2022 Annual Report

**Sweetwater Combined Communications
Joint Powers Board**

Updated 1-20-2023

CONTENTS

INTRODUCTION

This document covers projects that have been completed, are currently underway, coming this fiscal year, and planned for FY24. There are also some key statistics from 2022 and prior years, as well as the services we currently provide to our agencies and the public.

This report was written for members of the Rock Springs and Green River City Councils, the Sweetwater County Commission, and the Sweetwater Combined Communications Joint Powers Board. If you are interested in more information about dispatch operations in Sweetwater County, or would like a tour of our facilities, feel free to contact us using the information below.

CONTACTS

Email: Please use the contact form on our website: https://sweetwater911.org/contact

Rick Hawkins, Executive Director
David Halter, IT Director
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KEY STATISTICS

PHONES AND 911

The numbers below are from our 911 phone system, Motorola CallWorks. We went live with this system in October 2016; therefore, this table starts with the first full year of data from 2017. Also note, we upgraded the CallWorks phone system in 2022 with new hardware, but this should have minimal affect on statistics.

	2017	2018	2019	2020	2021	2022
911 Voice Calls	15,089	14,011	15,588	15,948	14,574	14,755
% Wireless	85.73%	86.98%	88.97%	86.07%	89.22%	91.59%
% Phase 1 Location	*15.09%*	*16.75%*	*18.94%*	*18.48%*	*23.15%*	*19.26%*
% Phase 2 Location	*71.36%*	*70.50%*	*70.30%*	*70.46%*	*67.09%*	*72.33%*
% RapidSOS Location	*-*	*-*	*47.9%*	*62.3%*	*67.4%*	*71.9%*
911 Text Calls	43	46	39	30	43	45
Inbound Admin Calls	70,437	61,534	60,423	57,234	54,344	41,559
Outbound Admin Calls	33,841	31,867	31,624	27,264	22,520	22,059
Calls Transferred to WHP (Not included in total)	N/A	N/A	5518	5109	4973	4700
Total Calls	*119,410*	*107,458*	*107,674*	*100,512*	*91,438*	*78,428*
Change from prior year		*-11,952*	*216*	*-7,162*	*-9,074*	*-13,010*
%		*-10.01%*	*0.20%*	*-6.65%*	*-9.03%*	*-14.23%*

CALLS FOR SERVICE

The numbers below are from our CAD system, Motorola Spillman Flex. We went live with this CAD system in August 2017; therefore, this table starts with the first full year of data from 2018. In addition, we went live with Priority Dispatch near the end of 2018. This may affect how data was entered into our CAD system in 2019. In 2021, our agency started tracking warrant entries using calls for service in our CAD software.

	2018	%	2019	%	2020	%	2021	%	2022	%
Rock Springs PD	39,457	42.60%	33,549	42.22%	30,375	40.03%	29,208	36.97%	27,517	34.49%
Sweetwater County Sheriff	23,108	24.95%	20,363	25.63%	19,363	25.52%	23,181	29.34%	24,003	30.09%
Green River PD	17,636	19.04%	15,723	19.79%	15,939	21.01%	15,197	19.23%	14,221	17.83%
Castle Rock Ambulance	1,861	2.01%	1,859	2.34%	2,131	2.81%	2,199	2.78%	5,039	6.32%
Sweetwater Medics	4,736	5.11%	3,557	4.48%	3,653	4.81%	3,994	5.05%	3,462	4.34%
Rock Springs FD	3,597	3.88%	2,388	3.01%	2,224	2.93%	2,654	3.36%	2,875	3.60%
Sweetwater Fire District #1	711	0.77%	495	0.62%	590	0.78%	702	0.89%	786	0.99%
Green River FD	935	1.01%	833	1.05%	877	1.16%	662	0.84%	667	0.84%
Sweetwater Combined Comm.	-	-	-	-	-	-	600	0.76%	642	0.80%
Farson Eden Fire/EMS	265	0.29%	360	0.45%	432	0.57%	342	0.43%	374	0.47%
Wamsutter Fire Department	57	0.06%	83	0.10%	59	0.08%	81	0.10%	135	0.17%
Sweetwater County FD	186	0.20%	186	0.23%	195	0.26%	155	0.20%	36	0.05%
Superior Fire Department	10	0.01%	16	0.02%	14	0.02%	26	0.03%	11	0.01%
Granger Fire Department	12	0.01%	23	0.03%	29	0.04%	10	0.01%	7	0.01%
Superior Police Department	51	0.06%	27	0.03%	0	0.00%	0	0.00%	0	0.00%
Total Calls for Service	*92,622*		*79,462*		*75,881*		*79,011*		*79,775*	
Change From prior year			-13,160		-3,581		3,130		764	
%			-14.21%		-4.5%		4.12%		0.96%	

