disabilities. Efforts to secure federal grant funds for 9-1-1 systems are also more likely to fail when federal policy makers see that funds available in the states for 9-1-1 are not used for their intended purpose. If the 9-1-1 system is not a state priority, it may not be treated as a federal priority.

While NENA is not opposed to the decision to use public funds for law enforcement body cameras, we believe it is *inappropriate public policy* to impose a surcharge specifically enumerated for the state's emergency telephone system, and then divert or dilute those funds for other uses unrelated to 9-1-1, regardless of the merits of the proposed alternate use.

As background, NENA has a long history of being at the forefront of emergency communications issues. NENA was formed in 1982 as a nonprofit corporation with a

Honorable David R. Parks

April 17, 2017

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mission to improve 9-1-1 through research, standards development, training, education, outreach, and advocacy. With more than 12,000 members NENA ensures 9-1-1 is prepared to meet the needs of all citizens making requests for assistance by developing standards and resources for 9-1-1 systems and operations; providing education, training and certifications for 9-1-1 professionals; informing policymakers about issues facing 9-1-1; and educating the public about 9-1-1 systems, their importance and their proper uses.

I look forward to discussing these concerns with you and other Nevada policy makers. Thank you again for your interest and consideration of these matters.

Respectfully,

A handwritten signature in black ink, appearing to read "Brian F. Fontes". The signature is fluid and cursive, with a large initial "B" and "F".

Brian F. Fontes, CEO

4.2 Attachment B – Senate Bill 12



Senate Bill No. 12–Committee on Government Affairs

CHAPTER.....

AN ACT relating to counties; authorizing a county to use revenue collected from certain telephone surcharges to pay for an analysis or audit of the surcharges collected by a telecommunications provider, certain costs related to a master plan and certain costs for personnel and training associated with portable event recording devices and vehicular event recording devices; providing the conditions under which the audits may be performed; prioritizing the expenditure of the proceeds of certain telephone surcharges; requiring a recipient of money collected from the surcharge to repay or return that money under certain circumstances; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law authorizes a board of county commissioners to impose a surcharge for the enhancement of the telephone system for reporting an emergency if the board adopts and reviews, at least annually, a 5-year master plan for the enhancement of that system or the purchase and maintenance of certain recording devices. (NRS 244A.7643) If a county imposes such a surcharge, the revenue collected from the surcharge must be deposited in a special revenue fund and used only for certain purposes. (NRS 244A.7645)

Section 1.3 of this bill authorizes the revenue collected from the surcharge to also be used to pay for the costs of an analysis or audit of the surcharges collected by a telecommunications provider. **Section 1** of this bill authorizes the board of county commissioners in a county where a surcharge is imposed to engage an independent auditor to perform such an analysis or audit: (1) as part of the mandatory review of the 5-year master plan; or (2) if a previous analysis or audit revealed evidence of a violation of certain provisions of law with respect to the amount of money a telecommunications provider collected or remitted to the county.

Section 1.3 further authorizes the revenue collected from the surcharge to also be used for personnel and training associated with: (1) maintaining, updating and operating the equipment, hardware and software of portable event recording devices and vehicular event recording devices; and (2) the maintenance, retention and redaction of audio and video events recorded on portable event recording devices and vehicular event recording devices.

Section 1.3 establishes the order of priority that revenue collected from the surcharge may be expended.

Section 1.3 also requires a recipient to: (1) return money not used within 6 months for an approved purpose; (2) repay any money that is not used for an approved purpose; and (3) repay any amount to which the recipient was not entitled to receive.

EXPLANATION – Matter in *bolded italics* is new; matter between brackets ~~omitted material~~ is material to be omitted.



THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN
SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. Chapter 244A of NRS is hereby amended by adding thereto a new section to read as follows:

1. Except as otherwise provided in subsection 3, if a surcharge is imposed in a county pursuant to NRS 244A.7643, the board of county commissioners of that county may, as part of its review of the 5-year master plan adopted pursuant to NRS 244A.7643 for the enhancement of the telephone system for reporting emergencies in the county or for the purpose of purchasing and maintaining portable event recording devices and vehicular event recording devices, as applicable, engage a qualified independent auditor to perform an analysis or audit of the surcharges collected by telecommunications providers in the county.

2. An auditor that performs an analysis or audit pursuant to this section:

(a) Shall not charge a fee exceeding the actual costs of performing the analysis or audit.

(b) Shall submit a report of his or her findings to the advisory committee of the county established pursuant to NRS 244A.7645.

3. If an auditor performing an analysis or audit of the surcharges collected by telecommunications providers finds in the course of conducting the analysis or audit evidence of a violation of the provisions of NRS 244A.7643, with respect to the amount of money collected or remitted to the county treasurer by a telecommunications provider, the board of county commissioners may engage a qualified independent auditor to perform an additional analysis or audit of the surcharges collected by the telecommunications provider before the next review of the 5-year master plan is conducted.

Sec. 1.3. NRS 244A.7645 is hereby amended to read as follows:

244A.7645 1. If a surcharge is imposed pursuant to NRS 244A.7643 in a county whose population is 100,000 or more, the board of county commissioners of that county shall establish by ordinance an advisory committee to develop a plan to enhance the telephone system for reporting an emergency in that county and to oversee any money allocated for that purpose. The advisory committee must:

(a) Consist of not less than five members who:

(1) Are residents of the county;



(2) Possess knowledge concerning telephone systems for reporting emergencies; and

(3) Are not elected public officers.

(b) Subject to the provisions of subparagraph (3) of paragraph (a), include the chief law enforcement officer or his or her designee from each office of the county sheriff, metropolitan police department, police department of an incorporated city within the county and department, division or municipal court of a city or town that employs marshals within the county, as applicable.

2. If a surcharge is imposed pursuant to NRS 244A.7643 in a county whose population is less than 100,000, the board of county commissioners of that county shall establish by ordinance an advisory committee to develop a plan to enhance or improve the telephone system for reporting an emergency in that county and to oversee any money allocated for that purpose. The advisory committee must:

(a) Consist of not less than five members who:

(1) Are residents of the county;

(2) Possess knowledge concerning telephone systems for reporting emergencies; and

(3) Are not elected public officers.

(b) Include a representative of an incumbent local exchange carrier which provides service to persons in that county. As used in this paragraph, "incumbent local exchange carrier" has the meaning ascribed to it in 47 U.S.C. § 251(h)(1), as that section existed on October 1, 1999, and includes a local exchange carrier that is treated as an incumbent local exchange carrier pursuant to that section.

(c) Subject to the provisions of subparagraph (3) of paragraph (a), include the chief law enforcement officer or his or her designee from each office of the county sheriff, metropolitan police department, police department of an incorporated city within the county and department, division or municipal court of a city or town that employs marshals within the county, as applicable.

3. If a surcharge is imposed in a county pursuant to NRS 244A.7643, the board of county commissioners of that county shall create a special revenue fund of the county for the deposit of the money collected pursuant to NRS 244A.7643. The money in the fund must be used only:

(a) *To pay the costs of adopting and reviewing the 5-year master plan for the enhancement of the telephone system for reporting emergencies in the county that is required pursuant to NRS 244A.7643.*



(b) With respect to the telephone system for reporting an emergency:

(1) In a county whose population is 45,000 or more, to enhance the telephone system for reporting an emergency, including only:

(I) Paying recurring and nonrecurring charges for telecommunication services necessary for the operation of the enhanced telephone system;

(II) Paying costs for personnel and training associated with the routine maintenance and updating of the database for the system;

(III) Purchasing, leasing or renting the equipment and software necessary to operate the enhanced telephone system, including, without limitation, equipment and software that identify the number or location from which a call is made; and

(IV) Paying costs associated with any maintenance, upgrade and replacement of equipment and software necessary for the operation of the enhanced telephone system.

(2) In a county whose population is less than 45,000, to improve the telephone system for reporting an emergency in the county.

~~[(b)]~~ **(c)** With respect to purchasing and maintaining portable event recording devices and vehicular event recording devices, ~~[paying]~~ :

(1) Paying costs associated with the acquisition, maintenance, storage of data, upgrade and replacement of equipment and software necessary for the operation of portable event recording devices and vehicular event recording devices or systems that consist of both portable event recording devices and vehicular event recording devices ~~[(1)]~~ ;

(2) Paying costs for personnel and training associated with maintaining, updating and operating the equipment, hardware and software necessary for portable event recording devices and vehicular event recording devices or systems that consist of both portable event recording devices and vehicular event recording devices; and

(3) Paying costs for personnel and training associated with the maintenance, retention and redaction of audio and video events recorded on portable event recording devices and vehicular event recording devices or systems that consist of both portable event recording devices and vehicular event recording devices.



(d) To pay any costs associated with performing an analysis or audit pursuant to section 1 of this act of the surcharges collected by telecommunications providers.

4. For the purposes described in subsection 3, money in the fund must be expended in the following order of priority:

(a) Paying the costs authorized pursuant to paragraph (a) of subsection 3 to adopt and review the 5-year master plan.

(b) If the county performs an analysis or audit described in section 1 of this act, paying the costs associated authorized pursuant to paragraph (d) of subsection 3.

(c) Paying the costs authorized pursuant to paragraph (b) of subsection 3.

(d) If the county has imposed a portion of the surcharge for purposes of purchasing and maintaining portable event recording devices and vehicular event recording devices:

(1) Paying the costs authorized pursuant to paragraph (c) of subsection 3 other than costs related to personnel and training.

(2) Paying the costs authorized pursuant to paragraph (c) of subsection 3 related to personnel.

(3) Paying the costs authorized pursuant to paragraph (c) of subsection 3 related to training.

5. If money in the fund is distributed to a recipient and:

(a) The recipient has not used the money for any purpose authorized pursuant to subsection 3 within 6 months, the recipient must:

(1) Notify the board of county commissioners and the advisory committee; and

(2) Return the unused money.

(b) The recipient used any portion of the money for a purpose that is not authorized pursuant to subsection 3, the recipient must:

(1) Notify the board of county commissioners and the advisory committee; and

(2) Repay the portion of the money that was used for a purpose not authorized pursuant to subsection 3.

(c) The recipient was not entitled to receive all or a portion of the money, the recipient must:

(1) Notify the board of county commissioners and the advisory committee; and

(2) Repay all money to which the recipient was not entitled to receive.

6. If the balance in the fund created in a county whose population is 100,000 or more pursuant to subsection 3 which has not been committed for expenditure exceeds \$5,000,000 at the end



of any fiscal year, the board of county commissioners shall reduce the amount of the surcharge imposed during the next fiscal year by the amount necessary to ensure that the unencumbered balance in the fund at the end of the next fiscal year does not exceed \$5,000,000.

~~§ 7.~~ 7. If the balance in the fund created in a county whose population is 45,000 or more but less than 100,000 pursuant to subsection 3 which has not been committed for expenditure exceeds \$1,000,000 at the end of any fiscal year, the board of county commissioners shall reduce the amount of the surcharge imposed during the next fiscal year by the amount necessary to ensure that the unencumbered balance in the fund at the end of the next fiscal year does not exceed \$1,000,000.

~~§ 8.~~ 8. If the balance in the fund created in a county whose population is less than 45,000 pursuant to subsection 3 which has not been committed for expenditure exceeds \$500,000 at the end of any fiscal year, the board of county commissioners shall reduce the amount of the surcharge imposed during the next fiscal year by the amount necessary to ensure that the unencumbered balance in the fund at the end of the next fiscal year does not exceed \$500,000.

Sec. 1.7. 1. Notwithstanding the provisions of section 1 of this act, the board of county commissioners of a county where a surcharge is imposed pursuant to NRS 244A.7643 may, between July 1, 2019, and July 1, 2020, engage an independent auditor to perform an analysis or audit of the surcharges collected by telecommunications providers.

2. An auditor that performs an analysis or audit pursuant to this section:

(a) Shall not charge a fee exceeding the actual costs of performing the analysis or audit.

(b) Shall submit a report of his or her findings to the advisory committee of the county established pursuant to NRS 244A.7645.

3. If a board of county commissioners has an analysis or audit performed pursuant to this section, the board may use money in the special revenue fund created pursuant to NRS 244A.7645, as amended by section 1.3 of this act, to pay the costs of performing the analysis or audit.

Sec. 2. This act becomes effective on July 1, 2019.



