Colorado Department of Public Safety

Stan Hilkey Executive Director

Report to the Joint Budget Committee

Colorado State Patrol Computer Aided Dispatch, Records Management, Mobile Data Computer and Maintenance Annual Report

October 2018











COLORADO Division of Homeland Security & Emergency Management Department of Public Safety





COLORADO Division of Criminal Justice Department of Public Safety

COLORADO State Patrol Department of Public Safety

Colorado State Patrol Computer Aided Dispatch

The Colorado State Patrol currently utilizes the Motorola P1 Computer Aided Dispatch (CAD). This system is the backbone of our Communications Branch and is how the Colorado State Patrol;

- Logs all incoming requests for service,
- dispatches resources to fulfill those requests for service,
- tracks people and resources,
- and retains historical data on communication services.

Using CAD, the Colorado State Patrol Communications Branch is able to provide professional communications services not only for the Colorado Department of Public safety, but also a variety of state, county, and local public safety entities.

Our current CAD system however is currently in a state of flux. The current platform does not have any ability to upgrade in its current format. In addition, the servers that run the system are at their end of life cycle and are at risk of failure. The Patrol is currently investigating the best option to ensure the stability and longevity of our CAD system.

Records Management

The Niche Records Management System (RMS) implementation will result in the establishment of a central records management system for the Colorado State Patrol. The first phase of the implementation will be to establish the following:

- A production instance of the RMS
- Develop an online and offline crash form (DR2447)
- Develop an online and offline contact form
- Develop an interface with DOR for crash (DR2447) data
- Create in interface with CAD to receive incident data
- Create an extract to the CSP reporting platform
- Create approval workflow for Crash reports

Long term the system will be utilized to manage all of the CSP incident related data.

Mobile Data Computer

Mobile Data Computers (MDC) refer to the total equipment package that is installed in Colorado State Patrol vehicles and allows Patrol members to both communicate and interact with the CAD system utilized by the Communications Branch. This system allows for efficiency in operation and improved situational awareness of events for both the member in the field and the communications officer in the center.

Currently, our MDC program utilizes the Fujitsu Q704 tablet. The current (Fujitsu) tablet ceased production in 2017-18 and is no longer available. Due to several concerns (durability, functionality, form factor/design changes) from several business units, the Patrol is preparing a request for information for a new vendor/device to be purchased by the end of FY2018-19.

The process to select our new device will change much of the agency's historical procurement process. First, we plan to lease the new device. As such, all vehicles would have the same device with the same warranty and complete interoperability. We also are mandating service plans that would allow Troopers to work directly with the vendor--via overnight mail or on-site (troop office) technical support. It is believed these changes will allow for defective or damaged devices to be replaced or repaired in a timelier fashion with less disruption to the user.

Projects Completed in FY 2017-18

- Relocation of the Pueblo Regional Communication Center (PRCC) into a new building that combines, the PRCC with the Colorado State Patrol Troop Office and the Colorado Department of Tranportation (CDOT) Region 2 office. This relocation also provided the opportunity to partner with CDOT and establish a Traffic Operations Center (TOC) for the southern region of Colorado allowing the Patrol and CDOT to better respond to and mitigate traffic incidents.
- Each of the five regional communications centers received upgraded network switches and CAD computers.
- A new radio tower was added in Pueblo to support the relocation of the PRCC. The additions of equipment and towers is part of a continual improvement process for radio communications.
- The Patrol began the start of a transition to an actual Record Management System utilizing Niche.
- Maintenance contracts for all systems were continued to ensure a stable and dependable operating platform for each system.
- An annual analysis of other business systems that may require updates or upgrades was conducted. These neeeds are reflected in the summary for the coming years.
- Conducted the annual review of the plan for equipment replacement cycles. This helps to ensure the Patrol is prepared to replace equipment before it fails, but not before it is needed.
- Continued our constant efforts to ensure MDC connectivity, replacement, installation, and maintenance.