RADIO USAGE

The radio usage numbers below are from the State-wide P25 radio system, WyoLink. These are just a handful for the channels we communicate on, and are not a complete picture of radio usage in our dispatch center. These numbers also only count digital channels, as we do not have a good way to measure analog radio usage (yet). The columns labeled "PTTs" are the push to talks, which are the number of times a user "keys up" the radio channel. The columns labeled "Minutes" are the actual amount of talk time users speak on their radios.
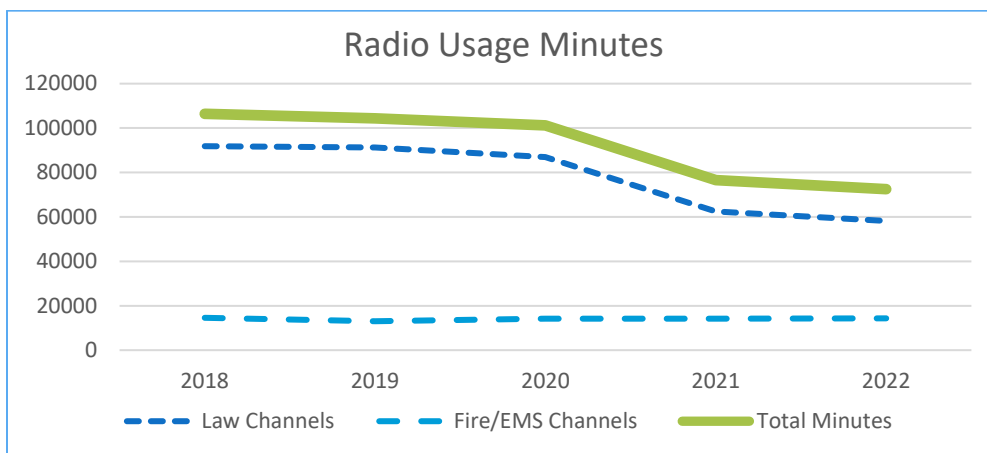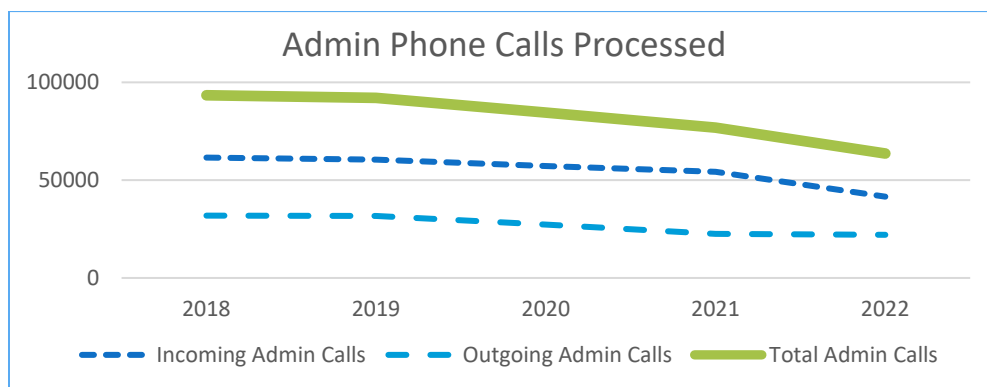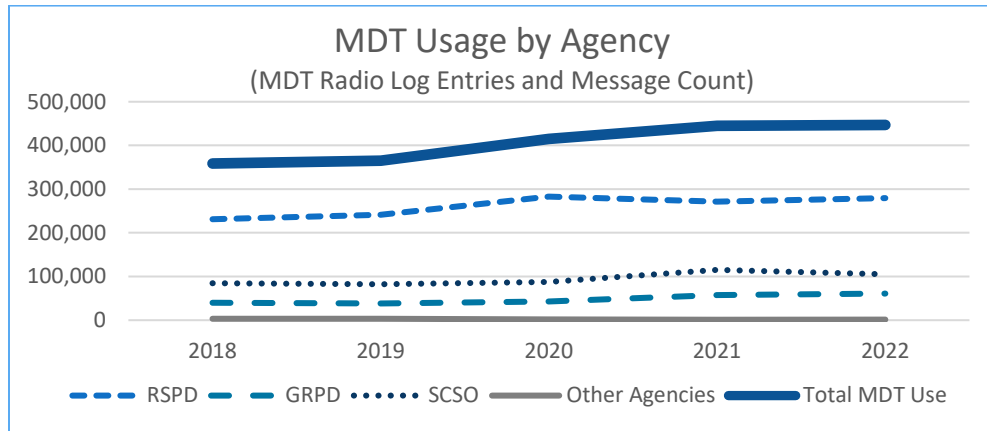
Primary Agency	Talkgroup	2019 PTTs	2019 Minutes	2020 PTTs	2020 Minutes	2021 PTTs	2021 Minutes	2022 PTTs	2022 Minutes
Rock Springs Police	04RSPD	529,904	**38,906**	455,923	**35,173**	337,812	**25,797**	295,027	**23,253**
Sweetwater Sheriff's Office	04SO1	373,352	**29,660**	358,609	**29,226**	265,074	**21,418**	246,131	**19,553**
Green River Police	04GRPD	313,688	**22,739**	301,456	**22,598**	199,999	**14,981**	178,432	**13,313**
Rock Springs FD*	04RSFD1	6,715	**1,182**	5,995	**1,175**	6,033	**1,214**	5,695	**1,183**
Green River FD	04GRFD	20,603	**1,770**	24,908	**2,209**	19,227	**1,639**	21,585	**1801**
Sweetwater County FD	04FIRE **	9,846	**1,010**	9,801	**1,005**	7,953	**808**	3420	**333**
Sweetwater Fire Dist. #1	04SCFD1	17,168	**1,537**	19,068	**1,731**	21,521	**1920**	22,315	**1932**
Castle Rock/SW Medics	04EMS **	101,509	**7,532**	105,684	**8,021**	109,579	**8,546**	113,088	**9061**
County-Wide Mutual Aid 1	04CAT1	20,256	**1,607**	2,778	**251**	4,424	**396**	3,174	**294**
County-Wide Mutual Aid 2	04CAT2	-	**-**	279	**34**	668	**67**	43	**3**
County-Wide Mutual Aid 3	04CAT3	-	**-**	19	**1**	16	**1**	27	**3**
County-Wide Mutual Aid 4	04CAT4	-	**-**	134	**11**	41	**5**	5,211	**296**
County-Wide Law 1	04LE1 **	-	**-**	1,694	**124**	2,826	**227**	15,061	**1147**
County-Wide Law 2	04LE2 **	-	**-**	104	**6**	103	**7**	11,608	**915**