4.3 Attachment C – FCC Final Rules on Acceptable Expenditures of 9-1-1 Surcharge Revenues



APPENDIX A

Final Rules

For the reasons described in the preamble, the Federal Communications Commission amends 47 CFR part 9 as follows:

PART 9 – 911 Requirements

1. The authority citation for part 9 is revised to read as follows: Authority: 47 U.S.C. 151–154, 152(a), 155(c), 157, 160, 201, 202, 208, 210, 214, 218, 219, 222, 225, 251(e), 255, 301, 302, 303, 307, 308, 309, 310, 316, 319, 332, 403, 405, 605, 610, 615, 615 note, 615a, 615b, 615c, 615a-1, 616, 620, 621, 623, 623 note, 721, and 1471, and Section 902 of Title IX, Division FF, Pub. L. 116–260, 134 Stat. 1182, unless otherwise noted.

2. Add subpart I, consisting of §§ 9.21 through 9.26, to read as follows:

Subpart I – 911 Fees

Sec.

9.21 Applicability.

9.22 Definitions.

9.23 Designation of acceptable obligations or expenditures for purposes of section 902 of Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, Division FF, Title IX, section 902(c)(1)(C).

9.24 Petition regarding additional purposes and functions.

9.25 Participation in annual fee report data collection.

9.26 Advisory committee participation.

§ 9.21 Applicability.

The rules in this subpart apply to States or taxing jurisdictions that collect 911 fees or charges (as defined in this subpart) from commercial mobile services, IP-enabled voice services, and other emergency communications services.

§ 9.22 Definitions.

For purposes of this subpart, the terms in this section have the following meanings set forth below. Furthermore, where the Commission uses the term “acceptable” in this subpart, it is for purposes of Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, Division FF, Title IX, section 902(c)(1)(C).

911 fee or charge. A fee or charge applicable to commercial mobile services, IP-enabled voice services, or other emergency communications services specifically designated by a State or taxing jurisdiction for the support or implementation of 911 services. A 911 fee or charge shall also include a fee or charge designated for the support of public safety, emergency services, or similar purposes if the purposes or allowable uses of such fee or charge include the support or implementation of 911 services.

Diversion. The obligation or expenditure of a 911 fee or charge for a purpose or function other than the purposes and functions designated by the Commission as acceptable pursuant to § 9.23. Diversion also includes distribution of 911 fees to a political subdivision that obligates or expends such fees for a purpose or function other than those designated as acceptable by the Commission pursuant to § 9.23.

Other emergency communications services. The provision of emergency information to a public safety answering point via wire or radio communications, and may include 911 and E911 service.

State. Any of the several States, the District of Columbia, or any territory or possession of the United States.

State or taxing jurisdiction. A State, political subdivision thereof, Indian Tribe, or village or regional corporation serving a region established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 *et seq.*).

§ 9.23 Designation of acceptable obligations or expenditures for purposes of section 902 of Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, Division FF, Title IX, section 902(c)(1)(C).

- (a) Acceptable purposes and functions for the obligation or expenditure of 911 fees or charges for purposes of section 902 are limited to:
 - (1) Support and implementation of 911 services provided by or in the State or taxing jurisdiction imposing the fee or charge; and
 - (2) Operational expenses of public safety answering points within such State or taxing jurisdiction.
- (b) Examples of acceptable purposes and functions include, but are not limited to, the following, provided that the State or taxing jurisdiction can adequately document that it has obligated or spent the fees or charges in question for these purposes and functions:
 - (1) PSAP operating costs, including lease, purchase, maintenance, replacement, and upgrade of customer premises equipment (CPE) (hardware and software), computer aided dispatch (CAD) equipment (hardware and software), and the PSAP building/facility and including NG911, cybersecurity, pre-arrival instructions, and emergency notification systems (ENS). PSAP operating costs include technological innovation that supports 911;
 - (2) PSAP personnel costs, including telecommunicators' salaries and training;
 - (3) PSAP administration, including costs for administration of 911 services and travel expenses associated with the provision of 911 services;
 - (4) Integrating public safety/first responder dispatch and 911 systems, including lease, purchase, maintenance, and upgrade of CAD hardware and software to support integrated 911 and public safety dispatch operations; and
 - (5) Providing for the interoperability of 911 systems with one another and with public safety/first responder radio systems.
- (c) Examples of purposes and functions that are not acceptable for the obligation or expenditure of 911 fees or charges for purposes of section 902 include, but are not limited to, the following:
 - (1) Transfer of 911 fees into a State or other jurisdiction's general fund or other fund for non-911 purposes;
 - (2) Equipment or infrastructure for constructing or expanding non-public safety communications networks (e.g., commercial cellular networks); and
 - (3) Equipment or infrastructure for law enforcement, firefighters, and other public safety/first responder entities that does not directly support providing 911 services.

- (d) If a State or taxing jurisdiction collects fees or charges designated for “public safety,” “emergency services,” or similar purposes that include the support or implementation of 911 services, the obligation or expenditure of such fees or charges shall not constitute diversion provided that the State or taxing jurisdiction:
 - (1) Specifies the amount or percentage of such fees or charges that is dedicated to 911 services;
 - (2) Ensures that the 911 portion of such fees or charges is segregated and not commingled with any other funds; and
 - (3) Obligates or expends the 911 portion of such fees or charges for acceptable purposes and functions as defined under this section.

§ 9.24 Petition regarding additional purposes and functions.

- (a) A State or taxing jurisdiction may petition the Commission for a determination that an obligation or expenditure of 911 fees or charges for a purpose or function other than the purposes or functions designated as acceptable in § 9.23 should be treated as an acceptable purpose or function. Such a petition must meet the requirements applicable to a petition for declaratory ruling under § 1.2 of this chapter.
- (b) The Commission shall grant the petition if the State or taxing jurisdiction provides sufficient documentation to demonstrate that the purpose or function:
 - (1) Supports public safety answering point functions or operations; or
 - (2) Has a direct impact on the ability of a public safety answering point to:
 - (i) Receive or respond to 911 calls; or
 - (ii) Dispatch emergency responders.

§ 9.25 Participation in annual fee report data collection.

- (a) If a State or taxing jurisdiction receives a grant under section 158 of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 942) after December 27, 2020, such State or taxing jurisdiction shall provide the information requested by the Commission to prepare the report required under section 6(f)(2) of the Wireless Communications and Public Safety Act of 1999, as amended (47 U.S.C. 615a-1(f)(2)).
- (b) Each state or taxing jurisdiction subject to paragraph (a) of this section must file the information requested by the Commission and in the form specified by the Public Safety and Homeland Security Bureau.
- (c) Paragraph (b) of this section contains information collection and recordkeeping requirements. Compliance will not be required until after approval by the Office of Management and Budget. The Commission will publish a document in the *Federal Register* announcing that compliance date and revising this paragraph accordingly.

§ 9.26 Advisory committee participation.

Notwithstanding any other provision of law, any State or taxing jurisdiction identified by the Commission in the report required under section 6(f)(2) of the Wireless Communications and Public Safety Act of 1999, as amended (47 U.S.C. 615a-1(f)(2)), as engaging in diversion of 911 fees or charges shall be ineligible to participate or send a representative to serve on any advisory committee established by the Commission.

4.4 Attachment D – FCC Ending 9-1-1 Fee Diversion Now Report and Recommendations



ENDING 9-1-1 FEE DIVERSION NOW
STRIKE FORCE

REPORT AND RECOMMENDATIONS

SUBMITTED TO

THE UNITED STATES CONGRESS

Committee on Energy and Commerce of the House of Representatives
Committee on Commerce, Science, and Transportation of the Senate

Pursuant to the Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, Division FF, Title IX, Section 902, Don't Break Up the T-Band Act of 2020

SEPTEMBER 23, 2021

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1 Introduction

This report documents the efforts undertaken by the “Ending 9-1-1 Fee Diversion Now Strike Force” (911 Strike Force) established by the Federal Communications Commission (FCC) pursuant to Congressional directive.¹ On December 27, 2020, the President signed the Don’t Break Up the T-Band Act of 2020, which is Section 902 of the Consolidated Appropriations Act, 2021, enacting it into law.²

- Section 902 includes new congressional mandates related to addressing 911 fee diversion, that is, the practice of some states and jurisdictions of using the 911 fees that consumers pay on their phone bills for non-911 purposes.
- Section 902 directs the FCC to issue final rules within 180 days, which were released on June 25, 2021, defining what uses of 911 fees by states and taxing jurisdictions constitute 911 fee diversion for purposes of the new legislation.
- Additionally, Section 902(d)(3) requires the FCC to establish the 911 Strike Force.

1.1 911 Strike Force Background and Purpose

“Congress has had a longstanding concern about the practice by some states and local jurisdictions of diverting 911 fees for non-911 purposes.”³ Congress initially directed the FCC to address 911 fee diversion in 47 U.S.C. § 615a-1, which required the FCC to provide an annual report to Congress.

The purpose of the 911 Strike Force is “to study how the Federal Government can most expeditiously end diversion by a State or taxing jurisdiction of 9-1-1 fees or charges.”⁴

- On June 3, 2021, the 911 Strike Force held its first meeting.
- In carrying out this study, the 911 Strike Force formed three working groups. The 911 Strike Force assigned the three working groups with the following tasks, including issues that the FCC referred to the 911 Strike Force:

¹ Unless otherwise indicated, the “911 Strike Force” refers to the 17 voting members appointed by the Acting Chairwoman (also referred to as the parent committee). See *FCC Announces the Membership and First Meeting of the Ending 9-1-1 Fee Diversion Now Strike Force*, Public Notice, 36 FCC Rcd 8547 (PSHSB 2021), <https://www.fcc.gov/document/fcc-announces-members-911-strike-force>. The 911 Strike Force parent committee established three working groups. The working groups are composed of parent committee members and nine (nonvoting) working group-only participants. See Appendices C and D. The “FCC” and “Commission” refer to the FCC’s Acting Chairwoman and Commissioners.

² Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, Division FF, Title IX, Section 902, Don’t Break Up the T-Band Act of 2020 (Section 902).

³ *911 Fee Diversion; New and Emerging Technologies 911 Improvement Act of 2008*, PS Docket Nos. 20-291 and 09-14, Notice of Proposed Rulemaking, 36 FCC Rcd 4513, 4514, para. 2 (2021) (*Notice*); see also, e.g., *Ensuring Needed Help Arrives Near Callers Employing 911 Act of 2004*, Pub. L. No. 108-494, 118 Stat. 3986 (ENHANCE 911 Act) (relevant grant provisions codified at 47 U.S.C. § 942). Congress provided another round of 911 grant funding, with similar non-diversion requirements, in the NG911 Act. *Middle Class Tax Relief and Job Creation Act of 2012*, Pub. L. No. 112-96, 126 Stat. 237, Title VI, Subtitle E, *Next Generation 9-1-1 Advancement Act of 2012* (NG911 Act) (relevant grant provisions codified at 47 U.S.C. § 942).

⁴ 47 U.S.C. § 615a-1 Statutory Notes (as amended); Section 902(d)(3)(A).

- Working Group 1 (WG 1) evaluated the effectiveness of any federal laws, including regulations, policies, and practices, or budgetary or jurisdictional constraints regarding how the federal government can most expeditiously end 911 fee diversion, the acceptable use of 911 fees for public safety radio systems, and the issue of whether, and how much, the FCC should focus on wireless providers, rather than 911 authorities, when finding fee diversion for subsidization of commercial wireless towers;
- Working Group 2 (WG 2) considered whether criminal penalties would further prevent 911 fee diversion; and
- Working Group 3 (WG 3) identified the impacts of 911 fee diversion and specifically the impact of underfunding 911 services in the state or taxing jurisdiction.

As required by Section 902, it is anticipated that not later than September 23, 2021 (270 days after Section 902 was signed into law), the 911 Strike Force shall publish on the website of the Commission and submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on the findings of the study mandated by Section 902, including:

- (i) any recommendations regarding how to most expeditiously end 911 fee diversion, including actions that can be taken by federal departments and agencies and appropriate changes to law or regulations; and
- (ii) a description of what progress, if any, relevant federal departments and agencies have made in implementing the recommendations under clause (i).