Information Technology Asset Maintenance	FY2017-18
CAD Premier Maintenance	\$ 397,773.00
Records Management System (RMS)	\$223,400.00
Pueblo Radio Tower / Microwave / Upgrades	\$ 95,931.25
Computer Equipment	\$287,790.80
Voice Recorder Maintenance	\$50,743.00
Pueblo Dispatch Consoles Upgrade / Move	\$182,151.14
Software Upgrades / Maintenance	\$188,411.18
UPS / Generator Maintenance	\$28,939.00
Operational Expenses	\$2,138.60
CAD Training/Travel	\$23,791.92
TOTALS	\$1,481,069.89

MDC Budget	FY2017-18
Mobile Connectivity (Verizon and AT&T)	\$ 357,987.00
Mobile Computers, Installation, and Maintenance	\$281,768.00
(various suppliers)	
TOTALS	\$639,755.00

Planned Projects for FY 2018-19

- As indicated previously, our current CAD system is in need of an upgrade. In the coming fiscal years, the Patrol will be identifying the appropriate way to upgrade our current CAD software/hardware.
- The Patrol is currently working with CDOT to consolidate the Denver Regional Communications Center (DRCC) with CDOT to stand up a second TOC for the metropolitan Denver area.
- We will continue to upgrade our radio communications equipment, primarily through new tower installation.
- Maintenance contracts for all systems will be continued to ensure a stable and dependable operating platform for each system.
- We will continue to review all business systems to identify those that require upgrades or updates in the coming years.
- We will continue our annual review of the plan for equipment replacement cycles. To include MDC connectivity, replacement, installation, and maintenance.
- The Communications Branch will begin to purchase equipment for the department as the initial phase of the FirstNet broadband system begins to roll out.

Information Technology Asset Maintenance	FY2018-19
CAD Premier Maintenance	\$ 413,243.00
Records Management System (RMS)	\$321,040.00
Upgrade Computer Aided Dispatch (CAD)	\$700,000.00
Computer Equipment	\$95,000.00
Voice Recorder Maintenance	\$50,743.00
FirstNet Devices	\$11,974.00
Software Upgrades / Maintenance	\$60,000.00
UPS / Generator Maintenance	\$41,000.00
Operational Expenses	\$5,000.00
CAD Training/Travel	\$15,000.00
Equipment Installation / Repair	\$30,000.00
Network Infrastructure	\$7,000.00
Telecommunications Charges / Modem	\$250,000.00
TOTALS	\$2,000,000.00

MDC Budget	FY2018-19
Mobile Connectivity (Verizon and AT&T)	\$ 471,728.00
Mobile Computers, Installation, and	\$371,292.00
Maintenance (various suppliers)	
TOTALS	\$843,020.00

Planned Projects for FY 2019-20

- This will be the first year of a five-year cycle to replace over 750 pac set radios for all uniformed officers and communication centers.
- The Communications Branch will continue to progress with the transition to FirstNet.
- The Communications Branch will continue with the upgrade to the current CAD system.
- We will continue to upgrade our radio communications equipment.
- Maintenance contracts for all systems will be continued to ensure a stable and dependable operating platform for each system.
- We will continue to review all business systems to identify those that require upgrades or updates in the coming years.
- We will continue our annual review of the plan for equipment replacement cycles. To include MDC connectivity, replacement, installation, and maintenance.

Information Technology Asset Maintenance	FY2019-20
CAD Premier Maintenance	\$ 428,094.00
Records Management System (RMS)	\$217,000.00
Radio Console / Mobile Radios / Upgrades	\$54,000.00
Computer Equipment	\$50,000.00
Voice Recorder Maintenance	\$50,743.00
FirstNet Devices	\$100,000.00
Voice Recorder Replacement	\$92,163.00
Software Upgrades / Maintenance	\$65,000.00
UPS / Generator Maintenance	\$45,000.00
Operational Expenses	\$5,000.00
CAD Training/Travel	\$3,000.00
Telecommunications Charges / Modem	\$250,000.00
Network Infrastructure	\$100,000.00
Pac Set Replacement	\$540,000.00
TOTALS	\$2,000,000.00

MDC Budget	FY2018-19
Mobile Connectivity (Verizon and AT&T)	\$ 471,728.00
Mobile Computers, Installation, and Maintenance	\$371,292.00
(various suppliers)	
TOTALS	\$843,020.00

Planned Projects for FY 2020-21

- This will be in the second year of a five-year cycle to replace over 750 pac set radios for all uniformed officers and communication centers.
- The Communications Branch will continue to progress with the transition to FirstNet.
- The Communications Branch will continue with the upgrade to the current CAD system.
- The Communications Branch will be replacing all the recording equipment in our communication centers as the previous equipment will be at the end of their life cycle.
- Maintenance contracts for all systems will be continued to ensure a stable and dependable operating platform for each system.
- We will continue to review all business systems to identify those that require upgrades or updates in the coming years.
- We will continue our annual review of the plan for equipment replacement cycles. To include MDC connectivity, replacement, installation, and maintenance.