These agencies also operate on analog conventional channels for dispatch radio traffic.

*** These talk groups are used to dispatch multiple agencies.*

MOBILE DATA TERMINAL (MDT) USAGE VS PHONE AND RADIO USAGE

In an effort to streamline operations and dispatch agencies more efficiently, we have asked agencies to utilize their mobile data terminals (MDTs) more. Lower priority calls are dispatched "silently." These calls are assigned to the unit through our Spillman software, and they are alerted through the Spillman application on their MDT (mobile data terminal) or through a text message on their phone. This helps keep radio traffic available for more emergent calls. In addition, units and dispatch are able to instant message each other through the software rather than tying up phone lines in dispatch. To visualize this transition to a more efficient process, the graphs below show a picture of MDT, phone, and radio use. Note the MDT usage trending up, and the phone and radio usage trending down.

MDT Usage by Agency
(MDT Radio Log Entries and Message Count)

Legend: RSPD, GRPD, SCSO, Other Agencies, Total MDT Use

Admin Phone Calls Processed

Legend: Incoming Admin Calls, Outgoing Admin Calls, Total Admin Calls

Radio Usage Minutes

Legend: Law Channels, Fire/EMS Channels, Total Minutes

CALL TAKING PROTOCOLS

Below is a table showing the number of calls protocoled from 2020-2022. The determinate codes, which dictate the level of response, are indicated in each column. While each discipline is different in how it handles determinate codes, Delta and Echo level responses are emergent response (sometimes referred to lights and sirens), while the other levels are less emergent. Call takers also have the ability to provide life-saving services prior to the arrival of public safety personnel.