1.2 911 Strike Force Structure

Section 902 states that the 911 Strike Force shall be composed of representatives from eight membership categories. The 911 Strike Force shall be composed of such representatives of federal departments and agencies as the Commission considers appropriate, in addition to:

- (i) state attorneys general;
- (ii) states or taxing jurisdictions found not to be engaging in diversion of 911 fees or charges;
- (iii) states or taxing jurisdictions trying to stop the diversion of 911 fees or charges;
- (iv) state 911 administrators;
- (v) public safety organizations;
- (vi) groups representing the public and consumers; and
- (vii) groups representing public safety answering point professionals.

Table 1 – 911 Strike Force Structure

Kelli Merriweather (Chair of the 911 Strike Force) Steven C. Sharpe, EdD (Vice-Chair of the 911 Strike Force)		
Members:		
Cindy Barbera-Brelle	Richard Bradford	Daryl Branson
Terry Clark	Budge Currier	Laurie Flaherty
Shaun Golden	April Heinze	Karima Holmes
Thaddeus Johnson	Mel Maier	Nicole Pickrell
Mark Reddish	Lance Terry	Dana Wahlberg
FCC Liaisons:		
John Evanoff	Jill Coogan	Rachel Wehr
WG 1: Effectiveness of Federal Laws in Ending 911 Fee Diversion	WG 2: Criminal Penalties to Prevent 911 Fee Diversion	WG 3: Impacts of 911 Fee Diversion
Budge Currier (Chair) Daryl Branson (Vice-Chair) April Heinze Laurie Flaherty Captain Mel Maier Steven Sharpe Matt Tooley* James Goldstein* Leah Missildine* Cathy Jones-Gooding* Mark “Fletch” Fletcher*	Richard Bradford (Chair) Thaddeus Johnson (Vice-Chair) Sheriff Shaun Golden Lance Terry Cindy Barbera-Brelle Jeffrey Jelinski* Patricia Coates*	Karima Holmes (Chair) Dana Wahlberg (Vice-Chair) Chief Terry Clark Kelli Merriweather Deputy Chief Nicole Pickrell Mark Reddish Barbara Neal* Peter Beckwith*
* Working group-only participant		

1.3 Report Methodology

The 911 Strike Force established three working groups to evaluate the problem sets assigned by Congress and the FCC. Each working group performed its work independently to ensure no single person or group had undue influence over the final report. Working groups met periodically (e.g., weekly, or bi-weekly) to conduct research, discuss findings, and draft assigned portions of the report. A leadership team consisting of the Chair, Vice-Chair, and working group leaders met regularly to check progress and establish timelines. A mid-term public meeting was held August 2, 2021, where working groups reported their progress and draft findings to the 911 Strike Force's parent committee (i.e., the 17 voting members appointed to the 911 Strike Force). This provided an opportunity for the entire committee to ask questions and provide comments to working groups. Following the August 2, 2021 meeting, drafts of working group reports were sent to the entire 911 Strike Force membership for comment, with each working group retaining drafting responsibility of its assigned portion. The three reports were combined into a single draft report for the 911 Strike Force's parent committee to consider approving. This process precluded the complete harmonization of three different styles and approaches to the working groups' assigned tasks. Despite this challenge, the 911 Strike Force was able to develop consensus and this report offers several recommendations for Congress, the FCC, federal agencies, states, and local 911 agencies to consider. The 911 Strike Force's parent committee adopted the final report, including the working group findings and recommendations, at a public meeting on September 17, 2021.

1.4 Report Executive Summary

All three working groups arrived at similar findings while working separately on their assigned topics. The 911 Strike Force independently and unanimously determined that 911 fee diversion negatively impacts the ability of the public to access emergency assistance via reliable 911 services and technology. Additionally, the following themes emerged across all three working groups and have been further summarized in the key findings below.

Key Findings:

1. 911 fee diversion negatively impacts public safety, 911 operations, first responders, and the fiscal sustainability of 911 service in the United States of America.
2. 911 fee receipts and expenditures should be distinguishable and auditable to ensure 911 fees are used for eligible activities directly related to the provision of 911 services.
3. 911 systems require significant capital and recurring operational investments to accomplish the mission. Greater access to funding (e.g., grants, appropriations, etc.) with prohibitions against 911 fee diversion is necessary to financially disincentivize diverters.
4. 911 fee diversion requires direct enforcement action by the FCC. A majority of 911 Strike Force members agree enforcement actions should follow an escalation path focused on resolving fee diversion. 911 Strike Force working groups presented recommendations including, but not limited to: fines, FCC licensing enforcement actions, and criminal referrals. While common ground currently exists, further study is recommended.

5. State and local 911 authorities or agencies should be held accountable as individual actors. States should not be punished for the activities of local governments nor local governments punished for the behavior of states.
6. The FCC requires additional authority to ensure local agencies are providing information to states for the compilation of their annual report to Congress. The FCC collection methodology may require adjustment to assist in this effort.
7. The FCC definition of fee diversion requires refinement to ensure that 911 fees directly support the entire 911 communications ecosystem between the 911 “entry point”⁵ and first responders.

While the findings above summarize the work of the three working groups, each working group’s recommendations should be reviewed and considered as a holistic approach to ending fee diversion. Therefore, recommendations from each working group should be specifically reviewed by Congress, the FCC, federal agencies, states, and local 911 agencies.

The FCC *911 Fee Diversion Report and Order* was adopted as the 911 Strike Force was developing its recommendations. Therefore, the 911 Strike Force was unable to identify or evaluate progress made in implementing recommendations or regulatory changes.

⁵ The term “entry point” is defined in the Definitions section in Appendix A.

2 Working Group 1 Summary

Working Group 1 (WG 1) began by reviewing federal laws related to 911 fee diversion and the policies and grant requirements established to deter 911 fee diversion. WG 1 then looked at state statutes for those states that have been identified as 911 fee diverters based on the information in the agency's Twelfth Annual Fee Report to Congress.⁶ The Twelfth Report 911 fee diverters included Nevada, New Jersey, New York, Rhode Island, and West Virginia. Additionally, state statutes from several states were reviewed that were identified because of their clear definition of the authorized use of 911 fees that included California, Iowa, Michigan, Montana, and Tennessee. The final FCC *911 Fee Diversion Report and Order* was also reviewed to ensure that the tasks assigned by the FCC were completed by the working group.⁷ WG 1 highly recommends reading through the FCC *911 Fee Diversion Report and Order* prior to reading this report. WG 1 identified the following key issues as a result of its research and deliberations:

Key Issues:

- Current laws, regulations, policies, and practices at the federal level have not stopped 911 fee diversion.
- While the final FCC *911 Fee Diversion Report and Order* included a definition of authorized uses for 911 fees, WG 1 is recommending additional clarity to ensure states understand what is eligible for 911 funding.
- Several states have good examples of how to ensure 911 fees are used exclusively for 911 purposes.
- States and local jurisdictions can apply a stricter definition of what is eligible for 911 funding; states may have eligibility criteria that differ from local jurisdictions and vice versa.
- Despite negative press, ineligibility to apply for 911 grants, and significant pressure from the federal government, some states and local agencies are still diverting 911 fees.
- Every effort should be made to ensure that the actions of a state do not prevent a local agency from accessing 911 fees and that actions from a local agency do not prevent a state from accessing 911 fees.
- Some states not previously identified as diverting 911 fees may be considered 911 fee diverters under the FCC's new rules without any change to their existing use of 911 fees.
- Using grant eligibility as a means to stop 911 fee diversion is only effective if the grant funding impacted is greater than the fee diverted.

2.1 Effectiveness of Federal Laws in Ending 911 Fee Diversion

After reviewing the existing federal laws, regulations, policies, budgetary or jurisdictional constraints, and practices, WG 1 determined that existing federal efforts are not effective in deterring 100% of 911 fee diversion. This is evidenced by the fact that 911 fee diversion continues.

⁶ FCC, Twelfth Annual Report to Congress on State Collection and Distribution of 911 and Enhanced 911 Fees and Charges (2020) (Twelfth Report), <https://www.fcc.gov/files/12thannual911feereport2020pdf>.

⁷ *911 Fee Diversion; New and Emerging Technologies 911 Improvement Act of 2008*, PS Docket Nos. 20-291 and 09-14, Report and Order, FCC 21-80 (June 25, 2021) (*911 Fee Diversion Report and Order*).

Congress attempted to deter fee diversion by making diverters ineligible for grant funding. One barrier to the effectiveness of these efforts might be the amount of appropriation available through 911 grant programs. If the state or local jurisdiction stands to lose more funding than it gains by diverting, it is more likely to stop diverting. Thus far, the two rounds of 911 grants (\$43M and \$115M) were not large enough appropriations to provide an effective deterrent.

WG 1 researched possible solutions that could be put into place that were not overly restrictive, could be easily implemented, and are likely to be effective.

The restrictions on grant eligibility for any federal grant funding source should align with the allowable use of 911 fees. This includes all grant programs listed on the 911.gov website.⁸ Furthermore, extend eligible 911 grant funding sources to all emergency communications grants. Historically, PSAPs and ECCs have not been eligible for emergency communications grants.⁹ Based on the expanded list of allowable 911 fee activities, any grant that was previously restricted to land mobile radio systems and emergency communications systems should include PSAPs and ECCs as eligible grantees.

The FCC should leverage its authority over public safety licensing activities to deter 911 fee diversion. Because land mobile radio purchases are an allowable use of 911 fees (see Section 2.2.1), there is a direct relationship between public safety FCC licenses and 911 funding. The initial recommendation is to modify the license application for all public safety spectrum¹⁰ licenses through the Universal Licensing System¹¹ to include the following question: “Is the applicant diverting 911 fees as currently defined in 47 CFR Part 9 (Yes/No)?” This question will provide a tracking mechanism that can be used by the FCC, states, and local authorities to identify 911 fee diversion. The next step could include restrictions on all public safety licensing activities. The potential impact on public safety requires a progressive approach to FCC licensing enforcement actions that allows time for remediation before FCC licenses are impacted.¹² Any state or local agency that is diverting 911 fees would not be eligible to file for new public safety spectrum FCC licenses, license modifications, and renewals during the period of 911 fee diversion or until it has provided an approved remediation plan. The public safety spectrum FCC license restrictions will provide another deterrent to 911 fee diversion that will extend beyond grant activities. The FCC license restrictions will also provide a means for local agencies to report 911 fee diversion. An approved remediation plan should include the following:

1. The specific steps that will be implemented to end 911 fee diversion.

⁸ See 911.gov, *Federal Funding Opportunities for 911*, https://www.911.gov/federal_funding_opportunities_for_911.html (last visited Sept. 7, 2021).

⁹ The terms PSAP and ECC are defined in the Definitions section in Appendix A.

¹⁰ See FCC, *Public Safety Spectrum*, <https://www.fcc.gov/public-safety/public-safety-and-homeland-security/policy-and-licensing-division/public-safety-spectrum> (last visited Sept. 7, 2021).

¹¹ See FCC, *Universal Licensing System*, <https://www.fcc.gov/wireless/universal-licensing-system> (last visited Sept. 7, 2021).

¹² WG 1 received comments that public safety officials would be denied the ability to renew FCC licenses based on the actions of elected officials deciding to divert 911 fees. The progressive approach and the remediation plan address this concern by allowing time to stop the 911 fee diversion before FCC licenses are impacted.

2. The timeline for when the fee diversion will end.
3. The process that will be followed to ensure all diverted 911 fees have been repaid.

2.2 911 Fees Discussion

Prior to the final FCC *911 Fee Diversion Report and Order*, it was difficult to determine expenditures that were an acceptable use of 911 fees. Below is a summary of the allowable expenditures¹³ for 911 fees, provided the state or taxing jurisdiction can document the expenditure:

1. PSAP operating costs, including lease, purchase, maintenance, replacement, and upgrade of customer premises equipment (CPE) (hardware and software), computer aided dispatch (CAD) equipment (hardware and software), and the PSAP building/facility;
2. PSAP personnel costs, including telecommunicators' salaries and training;
3. PSAP administration, including costs for administration of 911 services and travel expenses associated with the provision of 911 services;
4. Integrating public safety/first responder dispatch and 911 systems, including lease, purchase, maintenance, and upgrade of CAD hardware and software to support integrated 911 and public safety dispatch operations; and
5. Providing for the interoperability of 911 systems with one another and with public safety/first responder radio systems.