Information Technology Asset Maintenance	FY2020-21
CAD Premier Maintenance	\$448,473.00
Records Management System (RMS)	\$227,000.00
Radio / Mobile Radios / Upgrades	\$75,000.00
Computer Equipment	\$50,000.00
Voice Recorder Replacement	\$90,000.00
DSS Voice Recorder Maintenance	\$50,000.00
FirstNet Equipment	\$75,000.00
Server Charges	\$75,000.00
Software / Maintenance	\$75,000.00
UPS / Generator Maintenance	\$50,000.00
CAD Training/Travel	\$3,000.00
Network	\$50,000.00
Operational Expenses	\$5,000.00
Pac Set Replacement	\$476,527.00
Telecommunications Charges / Modem	\$250,000.00
TOTALS	\$2,000,000.00

MDC Budget	FY2020-21
Mobile Connectivity (Verizon and AT&T)	\$ 471,728.00
Mobile Computers, Installation, and Maintenance	\$371,292.00
(various suppliers)	
TOTALS	\$843,020.00

Planned Projects for FY 2021-22

- This will be in the third year of a five-year cycle to replace over 750 pac set radios for all uniformed officers and communication centers.
- The Communications Branch will continue to progress with the transition to FirstNet.
- The Communications Branch will continue with the upgrade to the current CAD system.
- The Communications Branch will complete the replacement of the recording equipment in our communication centers.
- Maintenance contracts for all systems will be continued to ensure a stable and dependable operating platform for each system.
- We will continue to review all business systems to identify those that require upgrades or updates in the coming years.
- We will continue our annual review of the plan for equipment replacement cycles. To include MDC connectivity, replacement, installation, and maintenance.

Information Technology Asset Maintenance	FY2021-22
CAD Premier Maintenance	\$ 450,000.00
Records Management System (RMS)	\$230,000.00
Radio Console / Mobile Radios / Upgrades	\$50,000.00
Computers / Repair Equipment	\$100,000.00
Voice Recorder Maintenance / Replacement	\$99,925.00
FirstNet	\$135.000.00
Software Upgrades / Maintenance	\$75,000.00
UPS / Generator Maintenance	\$50,000.00
CAD Plotter / Printing Supplies	\$5,000.00
CAD Training/Travel	\$20,000.00
Network Infrastructure	\$50,000.00
Telecommunications Charges	\$275,000.00
Pac Set Replacement	\$634,900.00
TOTALS	\$2,000,000.00

MDC Budget	FY2021-12
Mobile Connectivity (Verizon and AT&T)	\$ 471,728.00
Mobile Computers, Installation, and Maintenance	\$371,292.00
(various suppliers)	
TOTALS	\$843,020.00

Planned Projects for FY 2022-23

- This will be in the fourth year of a five-year cycle to replace over 750 pac set radios for all uniformed officers and communication centers.
- The Communications Branch will continue to progress with the transition to FirstNet.
- The Communications Branch will continue with the upgrade to the current CAD system.
- The Communications Branch will complete the replacement of the recording equipment in our communication centers.
- Maintenance contracts for all systems will be continued to ensure a stable and dependable operating platform for each system.
- We will continue to review all business systems to identify those that require upgrades or updates in the coming years.
- We will continue our annual review of the plan for equipment replacement cycles. To include MDC connectivity, replacement, installation, and maintenance.

Information Technology Asset Maintenance	FY2022-23
CAD Premier Maintenance	\$ 450,000.00
Records Management System (RMS)	\$230,000.00
Radio Console / Mobile Radios / Upgrades	\$50,000.00
Computers / Repair Equipment	\$100,000.00
Voice Recorder Maintenance	\$50,000.00
FirstNet	\$135.000.00
Software Upgrades / Maintenance	\$75,000.00
UPS / Generator Maintenance	\$50,000.00
CAD Plotter / Printing Supplies	\$5,000.00
CAD Training/Travel	\$20,000.00
Network Infrastructure	\$50,000.00
Telecommunications Charges	\$275,000.00
Pac Set Replacement	\$684,825.00
TOTALS	\$2,000,000.00

MDC Budget	FY2021-12
Mobile Connectivity (Verizon and AT&T)	\$ 471,728.00
Mobile Computers, Installation, and Maintenance	\$371,292.00
(various suppliers)	
TOTALS	\$843,020.00

In summary, these projects will be adaptive over the next five years to meet changes within the agency's business needs as well as the ever changing technology environment. These projects are broken into three basic categories.

- 1. Technology initiatives
- 2. Current projects
- 3. Ongoing programs that require maintenance and training.

These projects reflect various needs and support identified goals that ensure continued reliability and security of existing technological assets for the Colorado State Patrol, the Department of Public Safety, and the State of Colorado as a whole.