		Omega	Alpha	Bravo	Charlie	Delta	Echo	Total
EPD-Police Cases	**2022**	**0**	**6,979**	**5,645**	**2,989**	**5,304**	**12**	**20,929**
	2021	29	6,673	5,401	3,059	3,762	1	18,925
	2020	49	2,977	4,859	2,975	3,491	2	14,353
EMD-Medical Cases	**2022**	**18**	**721**	**444**	**680**	**880**	**137**	**2,880**
	2021	23	566	351	563	763	71	2,337
	2020	14	522	324	516	648	50	2,074
EFD-Fire Cases	**2022**	**8**	**192**	**224**	**263**	**165**	**58**	**910**
	2021	7	119	195	197	63	22	603
	2020	20	119	216	227	92	8	682

ACTIVE USERS IN RMS, JMS, AND CAD: BY AGENCY

The table below shows the number of active user accounts in our Spillman software by agency. These users have access to our records management, jail management, and computer aided dispatch systems.

Agency Name	# of users	%
Castle Rock Ambulance Service	15	3.71%
Wyoming DCI	1	0.25%
DUI Supervised Probation	1	0.25%
Farson Eden Ambulance Service	3	0.74%
Farson Eden Fire Department	4	0.99%
Green River Fire Department	16	3.96%
Green River Police Department	45	11.14%
Juvenile Probation and Parole	7	1.73%
Adult Probation and Parole	12	2.97%
Rock Springs Fire Department	11	2.72%
Rock Springs Municipal Court	4	0.99%
Rock Springs Police Department	51	12.62%
Sweetwater Search and Rescue	14	3.47%
Sweetwater Combined Communications	31	7.67%
Sweetwater County Fire Dept	5	1.24%
Sweetwater County Sheriff	131	32.43%
Sweetwater Fire District #1	18	4.46%
Sweetwater County Attorney	25	6.19%
Sweetwater Medics	4	0.99%
Total:	*404*	

ACTIVE USERS IN RMS, JMS, AND CAD: BY ENTITY

The table below shows the number of active user accounts in our Spillman software by entity.

Entity Name	# of users	%
City of Rock Springs	66	16.34%
City of Green River	61	15.10%
Sweetwater County	175	43.32%
Other Entities	102	25.25%
Total:	*404*	

SMART 911 STATISTICS

Smart 911 is a service that the public can sign up for to provide additional information to our communicators and first responders. When someone calls 911 with a Smart911 profile, our call taker will automatically see information in the caller's safety profile. This information could be medical alerts, floor plans, family member information, emergency contacts, etc.

Starting in 2021, we started asking local businesses to create facility profiles to provide our center with relevant information about their business and facilities. This information can include business contacts, floor plans, hazmat locations, utility shut offs, AED locations, etc.

The table below shows usage statistics for Smart 911 in our County.

Note: Safety profiles can contain multiple people and addresses. Our dispatch center will also receive safety profile data from travelers calling 911 in our County who have signed up for the service in their home town.

	2017	2018	2019	2020	2021	2022	All Time
Total Safety Profiles Created	15	57	114	47	86	79	589
Facility Profiles Created	0	0	1	1	8	4	14
911 Calls with Safety Profile	61	42	120	167	143	186	-
Text Conversations	4	5	6	9	27	15	-

OTHER STATISTICS

- Over 700 devices communicating with our network (includes servers, desktops, laptops, phones, tablets, etc.)
- Over 398TB of data transmitted in and out of our network in 2022
- 117,611 users accessed the sweetwater911.org website with 2,169,977 hits in 2022.
  - 98% of these hits were users accessing the Jail Roster
- Over 127,154 emails sent and received in 2022

SERVICES PROVIDED

TO AGENCIES

- 911 Dispatch
- Spillman FLEX: Records management system, jail management system, mobile computer aided dispatch, evidence management, automatic vehicle location, asset management, NCIC access, etc.
- Warrant entry and validation
- Protection order entry and validation
- Terminal agency coordinator (CJIS compliance)
- Priority Dispatch: Call taking protocols
- 911 telephone and radio logging
- Conventional radio system and paging infrastructure
- Microwave network backhaul
- IT support for dispatch related software and hardware
- Basic radio programming and support of agency radios
- RapidSOS location, medical, and connected car data
- Smart911 safety and facility profiles
- TipManager: Monitor public submitted tips from TipSubmit
- RAVE Alert: Emergency and non-emergency notifications to the public and personnel
- TLO: Background check software
- HipLink: Text paging software
- digiTicket: Electronic citations
- Mobile communications and dispatch equipment (mobile command post)
- Training for services we provide, as well as cooperative training, sit-a-longs
- Crystal Reports for custom and scheduled reports.