2.2.1 Allowable Uses for 911 Fees

The FCC *911 Fee Diversion Report and Order* directed the 911 Strike Force to provide recommendations on developing specific examples of the allowable use of 911 fees that can be used to support public safety radio systems. After feedback from the members of WG 1, the following recommendation was developed:

The allowable use of 911 fees should include the ability for local agencies and states to fund any communication system, technology or support activity¹⁴ that directly provides the ability to deliver 911 voice and data information between the “entry point”¹⁵ to the 911 system and the first responder.

This definition was adopted to ensure that all current and future technologies and communication systems that directly support the 911 system are included in the eligible use of 911 fees. The definition is broad enough to provide state and local agencies the ability to support the communications systems, technology, and support activities that are used every day to save lives. Some examples of allowable expenditures include, but may not be limited to:

¹³ See *911 Fee Diversion Report and Order* at 40-42, Appx. A.

¹⁴ The support activities are defined in the *911 Fee Diversion Report and Order*.

¹⁵ The “entry point” to the 911 system is defined in 47 CFR § 9.4, “Obligation to transmit 911 calls”: “All telecommunications carriers shall transmit all 911 calls to a PSAP, to a designated statewide default answering point, or to an appropriate local emergency authority as set forth in § 9.5.”

- Legacy 911
- Next Generation 911 (NG911)
- 911 Geographic Information Systems
- Cybersecurity for 911 and PSAP operations
- Equipment and services used in the PSAP/ECC for Emergency Notification Systems
- Communication systems to include land mobile radio, and any communication systems that directly support the exchange of information between the PSAP/ECC and the first responder
- Call Processing Equipment (CPE), also known as Customer Premises Equipment or Call Handling Equipment (CHE)
- Computer Aided Dispatch (CAD)
- Protocol-based caller interrogation systems
- Legacy and Next Generation 911 system analytics
- Training of Public Safety Communications Officials as allowed in the *911 Fee Diversion Report and Order*
- Any other costs allowed in the *911 Fee Diversion Report and Order*

2.2.2 911 Fees Not Allowed—Wireless Providers

The FCC also directed the 911 Strike Force to consider whether, and how much, the FCC should focus on wireless providers, rather than 911 authorities, when finding fee diversion for subsidization of commercial wireless towers.¹⁶

WG 1 determined that the definition given in Section 2.2.1 provides the clarity needed to determine an eligible use of 911 fees. Some local and state agencies are building communication solutions that include commercial wireless technology such as LTE or Wi-Fi. These solutions would be an eligible use of 911 fees provided they are directly supporting the delivery of data and information between the 911 request for assistance and the first responder. The use of 911 fees by telecommunications providers to supply commercial telecommunications services or to subsidize commercial wireless towers would not be an acceptable expenditure of 911 fees under this definition. The definition provided by WG 1 clearly indicates that 911 fees are not eligible to be used to cover the expenditures before the “entry point”¹⁷ into the 911 system.

2.2.3 Examples of Unauthorized Uses of 911 Fees

The definition in Section 2.2.1 can also be clarified by adding examples of what would be an unauthorized use of 911 fees based on the recommendations of WG 1. Some examples of unauthorized uses of 911 fees include, but may not be limited to:

- Land mobile radio assets that support jail and prison operations because these systems are not directly supporting the delivery of data and information between the 911 request for assistance and the first responder.

¹⁶ *911 Fee Diversion Report and Order* at 23, para. 48 n.144.

¹⁷ As previously noted, the “entry point” to the 911 system is defined in 47 CFR § 9.4.

- Subscriber units for Department of Transportation, emergency managers, and other entities that are not directly supporting the delivery of data and information between the 911 request for assistance and the first responder.
- LTE subscription plans that do not directly support delivery of data and information between the 911 request for assistance and the first responder.

2.3 Implications of a Broader 911 Fee Structure

The FCC *911 Fee Diversion Report and Order* and the clarifications discussed in this report for the authorized use of 911 fees may be significantly different from the current practices, statutes, policies, and rules used by state and local authorities. Because of these differences, some state and local authorities that are diverting 911 fees, may no longer be fee diverters. Similarly, some state and local authorities that are not considered to be diverting 911 fees, may now be considered fee diverters.

WG 1 discussed the importance of being able to clearly identify 1) the allowable use of 911 fees, 2) the revenue collected for 911 fees, and 3) the validation that the revenue was used to support allowable activities. State and local authorities should ensure that statutes, policies, procedures, and rules clearly identify these three elements.

Because the recommendation will be viewed as an expansion for some state and local authorities, there will be the need to ensure that statutes, policies, procedures, and rules are updated to reflect the funding needs of the state and local authority. While the FCC definition of the allowable use of 911 fees may be viewed as an expansion of allowable funding, nothing prevents a state or local authority from further restricting state and local use of 911 fees. Expanding the scope of allowable activities beyond the definition stated in Section 2.2.1 would be considered diversion of 911 fees.

Additional Implications:

- States and local agencies can adopt guidelines for the eligible use of 911 fees that are more restrictive than the federal definition, but not less restrictive.
- For states and local agencies that have a stricter definition today, the addition of eligible costs without increasing 911 funding overall may reduce funding available for costs specific to the upgrade and operation of PSAPs/ECCs for many jurisdictions.
- The successful adoption of the definition is dependent upon equitable access to all funding sources for emergency communications, by both 911 agencies and first responder agencies. Currently, many of the funding sources for emergency communications (such as those listed in SAFECOM Guidance on Emergency Communications Grants) exclude 911 as an eligible use of funds. If funding programs are not expanded and additional funding is not secured, 911 agencies (that manage 911 fees in most jurisdictions) will likely be challenged to financially and administratively support additional equipment and service without additional funds to cover these costs.
- FirstNet is legally and contractually precluded from using any of its funds for 911-related costs. The lack of a similarly exclusive funding source for 911 poses a significant equity issue.

- Based on the proposed definition, LTE connections used to support CAD or deliver 911 data between the NG911 core services and the PSAP would be eligible expenses.
- Many state and local jurisdictions may seek increased 911 fees to cover the additional costs associated with the broadened definition.
- The NG911 Cost Study, delivered to Congress in 2018, did not include the items in the broader definition. The estimate of \$9-12 billion for the national upgrade of the nation's 911 system in the 2018 report will be inadequate to cover these additional costs.
- The broader definition may invite interpretation to include additional components of the communication system used by emergency responders in the field, beyond radio networks and equipment.

2.4 Working Group 1 Conclusions and Recommendations

Based on the research completed, WG 1 makes the following recommendations that may apply to different responsible parties (e.g., Congress, the FCC, states, and local agencies).

1. The recommendations are a holistic approach. If the recommendations are implemented individually, the unanimous consensus used to develop the recommendations would be violated.
2. The allowable use of 911 fees should include the ability for local agencies and states to fund any communication system, technology, or support activity that directly provides the ability to deliver 911 voice and data information between the “entry point” to the 911 system and the first responder. This definition includes, but may not be limited to, those items listed in Section 2.2.1. This definition recognizes that 911 telecommunicators are first responders in many states.¹⁸
3. Section 2.2.1 defines the eligible use of 911 fees. States and local agencies can adopt guidelines for the eligible use of 911 fees that are more restrictive than the federal definition, but not less restrictive.
4. Federal grant programs that include public safety communications as an eligible expense should also include 911 as an eligible expense and 911 agencies as eligible applicants.
5. Federal grant funding for 911 should be increased.
6. State agencies that divert 911 fees should not be eligible for federal grant funding that includes 911 as an eligible expense.
7. State agencies that divert 911 fees with an obligation to serve as the State Administrative Authority shall pass 100% of the remaining grant funding through to the local agencies after covering authorized administrative costs for the grant.
8. It should be determined whether a 911 fee diverting state can serve as the State Administrative Authority if the state is ineligible for grant funding.¹⁹

¹⁸ See NENA: The 9-1-1 Association, *Telecommunicator Reclassification Map*, https://www.nena.org/page/reclassification_map (last visited Sept. 7, 2021).

¹⁹ The 911 Strike Force has concerns regarding the legality of allowing a state to act as an administrative authority if the state itself is ineligible for grant funding. We recommend that Congress explore this issue.

9. Local agencies that divert 911 fees should not be eligible for federal grant funding that includes 911 as an eligible expense as a direct grantee or subgrantee.
10. State Administrative Authorities with local agencies that divert 911 fees should be eligible for grant funding but shall ensure no local 911 fee diverting agency receives grant funding.
11. The FCC should modify the license application for all public safety spectrum²⁰ licenses through the Universal Licensing System²¹ to include the following question: “Is the applicant diverting 911 fees as currently defined in 47 CFR Part 9 (Yes/No)?”
12. Any FCC license applicant that is diverting 911 fees shall not be eligible for public safety spectrum FCC license renewals, modifications, or new licenses until it has provided an approved remediation plan as determined by the FCC. The remediation plan process should follow a progressive approach to FCC licensing enforcement actions that allows time for remediation before FCC licenses are impacted.
13. The FCC may need to clarify the language in the *911 Fee Diversion Report and Order* to ensure that the state is not denied FCC applications based on the behavior of local agencies, or vice versa. The FCC may also need to determine a start date for this requirement. The FCC may also need to determine an applicable timeframe, i.e., within the last 12 months.
14. The FCC should direct carriers to include a separate line item for “911 fee” or “911 surcharge” to identify any funds that are collected for 911.
15. State and local 911 fee structures should clearly identify the allowable use of 911 fees that aligns with the final FCC *911 Fee Diversion Report and Order*. Any multi-purpose fee should clearly indicate the breakdown of the fee so that eligible 911 fees can be clearly identified.
16. Any state and local 911 funds should be deposited into designated accounts and should be audited to ensure they were used exclusively for eligible 911 expenditures.
17. State and local authorities should ensure that current statutes, policies, procedures, and rules are updated to reflect the final FCC *911 Fee Diversion Report and Order*.
18. The grant process should be reviewed at the state and local level to ensure equitable access to all potential 911 funding sources.
19. An authorization and appropriation should be adopted to revise the 2018 NG911 Cost Study to ensure adequate funding for the expanded definition.

²⁰ See FCC, *Public Safety Spectrum*, <https://www.fcc.gov/public-safety/public-safety-and-homeland-security/policy-and-licensing-division/public-safety-spectrum> (last visited Sept. 7, 2021).

²¹ See FCC, *Universal Licensing System*, <https://www.fcc.gov/wireless/universal-licensing-system> (last visited Sept. 7, 2021).

3 Working Group 2 Summary

Working Group 2 (WG 2) considered whether criminal penalties would further prevent 911 fee diversion.

WG 2 began by noting that the question presented seeks a yes or no response. WG 2 concluded that the imposition of some form of criminal penalty may assist in ending 911 fee diversion. WG 2 recognizes that some penalties, such as suspension or denial of licenses, may have negative impacts on entities, and citizens, who have no hand in diverting 911 fees. WG 2 also recognizes that identifying fee diversion as a criminal act, thereby identifying public officials, state legislators, or others as having criminal intent, may create additional challenges to end 911 fee diversion. WG 2 reviewed information in the agency's Twelfth Report, comparisons of diverting states' statutes and practices, the FCC Enforcement Bureau's Enforcement Overview,²² publicly available reports from fee diverters²³ referenced in the Twelfth Report, and the final FCC *911 Fee Diversion Report and Order*. WG 2 emphasizes the following key points in its conclusions and recommendations:

- The primary actors diverting fees are elected officials or bodies such as state legislatures.
- Most PSAPs are operated by local governments.
- We do not know whether changes in federal legislation and the final rules will end 911 fee diversion.
- The FCC has some, albeit undetermined, authority to enforce the final rules under current law.
- Issues such as intent of diverters, notice to diverters, and opportunity or time for changing practices or law of diverters may impact imposition of criminal penalties.
- Criminal penalties may assist in preventing 911 fee diversion, or provide a means to assist in ending 911 fee diversion if Congress's changes and the FCC's rules are not fully effective.

3.1 Discussion

WG 2 reviewed publicly available records relating to past fee diversions identified in the agency's annual 911 fee reports to Congress. Using the agency's reports and the survey results submitted by diverting jurisdictions, WG 2 conducted further review of documents referenced by those jurisdictions as well as publicly available documents relating to those jurisdictions. WG 2 found Rhode Island's report and other records convoluted and confusing. Surcharges varied by subject, application, and deposits.²⁴ Rhode Island legislation changed in 2019,²⁵ directing a \$.50

²² FCC Enforcement Bureau, Enforcement Overview (2020), https://www.fcc.gov/sites/default/files/public_enforcement_overview.pdf (Enforcement Overview).

²³ Twelfth Report at 49-50, para. 27 & n.85, Table 16; *see also* FCC, *Twelfth Annual Fee Report State Filings*, <https://www.fcc.gov/twelfth-annual-fee-report-state-filings-0> (last visited Sept. 7, 2021). All five of these states self-identified as non-diverters. *Id.*

²⁴ Twelfth Report Rhode Island Questionnaire at C1a; Twelfth Report New York Questionnaire at C1a, C2, C3. <https://www.fcc.gov/twelfth-annual-fee-report-state-filings-0>.

²⁵ Twelfth Report at 55, para. 38 (noting the effective date of October 1, 2019).

911 surcharge to a restricted account.²⁶ Funding appears limited to a single PSAP and a single backup PSAP.²⁷ The funding relationship between the single primary PSAP and multiple secondaries, or dispatch centers, operated by municipal governments is unclear.²⁸ The agency noted deficits in reports from Rhode Island and New Jersey, and specifically asked for more complete responses.²⁹ These reviews revealed a likelihood that the surveys are not collecting all relevant data regarding 911 fees or 911 services.³⁰ Acknowledging the FCC's instruction to the 911 Strike Force regarding annual surveys, WG 2 recommends that Congress consider any additional authority needed by the FCC to enforce full and accurate responses to the annual survey.

Diverting states' Twelfth Report surveys³¹ identified disparate approaches to funding 911 services which WG 2 considered. In 2019 New Jersey received approximately \$124M in 911 fees and deposited the funds in the 9-1-1 System and Emergency Response Trust Fund account.³² The Trust account funds programs within the Departments of Law and Public Safety, Military and Veterans' Affairs, and Treasury.³³ The state legislature diverts fees through appropriations. Approximately 11% of the funds pay for expenses with an apparent 911 nexus (staff, OIT, network, PSAP CPE for State Police). Rhode Island deposited 90% of the collected funds in the state's general fund and 10% into the State Information Technology Investment Fund.³⁴ The agency was unable to determine whether Rhode Island's expenditures were correctly allocated for 911 services.³⁵

WG 2 considered "multi-purpose" fee provisions enacted by some states.³⁶ States' legislation directs deposits and uses of such multi-purpose fees involving both state and local governments. New York's survey responses exemplify this aspect of fee diversion. The New York Division of

²⁶ Title 39 R.I. Gen. Laws Ann. § 39-21.1-14 (West) (effective Oct. 1, 2019). *See* Letter from J. David Smith, RI E-911 Uniform Emergency Telephone System, Rhode Island Department of Public Safety, to Lisa M. Fowlkes, Chief, Public Safety and Homeland Security Bureau, FCC at 5 (June 29, 2020) (Rhode Island Supplemental Letter Response).

²⁷ Twelfth Report Rhode Island Questionnaire at B1.

²⁸ Twelfth Report Rhode Island Questionnaire at C2, D1 (the state receives 911 fee receipts and approves expenditure of such funds). The RI-911 Center is a transfer agency that receives 911 calls but transfers all calls to other entities for dispatch. *See* Rhode Island Supplemental Letter Response at 1. Municipalities operate secondary PSAPs, or dispatch centers, at their expense. Title 39 R.I. Gen. Laws Ann. § 39-21.1-1.5 (d), (f).

²⁹ Twelfth Report at 50, 54-55, para. 28 n.93, para. 37 nn.115 & 121, para. 38 n.124 (e.g., requesting that Rhode Island report all information requested and relevant to the annual survey).

³⁰ New Jersey, for example, failed to identify the number of PSAPs or telecommunicators in the state's Twelfth Report Questionnaire and explained that E911 is funded at a cost of \$14M but operational, equipment, and personnel costs are the responsibility of the PSAP and not reported to the State 911 Office. Twelfth Report New Jersey Questionnaire at B1, B2, B3a.

³¹ The Twelfth Report covers calendar year 2019 fee activities.

³² Twelfth Report at 50, para. 28. The agency found that New Jersey used 911 funds for non-public safety or unspecified uses. *Id.* at 3, para. 2.

³³ Twelfth Report at 50, para. 28. The agency found some uses may have a nexus to 911 but others do not. Perhaps more telling and relating to the safe harbor procedures, New Jersey did not provide any documentation supporting a nexus to 911. *Id.* *See* N.J. Stat. Ann. §§ 52:17C-18, 52:17C-19.

³⁴ Rhode Island Supplemental Letter Response at 5.

³⁵ Twelfth Report at 54, para. 37.

³⁶ *911 Fee Diversion Report and Order* at 9-11, paras. 18, 20.

Homeland Security and Emergency Services' Office of Interoperable and Emergency Communications (OIEC) filed the 2019 annual report.³⁷ New York laws³⁸ direct quarterly remittance of surcharges collected by providers to the state tax commissioner. The Comptroller is directed to deposit 41.7% of the available funds into the state's general fund.³⁹ Although some 911 fees are established by local governments,⁴⁰ such are remitted to the tax commissioner and disbursed at the direction of the local government.⁴¹ Responsibility for administration of the collected funds is not vested in a state 911 authority. Based on comments in the OIEC survey responses and comments filed in PS Docket No. 20-291 (911 Fee Diversion), OIEC did not report all of the fee receipts within the scope of FCC PS Docket Nos. 20-291 and 09-14.⁴² Hence there is a substantial question of whether OIEC is the proper, or only, entity that should file a report representing New York. The same lack of information and transparency is demonstrated in New Jersey's report.⁴³ WG 2 recommends that the agency modify the annual survey to ensure that all states respond to the survey detailing all 911 fees and expenditures.

Ancillary to the question presented, WG 2 identified differences among jurisdictions relating to how 911 fees are treated under accounting practices, budgets, and audits by state and local governments, and WG 2 notes that state-level enforcement actions may be consistent with the FCC's efforts to end 911 fee diversion. WG 2 members' collective experience is that all states have some form of auditing oversight for expenditures for local government and state agencies, despite some states' contrary reports.⁴⁴ Agency audits typically include corrective actions or recommendations. Other state-level actions may include whistleblower actions and fraud investigations.⁴⁵ Some such actions, such as state or administrative audits, mirror the FCC's intent to promote transparency, accountability, and integrity in the collection and expenditure of fees collected for 911 services.⁴⁶ WG 2 believes auditing and oversight may help to end 911 fee diversion, and that citizens may have standing under some state laws to challenge fee diversion when states act inconsistently with federal legislation and the final rules.

³⁷ See Twelfth Report New York Questionnaire at A2, C1a, C2, C3, F1, F2 (showing that no wireless funds were collected by OIEC).

³⁸ N.Y. Tax Law § 186-f (McKinney) ("Public Safety Communications Surcharge"); N.Y. Tax Law § 186-g (McKinney) ("Wireless Communications Surcharge").

³⁹ N.Y. Tax Law § 186-f 5(a) (McKinney).

⁴⁰ N.Y. County Law Article 6-A §§ 320-336 ("Local Enhanced Wireless 911 Program").

⁴¹ N.Y. Tax Law § 186-g (McKinney).

⁴² Twelfth Report New York Questionnaire; New York State Division of Homeland Security and Emergency Services (OIEC) Comments, PS Docket Nos. 20-291 and 09-14 (rec. Mar. 23, 2021), <https://ecfsapi.fcc.gov/file/10324198555825/NYS%20DHSES%20Comments%20on%20911%20Fee%20Diversion%20Notice%20of%20Proposed%20Rulemaking.pdf>.

⁴³ Twelfth Report New Jersey Questionnaire.

⁴⁴ Twelfth Report at 60-63, para. 43, Table 18.

⁴⁵ New Jersey reported that there are no oversight or auditing procedures for the 911 funds. See Twelfth Report New Jersey Questionnaire at H1.

⁴⁶ *911 Fee Diversion Report and Order* at 6, para. 12. "9-1-1 services" is defined in 47 U.S.C. § 942(e)(1) as including both E911 and NG911 services, and "E9-1-1 services" is defined in 47 U.S.C. § 942(e)(2) as meaning "both phase I and phase II enhanced 9-1-1 services, as described in section 20.18 of the Commission's regulations (47 C.F.R. 20.18), as in effect on [the date of enactment of the Next Generation 9-1-1 Advancement Act of 2012 (NG911 Act), enacted Feb. 22, 2012], or as subsequently revised by the Commission."

In considering the issue presented, WG 2 first considered the primary actors using the historical information above. The actors are primarily elected officials or bodies such as state legislatures. Other officials or bodies acting in county or municipal governments may share responsibilities for fee diversion.⁴⁷ State legislatures and governors may rely upon their state constitutions for authority to budget or direct funds in extraordinary situations or otherwise. We generally recognize that these individuals or bodies may believe their past actions have been conducted under color of state law. WG 2 is also aware that some state legislatures have established a non-reverting fund for 911 fee receipts and that such funds are not appropriated by the legislature.⁴⁸ This approach appears successful in avoiding fee diversion and WG 2 therefore recommends that states adopt similar measures.

WG 2 assumed states implemented 911 fees pursuant to their interpretation of federal law. Recent federal legislation removes the deference previously afforded states and taxing jurisdictions. WG 2 members relied upon extensive experience in the 911 community, state, and local government. Despite evidence of past 911 fee diversion, and some evidence of change, WG 2 remains concerned that diverting states may not expediently act in conjunction with changes in federal law that may then lead to enforcement actions.

The vast majority of PSAPs are operated by local governments. WG 2 members' general knowledge and experience determined that PSAPs may have FCC licenses but that states typically have FCC licenses too. WG 2 did not have information to determine the actual or relative numbers of FCC licenses among PSAPs and states.

WG 2 considered whether a criminal penalty is necessary. We concluded that identifying fee diversion as a crime requires careful consideration of various impacts upon the primary actors and the FCC. WG 2 quickly determined that any criminal penalty should be limited to imposition of monetary fines or forfeitures.

3.2 Penalties Considered

We do not know whether the federal legislation will end fee diversion, nor whether the FCC's *911 Fee Diversion Report and Order*, and final rules, will i) end fee diversion and ii) establish a decisional framework that effectively ends fee diversion within a reasonable time. We agree with the FCC's observation that fee diversion undermines the purpose of federal 911 legislation.⁴⁹ WG 2 also considered whether the number of diverting jurisdictions merits implementation of criminal penalties as an effective means of modifying behavior.

⁴⁷ Twelfth Report at 21-25, paras. 14-16, Tables 6 & 7.

⁴⁸ As used here, "non-reverting" includes two concepts. First, that 911 fees collected but not expended may accumulate across a state's fiscal year, i.e., roll from one year to the next, without appropriation actions by the state's legislature. Second, that 911 fees are deposited into a fund limited to 911 receipts and expenditures which facilitates accounting, audits, and other reviews. Some states also use "reserve" funds or "restricted" funds in this context.

⁴⁹ *911 Fee Diversion Report and Order* at 8-9, para. 17; see also *id.* at 10-11, para. 20 (discussing the legislative history of the NET 911 Act).

WG 2 supports the potential positive impact that criminal penalties may bring to end fee diversion. We have considered the nature of such penalties and a general construct of escalating penalties. WG 2 concluded that a single-level penalty setting a relatively small dollar amount, or small percentage of 911 fees diverted, invites diverting jurisdictions to simply trade off between the penalty and total fees diverted. WG 2 also considered suspending FCC licenses awarded to diverting jurisdictions and concluded that the likelihood of negative impacts on citizens and first responders must be carefully considered before imposing such penalties. As noted above, fee diversion typically occurs by act of a state legislature or public official. Considering historical evidence, WG 2 concluded that suspending an FCC license held by a PSAP, or withholding a license from a PSAP, would not target the majority of fee diverters. However, delaying license awards or granting temporary licenses may achieve compliance to end fee diversion by associating a time for compliance with the delay or temporary license. We recommend imposing a series of escalating penalties together with actions impacting public safety spectrum licenses as presented below. WG 2 intends that any enforcement action involving FCC licensing must be specifically identified with a diverting jurisdiction.