TO THE PUBLIC

- 911 (Voice and Text)
- RAVE Smart 911:
  - Safety profiles with data provided by the public (medical conditions, pet descriptions, emergency contacts, house floor plans and utility shut off locations, etc.)
  - Weather and emergency alerts
  - Facility profiles with data provided by businesses and organizations (floor plans, emergency plans, hazards, emergency contacts, etc.)
- RapidSOS: Ability to receive accurate GPS location of 911 wireless callers (iOS and Android smartphones)
- Education about 911 and dispatch
- Answer calls for service, and dispatch appropriate resources for fire, medical, and law enforcement
- Online Jail Roster
- TipSubmit: Provide the ability for the public to submit anonymous crime tips

COMPLETED PROJECTS

911 PHONE SYSTEM HARDWARE REFRESH

Our maintenance agreement on our current 911 phone system ended October 2021. To receive the latest software releases and support, our phone system required a hardware refresh. This refresh includes new desk phones, PCs, servers, networking equipment, and voice gateways. An agreement to purchase the hardware refresh and extend our maintenance was approved during Summer 2021. With delays in shipping, chip shortages, and scheduling issues, the tentative installation has been pushed into 2022. Since the delay was out of our control, the vendor agreed to cover maintenance and support of our existing hardware at no cost until the project was complete. In addition, our warranty period did not start until the new hardware was installed and operational to our satisfaction.

FIREWALL REPLACEMENT

Our firewalls at both the primary and backup centers were reaching end of life on support. We were required to replace them to continue receiving software and intrusion protection updates. The new firewalls will give us another 5-7 years of reliable security protection from outside threats.

CURRENT AND UPCOMING PROJECTS REMAINING IN FY23

CAD WORKSTATION REPLACEMENT

The PCs running our CAD software, as well as most other applications, were ten years old. They have been upgraded over the years, but they have reached their limit. The power supplies and motherboards in these PCs have out-lived their expected lifespan of five years. It was time to purchase new PCs to continue supporting software upgrades into the future, and improve performance of computer aided dispatching. The new workstations will perform well for the next five years.

SERVER UPGRADES (PHASED)

Three of our servers at the primary data center, and two of our servers at our backup data center will no longer be supported by the latest versions of VMWare. They will need to be replaced soon. We are currently replacing one of these servers this fiscal year, and hope to replace two more next fiscal year.

UPS SYSTEMS (PHASED)

We will be installing supplemental UPS systems in our primary data center in preparation of replacing our primary UPS system in the coming fiscal year. This will allow us to maintain operations while power is removed from the primary UPS.

DISPATCH AV SYSTEM UPGRADE - FY23

Our dispatch room's audio-visual system is identical to our conference room's old equipment. We are experiencing the issues with the dispatch AV equipment, and it needs to be replaced as soon as possible. The AV system in dispatch allows our communicators to monitor cameras in our building, schools, and other agencies. In addition, they can display important information about a current incident. The new AV system will be tied into the conference room's equipment, which will allow for a much better user and administrative experience.

CAPITAL PROJECTS PLANNED FOR FY24 AND BEYOND

MOBILE REPEATER TRAILER - FY24

One of the biggest challenges for public safety in Sweetwater County and much of Wyoming is having reliable portable radio coverage. A majority of the time, radio coverage in certain areas of the County are only needed for a few days. Incidents like search and rescue, and wildland fires are great examples. In these cases, on-scene communications are handled by talk-around channels. However, without a repeater, these radios won't be able to talk to dispatch, or talk to another radio outside of portable range. A mobile repeater trailer can solve these issues in pockets of little to no radio coverage.

We are working on different funding sources for this project outside of our normal budget. This project is a great fit for grants and impact assistance funds. In 2020, Sweetwater County was awarded impact assistance funds from two industrial expansion projects. These funds included two mobile repeater trailers.

REPEATER AND PAGING UPGRADES IN FARSON - FY25

In 2018, we implemented a new paging system that we are licensed to use County-wide. We have transmitter sites in Rock Springs and Green River, and they cover those cities very well. For our rural communities, we rely on a single radio on Wilkins Peak to relay paging tones to repeaters in those communities. This is a point of failure that could result in losing our ability to page multiple agencies.