WG 2 considered delaying license renewal applications. Within WG 2's experience, jurisdictions frequently seek renewals on the eve of expiration. Denial or delay of renewal applications may have merit as an enforcement mechanism. However, WG 2 does not recommend taking such action without further study of the potential impacts on citizens, PSAPs, and response agencies.

Two primary factors supported our recommendation to impose criminal penalties. First, few jurisdictions⁵⁰ were identified as diverters, but those diverting jurisdictions have repeatedly diverted 911 fees.⁵¹ Second, the agency's survey data identified states which combined 911 fees with other revenues, and indicated that 911 fee diversion may occur within county or municipal governments independent from state oversight.⁵² WG 2 had some concerns regarding the ability to prove that a jurisdiction, or actor, intended⁵³ to divert 911 fees. Although we believe the FCC's Enforcement Bureau would establish notice of any action pursuant to an investigation, we are unsure that state legislatures are aware of the changes in federal law, the final rules, and the impacts of those changes.⁵⁴ The multi-purpose fee safe harbor⁵⁵ and use of illustrative acceptable costs⁵⁶ may have impacts on determinations of intent and notice.

WG 2 concluded that 911 fees are "state funds" under laws of states' jurisdictions, and as generally understood among the states. Understanding that 911 fees are state funds, and that prior federal law included some deference to states' determination of acceptable 911 expenditures, WG 2 believes states may require a period of time to implement legislative or other

⁵⁰ Twelfth Report at 3, para. 2.

⁵¹ Twelfth Report at 56-59, para. 41, Table 17.

⁵² Twelfth Report at 21-22, 41, 60, paras. 14, 23, 43.

⁵³ See generally Enforcement Overview.

⁵⁴ Fourteen states and one jurisdiction reported modifications to their 911/E911 funding legislation in 2019. Twelfth Report at 19-20, para. 13.

⁵⁵ See *911 Fee Diversion Report and Order* at 42-44, Appx. A (§ 9.23(d)).

⁵⁶ See *911 Fee Diversion Report and Order* at 42-44, Appx. A (§ 9.23(b)). The FCC noted that acceptable has the same meaning as Congress provided. *Id.* at 5, para. 9.

changes necessary to end 911 fee diversion. WG 2 anticipates that the safe harbor⁵⁷ provision will illuminate multi-purpose fees and establish the means, and a reasonable time, for compliance with the *911 Fee Diversion Report and Order*. WG 2 also anticipates use of the safe harbor provision to mitigate penalty enforcement.

WG 2 considered imposing a penalty effected by disallowing providers' disbursements to states that divert 911 fees. This notion was not found in comments filed in response to the *Notice*. WG 2 believes CMRS providers would have concerns regarding administration of such funds as collected but not disbursed and administrative costs associated with such funds. Additionally, this action would negatively impact CMRS cost reimbursements where such are authorized by state law. We are not aware of any existing authority to implement this notion. However, if this form of sanction can be interposed through additional authority granted to the FCC, such may have a positive impact on ending fee diversion.

Existing procedural rules will govern actions, petitions, etc., before the FCC.⁵⁸ WG 2 also notes that the Enforcement Overview provides clear explanations of how matters may be investigated and how actions during and following investigations are managed. WG 2 recommends ensuring that diverting jurisdictions have notice of potential actions and penalties prior to imposition of any fines or other penalties. It is certain from available records that some jurisdictions are aware of the agency's past findings that 911 fees were diverted.⁵⁹ WG 2 believes its concerns regarding notice to diverting jurisdictions will be satisfied by the FCC's Enforcement Bureau and the safe harbor provisions in the final rules.⁶⁰ WG 2 recommends ensuring that the FCC is granted sufficient authority to act upon enforcement measures to end 911 fee diversion. WG 2 also recommends that the agency modify the annual 911 fee questionnaire instructions to identify changes in the law, the final rules, and the potential for future enforcement action if diversion of 911 fees occurs.

⁵⁷ See, e.g., *911 Fee Diversion Report and Order* at 11, para. 21.

⁵⁸ 47 U.S.C. § 615a-1(e)(2) provides that the FCC "shall enforce this section as if this section was a part of the Communications Act of 1934 [47 U.S.C. 151 et seq.]" and that "[f]or purposes of this section, any violations of this section, or any regulations promulgated under this section, shall be considered to be a violation of the Communications Act of 1934 or a regulation promulgated under that Act, respectively."

⁵⁹ WG 2 notes that West Virginia's Legislative Auditor published a report dated August 20, 2020 identifying S.B. 579 (2020 W. Va. Acts 303 codified in §24-6-6b of the Code of West Virginia) as segregating a Wireless E-911 fee for distribution to support 911 in response to the FCC's conclusions. This indicates corrective action by the state in response to the FCC's identification of the state as a diverter. See Joint Committee on Government and Finance, West Virginia Office of the Legislative Auditor, Post Audit Division, Legislative Auditor's Letter Report (Aug. 20, 2020), http://www.wvlegislature.gov/legisdocs/reports/agency/PA/PA_2020_708.pdf. Rhode Island Governor Raimondo agreed that 911 surcharges should not be deposited into the general fund. See Government Technology, *Editorial: 911 in Rhode Island Needs Dedicated Funds* (Apr. 22, 2019; The Providence Journal), <https://www.govtech.com/em/safety/editorial-wake-up-and-protect-91.html> (last visited Sept. 6, 2021).

⁶⁰ See Enforcement Overview at 17-18 (explaining that clear evidence of intent in a forfeiture action is shown if the conduct continues after notice of violation).

3.3 Working Group 2 Conclusions and Recommendations

3.3.1 For Congress

WG 2 recommends that Congress consider any additional authority needed by the FCC to enforce full and accurate responses to the annual survey.

WG 2 recommends imposing an escalating series of actions against states or other jurisdictions to enforce ending 911 fee diversion. There is no expectation or recommendation that legislators, public officials, or any other natural persons, are to be prosecuted or incarcerated. As a first-level action, we recommend a fine, as a criminal penalty, against the jurisdiction diverting 911 fees. Escalation may include increasing fines representing specific amounts or a percentage of the fees diverted by the jurisdiction. If the initial fine fails to achieve compliance with applicable federal law and FCC rules, we recommend imposing additional penalties including a percentage of 911 fees diverted, e.g., ten percent or more. If the escalating fines fail to achieve compliance with applicable federal law and FCC rules, it is recommended that any new public safety spectrum license applications should be delayed for a period of time, e.g., 60-90-180 days, or granted only as temporary licenses with approval based on satisfying conditions to end fee diversion. If such penalties fail to achieve compliance, WG 2 recommends that Congress provide authority to the FCC to take direct action suspending or otherwise limiting licenses held by diverting jurisdictions. WG 2 intends that any enforcement action involving FCC licensing must be specifically identified with a diverting jurisdiction, e.g., a license held by a county PSAP should not be the subject of action if the state diverts 911 fees.

WG 2 recommends ensuring that the FCC is granted sufficient authority to act upon enforcement measures to end 911 fee diversion.

WG 2 recommends ensuring that diverting jurisdictions have notice of potential actions and penalties prior to imposition of any fines or other penalties. WG 2 also recommends modifying the annual 911 fee questionnaire instructions to identify an active effort to provide notice to jurisdictions identified as diverters of changes in the law, the final rules, and potential for future action if diversion of 911 fees occurs.

3.3.2 For the FCC

WG 2 suggests modifying the annual survey to ensure that all entities receiving 911 fees, and multi-purpose fees, respond to the survey detailing applicable fees and expenditures.

- Add the definition of 911 fee. B1.
- Add the definition of 911 services. B3.
- For C2, identify any oversight or audit authority for: a State, a Local Authority, and hybrid approach. (Should relate to responses in D2a.)
- Add C3 (or C2a) requesting details of any effort to collect information from Local Authorities if the box for Local Authority or hybrid approach is checked.
- Modify E1 to use “any” instead of “all,” and further modify the instruction as follows: “Provide a statement identifying with specificity any activities, programs, and organizations for whose benefit your state, or political subdivision thereof, has obligated or expended funds collected for 911/E911/Next Generation 911 purposes.” The

remaining part of E1 should be retained as a separate instruction: “How have the collected funds supported 911/E911/Next Generation 911 services?”

- Modify E2 to correspond to the final rules, i.e., add both acceptable and unacceptable expense categories.
- Modify G1 to conform with the legislative changes in § 615a-1: “In the annual period ending December 31, _____, were funds collected for 911 services in your state or jurisdiction made available or used solely for purposes identified in 47 U.S.C. § 615a-1?”
- Modify K1 to conform with the legislative changes in § 615a-1.

4 Working Group 3 Summary

Working Group 3 (WG 3) was tasked with determining the impacts of diversion by a state or taxing jurisdiction of 911 fees or charges and underfunding 911.⁶¹ In response, the group developed a comprehensive list of specific examples of impacts on 911 service and the ability of PSAPs to protect life and property. WG 3 then categorized the examples into related categories and subcategories. Additionally, WG 3 considered the subject of how to define underfunding of 911 services in the state or taxing jurisdiction. WG 3 reviewed the Twelfth Report which identified states and/or jurisdictions identified as diverting 911/E911 fees from 2009-2020, as well as the 2016 Task Force on Optimal PSAP Architecture Final Report with respect to the diversion of funding.⁶² WG 3 determined the following key points should be emphasized in the report.

Key Points:

- 911 fee diversion is a harmful practice that exacerbates significant challenges facing PSAPs.
- Defining 911 fee diversion and uncovering instances of diversion is difficult. However, the most important goal from a public safety perspective is ensuring that 911 has the funding it needs.
- The cost of providing 911 service nationwide far exceeds the revenue collected from 911 fees.⁶³
- Fee diversion and/or underfunding have a negative impact on every aspect of 911 programming because impacts of fee diversion directly affect every fundable resource in a PSAP, which inhibits the ability of emergency communications centers to perform optimally and to transition from legacy systems.
- Fee diversion and/or underfunding may result in resource cuts, whether staffing, technological, or programmatic, to meet 911 program priorities established by leadership, governance structures, and/or political climates. One of the foreseeable impacts that may be the result of fee diversion and/or underfunding is related to the transition from legacy to NG911 systems. NG911 requires acquiring NG911 services and equipment while simultaneously maintaining the legacy 911 system. Fee diversion and insufficient funding can unnecessarily extend dual system operations, degrade the efficiency of 911, and create duplicative costs for an indefinite period.
- We defined 911 underfunding as occurring when funding levels are below the levels required for optimal performance of 911 operations.

⁶¹ *911 Fee Diversion Report and Order* at 38-39, para. 82 (“We direct the Bureau to modify the annual fee report questionnaire to seek additional information on the underfunding of 911 systems, including both (1) information on the impact of fee diversion on 911 underfunding, and (2) information on 911 underfunding in general. We also refer this issue to the 911 Strike Force.”); *id.* at 39, para. 83 (referring the topic of defining underfunding 911 to the 911 Strike Force to study).

⁶² See FCC, *Task Force on Optimal Public Safety Answering Point Architecture (TFOPA)*, <https://www.fcc.gov/about-fcc/advisory-committees/general/task-force-optimal-public-safety-answering-point> (last visited Sept. 7, 2021).

⁶³ Twelfth Report at 3-4, 14, paras. 2, 12 (noting that for the states and territories that provided data, the total cost of providing 911 service exceeded \$5 billion while approximately \$3 billion was collected in 911 fees).

- Underfunding 911 can be a result of 911 fee diversion, and 911 can be underfunded even where no 911 fee diversion is taking place. Further, not all jurisdictions have established a 911 fee, and these jurisdictions therefore could not be labeled as “diverters” regardless of whether governance and funding mechanisms are in place to adequately support 911.
- Even if 911 fee diversion does not result in underfunding 911, diversion can have harmful impacts (such as violating the public’s trust). However, the impacts of diversion most related to public safety occur when diversion results in underfunding 911.
- 911 fee diversion and/or underfunding not only prevent 911 programs from implementing new and emerging technologies, but also harm critical services employed today.
- Adoption of progressive tools is key for our emergency communications centers to sustain the level of operational functionality that supports all stakeholders. 911 service is a critical component of the emergency communications ecosystem which requires hiring, training, and exercising highly qualified staff to meet the needs of the citizens who expect the system to work both seamlessly and flawlessly.
- The impact of fee diversion and/or underfunding of PSAPs will be evident to others in the emergency communications ecosystem, i.e., Law Enforcement, Fire, and EMS.