Starting with Farson, we will add a paging radio to the existing tower at the fire station, and a voice gateway to operate the repeater remotely using 4-wire audio. This configuration will be much more reliable, as well as provide a secondary means of paging Farson EMS and Fire.

DATA CENTER UPS SYSTEMS –FY24 (PHASED)

As with our cooling system at our Green River data center, we also only have one leg of UPS battery power. While the UPS keeps everything running until the generator starts during a power outage, if it were to fail, all of our critical systems would go offline for minutes or even hours. Much of our equipment has dual power supplies, which means that they can be powered from two power sources. With a second leg of UPS power, we can continue to operate regardless if the primary unit fails or not. Also, we will be able to take down the primary unit for extended periods of time for maintenance or replacement. After installation of the secondary UPS system, we plan on replacing the primary UPS system in the next fiscal year.

SERVER UPGRADES - FY24-26 (PHASED)

Three of our servers at the primary data center, and two of our servers at our backup data center will no longer be supported by the latest versions of VMWare. They will need to be replaced soon.

STORAGE REPLACEMENT – FY24

Our two SAN storage systems will need replaced near the beginning of fiscal year 2024. Support for these systems expires in April 2024.

RADIO CONSOLE REPLACEMENT – FY26

Motorola announced the end of life on the MC7500 radio console. Both of our dispatch centers use this system, and they will need to be replaced in 4-6 years.

CONSOLETTE REPLACEMENT – FY24-25 (PHASED)

We have nine Motorola Astro consolettes in service. While they work great today, they are no longer supported by Motorola. In addition, they are not P25 phase 2 compliant. They will need replaced in the near future.

EXALT MICROWAVE SYSTEM REPLACEMENT – FY25

In 2014, we installed our microwave backhaul between the Cities. In 2020, we started the reconfiguration of this system to include the Justice Center and HHS buildings in Rock Springs. We replaced one of the three links powered by Exalt radios. Exalt is no longer in business, and we will not be able to replace this equipment directly. Fortunately, we do have two spare radios from the link we decommissioned last year. However, looking forward, the two remaining links should be replaced with new and supported equipment.

REPEATER AND PAGING UPGRADES IN GRANGER AND WAMSUTTER - FY25-26 (PHASED)

In 2018, we implemented a new paging system that we are licensed to use County-wide. We have transmitter sites in Rock Springs and Green River, and they cover those cities very well. For our rural communities, we rely on a single radio on Wilkins Peak to relay paging tones to repeaters in those communities. This is a point of failure that could result in losing our ability to page multiple agencies.

Adding Granger and Wamsutter will allow us to page agencies in these locations more effectively.

LED LIGHTING AND CONTROLS - FY25

Most of the lighting in our dispatch center uses fluorescent light fixtures. Fluorescent lighting causes fatigue and eye strain, and our communicators work 12-hour shifts. While the lights can be shut off, they are not dimmable, which is not ideal if someone needs light at their workstation. Replacing the fixtures with LED lighting and modern controls, we can solve this problem. LED lighting is dimmable and controllable at the fixture level. This means each workstation will have the ability to control its own lighting. In addition to the health benefits, LEDs use less power than fluorescent which will save on electricity costs.

ROOF TOP HVAC UNITS – FY26-27

The roof top HVAC units at our primary dispatch center are now 10 years old, and parts are becoming difficult to find. These units should be replaced in the coming years.

RE-PAVE PARKING AND FIX DRAINAGE ISSUES – FY25

The staff parking lot on the North side of the building needs re-paved. In addition, there are drainage issues on the South side of the building where water pools up in the parking areas.

REPLACE UPS SYSTEMS AT BLAIRTOWN – FY24

The UPS systems at our Blairtown communications site originally came from our old C St location in Rock Springs. They are showing their age, and may not power equipment during a power outage before the on-site generator starts.

REPLACE UPS SYSTEMS AT OTHER COMMUNICATION SITES – FY25-FY26

The UPS systems at many of our other communication sites are reaching their maximum age. While they are still performing within specification, this may not be the case in the next year.

REPLACE FIREWALL AT JUSTICE CENTER – FY24

Our firewall at the Justice Center will be reaching end of life in the near future, and is also a single-point of failure. All of the Mobile CAD, Records, and Jail Management for the County use this firewall. We will be replacing it with two firewalls operating in high-availability and resilient power.