As a method of specifying within the broad subject of impacts, the team developed categories to group the types of impacts. This grouping method was used to help better highlight the broad brush of effects of fee diversion and/or underfunding 911. The categories are described in Section 4.1 Impacts of Fee Diversion and/or Underfunding 911.

4.1 Impacts of Fee Diversion and/or Underfunding 911

Evidence of the impacts of fee diversion and/or underfunding 911 is discernable in the following critical functional areas:

- Basic Operations
- Technology
- Interoperability
- Preparedness and Planning
- Public Trust and Accountability
- 911 Fee Oversight and Administration

4.1.1 Basic Operations

One of the most recognizable impacts of fee diversion and/or underfunding 911 we see today is the insufficient resources to support day-to-day operations. 911 fee diversion and/or underfunding prevent PSAPs from achieving and maintaining proper performance and operational services. Examples of this include:

- Insufficient funding for critical positions, resulting in inadequate staffing. PSAPs across the country are consistently operating at or below minimum staffing levels.
- Low staff retention rates due to lack of competitive compensation and benefits commensurate with the expected level of performance. Further, recruits should be offered compensation packages that account for the level of skill required to perform well, and the complexity and critical nature of the work.

- Forced overtime because of inadequate staffing, which contributes to telecommunicator burnout, decreased wellness, and low morale.
- Insufficient funds to provide critical training, resulting in errors and slower call processing and dispatch times.
- Inability to fund the purchase of industry specific, ergonomically correct workstations, chairs, and other equipment, which can contribute to degraded performance and increased workers' compensation claims.
- Equipment rooms lack proper attention (such as HVAC systems), which results in premature equipment failures.

4.1.2 Technology

911 is a complex system of critical infrastructure that is designed to process emergency communications. Lack of relevant and enhanced technology is catastrophic. 911 fee diversion and/or underfunding can result in:

- Inadequate funding to plan, implement, and transition to NG911 while also funding the legacy system until it can be decommissioned.
- Inadequate funding for integration of emerging technologies such as text-to-911 and wireless location accuracy applications, and implementation of telecommunicator resources such as integrated call handling protocol software.
- Inability to maintain or replace end-of-life equipment.
- Lack of integration with key systems and ability to optimize features. Specific examples include:
 - Inability to develop and maintain necessary geospatial data sets and integrate solutions that improve the delivery of the location information of the 911 caller. This is increasingly critical given more than eighty percent of calls to 911 are initiated from wireless handsets.⁶⁴
 - Inability to implement solutions that provide supplemental data such as personal health information about an individual, etc., delivered with a 911 call.
 - Inability to communicate using text and other multimedia, such as photos and videos, as expected by the public.
 - Inability to procure integrated public alert and warning system equipment or other public safety agency alerting programs to perform both external and internal timely notification to keep the public safe.
 - Inability to procure cybersecurity protections which have become of paramount importance in the transition to an IP environment.

4.1.3 Interoperability

A vital function of emergency communications is to transfer information between critical entities, such as 911 callers and field responders, in an expedited and coherent manner. The following are examples of the impact of 911 fee diversion and/or underfunding on these critical exchanges:

⁶⁴ See, e.g., NENA: The 9-1-1 Association, *9-1-1 Statistics*, <https://www.nena.org/page/911Statistics> (last visited Sept. 7, 2021).

- A lower level of quality and completeness in processing a 911 call, which sets the stage for the entire rest of the response; interoperability is a basic expectation for field responders and the public.
- Increased burden on public safety partners, i.e., Police, Fire, and EMS, due to their stymied ability to interface and maintain interoperability with PSAPs.
- The inability to communicate and/or transfer incident information with other jurisdictions or public service entities during emergencies (e.g., partners that aid in emergency response, such as public works, gas and electric providers, schools, and others).

4.1.4 Preparedness and Planning

911 fee diversion and/or underfunding prevent the ability for 911 programs to perform necessary strategic long-term planning for continuity of operations (COOP) which includes:

- Inability to follow best practices related to planning and mitigative efforts, preparedness, response, and recovery.
- Inadequate funding to procure and integrate backup equipment such as generators, uninterruptible power supply (UPS), and redundant systems and infrastructure.
- Inability to participate in mitigation activities such as training and exercises.
- Inadequate funding to ensure efficient response through procurement and integration of resources such as Mobile PSAP/PSAP in a box.
- Stymied recovery from catastrophic events.

4.1.5 Public Trust and Accountability

911's customers are every American and visitor to our country, in their time of need. The trust needed at the time of emergency starts before the 911 call and ends when our industry can prove accountability. Examples of when 911 fee diversion and/or underfunding can cause the fabric of trust to fade can be seen in:

- Fees collected for 911 purposes not being spent on 911.
- Lack of funding for public education, community outreach, and engagement to ensure that the callers know when, how, and what to expect when calling 911.
- Lack of funding to address the public's perception about PSAPs' inability to accept text messages, photos, and videos when commercially available social apps can.
- Lack of funding to educate the public about limitations of calling 911 from non-registered VoIP devices, non-initialized wireless devices, or devices which do not have service during commercial power outages.

4.1.6 Fee Oversight and Administration

When 911 fees are diverted, the 911 program's mission, values, and vision may be prevented from being adequately fulfilled. In addition, priorities, governance, and leadership structure support, such as human resources, technological, programmatic, and/or administrative resources that could monitor and audit the fee usage, may be cut due to diverted funds creating:

- Unclear guidance and authoritative support for states and territories to ensure that fee diversion is not occurring.
- Inconsistent interpretations of acceptable expenditures.

- Inability to properly audit 911 fee expenditures.

4.2 Defining “Underfunding” of 911

We defined 911 underfunding as occurring when funding levels are below the levels required for optimal performance of 911 operations.

However, underfunding of 911 can have different meanings depending on the context and can be both coupled or decoupled from 911 fee diversion. Additional time, research, and input from a broader and diverse set of stakeholders is needed to devise a more exhaustive definition and adequately address the topic of underfunding. Preliminarily, we found that 911 underfunding:

- Results in a lack of resources to fulfill statutorily or other defined responsibilities.
- Can be a result of 911 fee diversion.
- Can occur even when no 911 fee diversion is taking place.
- The consequences are exacerbated when fee diversion and underfunding occur simultaneously.

4.3 Working Group 3 Conclusions and Recommendations

911 was explicitly established to serve the public when they experience their worst day. 911 funding mechanisms must ensure dedicated, reliable, and sustainable resources are available to carry out that charge.

WG 3 concludes that 911 fee diversion and/or underfunding inhibit the ability of emergency communications centers to perform optimally, resulting in the inability to conduct the technological and operational “business” of 911. Specific impacts include, but are likely not limited to, the following:

- Reduced capacity to answer and dispatch 911 calls.
- Reduced capacity to hire, train, and retain qualified staff to process emergency calls and operate the specialized equipment necessary to support an effective public safety response.
- Increased potential for misrouted calls and/or slower call processing time—which results in slower responses and potentially leads to compromised call outcomes.
- Reduced ability for investment in new technology, including tools that deliver and enable immediate data sharing capability from the caller to the PSAP and to public safety responders.
- Erosion of public trust due to the public’s lack of confidence in the ability of a jurisdiction to provide emergency services when instances of substandard performance occur as a result of inadequate funding.

WG 3 makes the following recommendations:

- States should be provided with additional guidance on how to respond to the agency’s annual questionnaire seeking information about fee diversion and the underfunding of 911 services in general. This guidance should help ensure the collected information is comprehensive and consistent across jurisdictions.

- Jurisdictions across the nation should have mechanisms in place to review and act upon fee diversion and/or underfunding that impact 911 services, including access to federal funding to support a nationwide transition to NG911.
- Additional research is needed to understand the relationship between 911 fee diversion, 911 underfunding, and emergency response.
- Jurisdictions should have oversight mechanisms such as annual audits of 911 fee collection and expenditures to ensure funding mechanisms are optimized.

5 911 Strike Force Closing Comments

The 911 Strike Force members spent hundreds of volunteer hours developing recommendations to end 911 fee diversion and safeguard the long-term sustainability of 911 service in the United States of America. The recommendations developed by the three independent working groups and adopted by the 911 Strike Force parent committee should be considered as a holistic approach rather than a menu of options. As such, all parties (Congress, the FCC, federal agencies, states, and local 911 agencies) should take a measured and balanced approach to solving this critical issue.

Additionally, there are significant areas that require further study. FCC licensing enforcement actions, federal and state regulation updates regarding NG911,⁶⁵ and the chronic underfunding of 911 services represent specific areas where 911 Strike Force members strongly recommend more deliberation prior to deciding a path forward regarding these three issues.

The FCC *911 Fee Diversion Report and Order* was adopted as the 911 Strike Force was developing its recommendations. Therefore, the 911 Strike Force was unable to identify or evaluate progress made in implementing recommendations or regulatory changes.

The 911 Strike Force would like to thank Congress for seeking counsel regarding this complex issue. We also thank the FCC assigned staff and the 911 Strike Force members for their dedication to this process.

⁶⁵ The 911 Strike Force acknowledges that current Title 47 regulations may require further study to address issues relating to the recommendations presented.

6 APPENDIX A: DEFINITIONS

The definitions below reflect the recommendations of the 911 Strike Force unless otherwise indicated.

Term	Description
911 Entry Point	The “entry point” to the 911 system is defined in 47 CFR § 9.4, “Obligation to transmit 911 calls”: “All telecommunications carriers shall transmit all 911 calls to a PSAP, to a designated statewide default answering point, or to an appropriate local emergency authority as set forth in § 9.5.”
Allowable Uses of 911 Fees	<p>The allowable uses of 911 fees should include the ability for local agencies and states to fund any communication system, technology or support activity that directly provides the ability to deliver 911 voice and data information between the “entry point” to the 911 system and the first responder.</p> <p>For a list of eligible expenditures, refer to Working Group 1, Section 2.2.1.</p>
Public Safety Answering Point (PSAP) / Emergency Communications Center (ECC)	The National Emergency Number Association defines PSAP as: “An entity responsible for receiving 9-1-1 calls and processing those calls according to a specific operational policy.”
Underfunding 911	<p>Funding levels that are below the levels required for optimal performance of 911 operations.</p> <p>Refer to Working Group 3, Section 4.1 for discussion and examples of impacts.</p>

7 APPENDIX B: REFERENCES

The 911 Strike Force’s webpage is <https://www.fcc.gov/911strikeforce>

The 911 Strike Force’s email account is 911StrikeForce@fcc.gov

Section 902, Division FF, Title IX of the Consolidated Appropriations Act, 2021 (“Section 902”). <https://uscode.house.gov/statviewer.htm?volume=134&page=3206>

Section 902 Legislative History. <https://www.congress.gov/congressional-report/116th-congress/house-report/521>

911 Fee Diversion Report and Order. <https://www.fcc.gov/document/fcc-adopts-order-address-911-fee-diversion>

911 Fee Diversion Notice of Proposed Rulemaking. <https://www.fcc.gov/document/fcc-proposes-rules-address-911-fee-diversion-0>

911 Fee Diversion Notice of Inquiry. <https://www.fcc.gov/document/fcc-seeks-combat-911-fee-diversion>

911 Fee Diversion Public Notices in PS Docket Nos. 09-14 and 20-291:

- *Public Safety and Homeland Security Bureau Opens PS Docket No. 20-291* (2020). <https://www.fcc.gov/document/public-safety-and-homeland-security-bureau-opens-ps-docket-no-20-291>
- *Public Safety and Homeland Security Bureau Seeks Comment on Twelfth Annual Report to Congress on 911 Fee Diversion in Light of Ongoing Proceeding to Deter Such Practices* (2020). <https://www.fcc.gov/document/pshsb-seeks-comment-twelfth-annual-report-911-and-e911-fees>
- *Public Safety and Homeland Security Bureau Announces Comment and Reply Comment Dates for the Notice of Proposed Rulemaking on 911 Fee Diversion* (2021) <https://www.fcc.gov/document/pshsb-announces-comment-dates-911-fee-diversion-nprm>

FCC Annual Reports to Congress on State Collection and Distribution of 911 and Enhanced 911 Fees and Charges. <https://www.fcc.gov/general/911-fee-reports>

Annual State Filings in Response to FCC Fee Questionnaire. <https://www.fcc.gov/general/911-fee-reports>

FCC Electronic Documents System (EDOCS), PS Docket Nos. 09-14 and 20-291. <https://www.fcc.gov/edocs/search-results?t=quick&dockets=09-14> and <https://www.fcc.gov/edocs/search-results?t=quick&dockets=20-291>

FCC Electronic Comment Filing System (ECFS), PS Docket Nos. 09-14 and 20-291. https://www.fcc.gov/ecfs/search/filings?proceedings_name=09-14&sort=date_disseminated,DESC and

[https://www.fcc.gov/ecfs/search/filings?q=\(\(proceedings.name:\(\(20%5C-291*\)\)%20OR%20proceedings.description:\(\(20%5C-291*\)\)\)\)&sort=date_disseminated,DESC](https://www.fcc.gov/ecfs/search/filings?q=((proceedings.name:((20%5C-291*))%20OR%20proceedings.description:((20%5C-291*))))&sort=date_disseminated,DESC)

8 APPENDIX C: 911 STRIKE FORCE MEMBERSHIP

Chair:

- Kelli Merriweather, Executive Director of the Texas Commission on State Emergency Communications (CSEC), representing the National Association of State 911 Administrators (NASNA) as current President

Vice-Chair:

- Steven C. Sharpe, EdD, Genesee County (NY) Director of Emergency Communications, representing the New York State 911 Coordinators Association

Representatives of federal departments and agencies:

- Laurie Flaherty, Coordinator of the National 911 Program ([911.gov](https://www.911.gov)), National Highway Traffic Safety Administration's Office of Emergency Medical Services, U.S. Department of Transportation

State attorneys general:

- Richard Bradford, Special Deputy Attorney General, Office of the Attorney General, North Carolina Department of Justice

States or taxing jurisdictions found not to be engaging in diversion of 911 fees or charges:

- Terry Clark, Chief of Police of Prairie Band Potawatomi Tribal Police, Prairie Band Potawatomi Nation, Kansas
- Daryl Branson, State 911 Program Manager, Colorado Public Utilities Commission

States or taxing jurisdictions trying to stop the diversion of 911 fees or charges:

- Lance Terry, Oklahoma 911 Coordinator, Oklahoma 911 Management Authority
- Dana Wahlberg, Director of the Department of Public Safety Emergency Communications Networks, Minnesota Department of Public Safety
- Budge Currier, 911 Branch Manager for the California Office of Emergency Services

State 911 administrators:

- Cindy Barbera-Brelle, Statewide 911 Administrator, Illinois State Police
- Kelli Merriweather, Executive Director of the Texas Commission on State Emergency Communications (CSEC), representing the National Association of State 911 Administrators (NASNA) as current President

Public safety organizations:

- Nicole Pickrell, Deputy Chief for Communications and Support Services of Loudoun County (Virginia) Department of Fire and Rescue, representing the International Association of Fire Chiefs
- Mel Maier, Captain, Oakland County (MI) Sheriff's Office (OCSO), representing the Major County Sheriffs of America
- Shaun Golden, Sheriff, Monmouth County (NJ) Sheriff's Office

Groups representing the public and consumers:

- Thaddeus Johnson, Assistant People's Counsel at the Washington, DC Office of the People's Counsel (DC-OPC), representing the National Association of State Utility Consumer Advocates

Groups representing public safety answering point professionals

- April Heinze, 911 and PSAP Operations Director, the National Emergency Number Association
- Karima Holmes, Senior Director, ShotSpotter, Inc., representing 911der Women. Inc.
- Mark Reddish, Senior Counsel and Manager of Government Relations, Association of Public Safety Communications Officials-International
- Steven C. Sharpe, EdD, Genesee County (NY) Director of Emergency Communications, representing the New York State 911 Coordinators Association

FCC Staff

- John A. Evanoff, Designated Federal Officer, and Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau
- Jill Coogan, Deputy Designated Federal Officer, and Attorney-Advisor, Policy and Licensing Division, Public Safety and Homeland Security Bureau
- Rachel Wehr, Working Group Liaison, and Honors Attorney, Policy and Licensing Division, Public Safety and Homeland Security Bureau

9 APPENDIX D: 911 STRIKE FORCE WORKING GROUPS

** indicates a member of the 911 Strike Force (those without this designation are working group participants only)*

WORKING GROUP 1: EFFECTIVENESS OF FEDERAL LAWS IN ENDING 911 FEE DIVERSION

Chair: **Budge Currier,*** 911 Branch Manager, California Office of Emergency Services

Vice-Chair: **Daryl Branson,*** State 911 Program Manager, Colorado Public Utilities Commission

April Heinze,* 911 and Public Safety Answering Point Operations Director, National Emergency Number Association

Laurie Flaherty,* Coordinator, National 911 Program, National Highway Traffic Safety Administration's Office of Emergency Medical Services, U.S. Department of Transportation

Mel Maier,* Captain, Oakland County Sheriff's Office, Oakland County, Michigan, representing the Major County Sheriffs of America

Steven Sharpe,* EdD, Director of Emergency Communications, Genesee County, New York, representing the New York State 911 Coordinators Association

Matt Tooley, Technology Coordinator, Metro Communications Agency, Sioux Falls, South Dakota

James Goldstein, Director of Government Relations, National Public Safety Telecommunications Council

Leah Missildine, Executive Director, Alabama 911 Board

Cathy Jones-Gooding, Deputy State 911 Coordinator, Washington State Enhanced 911 Coordination Office

Mark Fletcher, Vice President of Public Safety Solutions, 911inform

WORKING GROUP 2: WHETHER CRIMINAL PENALTIES WOULD FURTHER PREVENT 911 FEE DIVERSION

Chair: **Richard Bradford,*** Special Deputy Attorney General, Office of the Attorney General, North Carolina Department of Justice

Vice-Chair: **Thaddeus Johnson,*** Assistant People's Counsel, Washington, DC Office of the People's Counsel, representing the National Association of State Utility Consumer Advocates

Shaun Golden,* Sheriff, Monmouth County Sheriff's Office, Monmouth County, New Jersey

Lance Terry,* Oklahoma 911 Coordinator, Oklahoma 911 Management Authority

Cindy Barbera-Brelle,* Statewide 911 Administrator, Illinois State Police

Jeffrey Jelinski, County Commissioner for Morrison County, Minnesota, representing the Association of Minnesota Counties

Patricia Coates, Administrator of the Court and Law Enforcement Management Information System/ 911 Coordinator, Oakland County, Michigan, representing the Michigan Communication Directors Association

WORKING GROUP 3: IMPACTS OF 911 FEE DIVERSION

Chair: **Karima Holmes**,* Senior Director, ShotSpotter, representing 911der Women, Inc.

Vice-Chair: **Dana Wahlberg**,* Director, Department of Public Safety Emergency Communications Networks, Minnesota Department of Public Safety

Terry Clark,* Chief of Police, Prairie Band Potawatomi Tribal Police, Prairie Band Potawatomi Nation, Kansas

Kelli Merriweather,* Executive Director, Texas Commission on State Emergency Communications, representing the National Association of State 911 Administrators as its President

Nicole Pickrell,* Deputy Chief for Communications and Support Services, Loudoun County Department of Fire and Rescue, Loudoun County, Virginia, representing the International Association of Fire Chiefs

Mark Reddish,* Senior Counsel and Manager of Government Relations, Association of Public-Safety Communications Officials-International

Barbara Neal, Executive Director, Vermont Enhanced 911 Board

Peter Beckwith, General Counsel, South Sound 911, Pierce County, Washington

Washoe County Regional 9-1-1 Master Plan Update Recommendations Report

5. Appendix A

List of known approved, contracted, and potential expenditures

Agency	Annual Expense?	Expense Name	FY22	FY23	FY24	FY25	FY26
Existing Approved Expenses and Contracts							
Regional	Yes	Intrado 911 Call Handling	\$ 1,345,000	\$ 1,345,000	\$ 1,345,000	\$ 1,345,000	\$ 1,345,000
Regional	Yes	Intrado geoMSAG addition FY22	\$ 30,554	\$ 22,916	\$ 22,916	\$ 22,916	\$ 22,916
Regional	Yes	Conference/Training Registration and Travel	\$ 60,000	\$ 65,000	\$ 70,000	\$ 75,000	\$ 80,000
Regional	No	CAD RFP Consultant	\$6,953				
Reno	yes	City of Reno GIS Salary Reimbursement	\$215,000	\$230,000	\$245,000	\$260,000	\$275,000
Reno	yes	City of Reno Bodycam	\$458,848	\$458,848	\$458,848	\$458,848	\$458,848
Reno	yes	City of Reno Fleet Cameras	\$227,136	\$227,136	\$227,136	\$227,136	\$227,136
Reno	Yes	City of Reno Dispatch Automatic Aid Calls	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Reno	yes	City of Reno Pro-QA Priority Dispatch - EFD Software	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200
Reno	yes	City of Reno Pro-QA Priority Dispatch - EMD Services	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Reno	no	City of Reno Fire Station Alerting System	\$1,099,712				
Reno	yes	Reno First Due Fire Response	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000
Reno	yes	City of Reno ProQA ESP	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200
Sparks	yes	City of Sparks Bodycam Fiber Internet	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000
Sparks	yes	City of Sparks GIS Salary Reimbursement	\$155,000	\$170,000	\$185,000	\$190,000	\$200,000
Sparks		City of Sparks Dispatch Data Lines	\$32,000	\$32,000	\$32,000	\$32,000	\$32,000
Sparks	yes	City of Sparks - new Axon and Fleet 5-year contract	\$304,000	\$304,000	\$304,000	\$304,000	\$304,000
Sparks		City of Sparks Dispatch Remote Workstation License					
Sparks	yes	City of Sparks Pro-QA Priority Dispatch - EFD	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
WC	no	911 Master Plan consultant	\$11,559				
WC	yes	CodeRed	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
WC	yes	Voiance	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
WC	yes	WC ProQA	\$34,560	\$34,560	\$34,560	\$34,560	\$34,560
WC	yes	WCSO Bodycam Fiber Internet	\$81,000	\$81,000	\$81,000	\$81,000	\$81,000
WC	yes	WCSO Fleet Cameras	\$96,480	\$96,480	\$96,480	\$96,480	\$96,480
WC	yes	WCSO Bodycams	\$644,258	\$629,195	\$629,195	\$629,195	\$629,195
WC	yes	Washoe County Dispatch Carbyne c-Live Universe	\$60,900	\$60,900	\$60,900	\$60,900	\$60,900
WC	Yes	WC GIS Salary	\$200,000	\$210,000	\$220,000	\$230,000	\$240,000
TMFPD	yes	TMFPD First Due Fire Response	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
TMFPD	no	TMFPD ProQA EFD	\$148,244	\$10,000	\$10,000	\$10,000	\$10,000
WCSD	yes	WCSD Bodycam	\$33,411	\$33,411	\$33,411	\$33,411	\$33,411
TOTAL			\$ 5,401,015	\$ 4,166,846	\$ 4,211,846	\$ 4,246,846	\$ 4,286,846
Unapproved Expense Estimates							
TMFPD	Yes	TMFPD Dispatch Phone + Data Lines	\$30,000	\$45,000	\$45,000	\$45,000	\$45,000
TMFPD	no	TMFPD Harris Dispatch Consoles	\$230,231				
TMFPD	No	TMFPD Fire Station Alerting	\$883,928				
Sparks	no	City of Sparks Fire Station Alerting	\$401,785				
Reno	no	City of Reno Harris Radio Dispatch Consoles for Public Safety Center				\$1,000,000	\$1,000,000
Regional	Yes	CAD	\$291,862	\$1,313,400	\$1,313,400	\$343,000	\$360,000
Regional	No	CAD Implementation and Project Management	\$25,000	\$100,000	\$100,000		
Regional	No	Regional ESI Net			\$650,000	\$250,000	\$250,000
Regional	No	NG911 Technology Assessment	\$170,000				
Regional	Yes	MDT replacement Annual - No Cell Data	\$58,200		\$98,000	\$245,000	\$481,000
Regional	Yes	MDT Cell Data	\$146,000	\$220,000	\$220,000	\$220,000	\$220,000
TOTAL			\$2,237,006	\$1,678,400	\$2,426,400	\$2,103,000	\$2,356,000

