

REPORT FOR INFORMATION**Alberta First Responders Radio Communications System Update****Report Purpose**

To provide an update on the implementation of the Alberta First Responders Radio Communications System (AFRRCS) and its implementation in the region.

Our Prioritized Strategic Goals

Goal 2 - Manage, invest and plan for sustainable municipal infrastructure

Goal 5 - Foster collaboration through regional, community and governmental partnerships

Goal 8 - Foster an environment for safe communities

Report

The Alberta First Responders Radio Communications System (AFRRCS) is a two-way digital radio network for first responders in municipal, provincial and First Nations agencies across the province. The commitment from the AFRRCS technical committee was to provide an infrastructure which supported a robust, resilient system for dispatched radio coverage for 95% of all numbered roadways in the province. Use of the system is meant to be voluntary for municipalities to implement.

The main tenants of the system are that it is built primarily as a voice-only, interoperable system for the first responder which allows communication between numerous agencies. Since the system's infrastructure was built by the province, municipalities were directed to only purchase system components which connect to the system, a savings for each municipality. There is capacity for secondary users, such as Transit and Utilities, which can use the system at a cost per radio. The system went live in May/June of 2016 to support communications during the Fort McMurray fire.

Over the past three years, Strathcona County Facility Services has led the projects which first assessed the County's radio communications situation and, based on recommendations, implemented the AFRRCS for both Enforcement Services (including the RCMP) and Emergency Services as first responder agencies. The County has also approved the implementation of AFRRCS for secondary users Facility Services, Transit, Recreation, Parks & Culture (RPC), Utilities, Transportation & Agriculture Services (TAS), and Fleet Services.

The system has been fully operational for Strathcona County Emergency Services (SCES) since March 21, 2018. To implement AFRRCS, Facility Services had to first install the main dispatch consoles and confirm the installation met technical and process standards. Once that was complete, radios were programmed then installed in vehicles, training was developed and initiated, and finally, portables were changed out. When the work was finally completed, Facility Services' focus changed to preparing the secondary users for the changeover to AFRRCS which occurred in Q3 and Q4 of 2018. Currently, Enforcement Services is completing their install of dispatch consoles and preparing for the changeover to AFRRCS. Facility Services has developed the internal technical support and capacity that led to the success of the transition to the AFRRCS and is continuing to improve our corporate radio communications.

AFRRCS has been an overall improvement for two-way communications between responders. As responders have become more familiar with the radios, clearer

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communication and better building infiltration of signal are two of the main improvements witnessed by responders.

In addition to these improvements, the following have also been recognized as positives of transitioning to AFRRCS:

- New purchase of firefighting-specific radios added intrinsically safe improvements, controls meant for gloved hands, displays and announcements which provide more information in an easy to read or listen to format.
- Overall area coverage improvement for rural areas.
- Digital Vehicle Repeater System attributes provide added capability where building penetration and area coverage might not be optimal.
- Less technical issues with dispatch consoles.
- Able to program system as required to minimize training and stress in learning new technology and processes.
- Ability to customize a multitude of settings as we develop our use of the system.
- Facilities provision of in-house expertise of our system.
- Potential to augment system for use by contracted dispatch clients.

The opportunities for improvement of the system have been identified as:

- True interoperability has not been recognized during a couple of events because of lack of use of system capabilities and the absence of common processes and procedures with other agencies.
- Use of the Digital Vehicle Repeater System (DVRS) – the DVRS provides responders with an augmented signal on scene that is boosted by a repeater system located on the vehicle. The DVRS is newer technology and SCES is currently working with responders and the vendor to ensure the system operates properly.
- Coverage Issues – a digital system still has limitations and there are areas in the County without AFRRCS coverage. Solutions to overcome this issue are the DVRS, maps which show no coverage, and a project to submit a request to the province to augment coverage in the area.

Overall improvement for secondary users has also been recognized. Positive feedback has been received from Transit, Transportation & Agriculture Services, and Recreation, Parks & Culture.

Regionally, over the past two years, SCES has been in conversations with Alberta Health Services (AHS) and neighbouring municipalities on the use of AFRRCS. Also regionally, SCES and Fort Saskatchewan Fire recently agreed to share channels to assist with mutual aid during incidents, which should assist with operations in our respective municipalities.

One of the activities taken on by SCES in the region is to work with industry on implementing the AFRRCS within the NRCAER responder communication plan. Deputy Chief Vern Elliott provided a report to the NRCAER Board in December of 2018 to provide an overview of the system and the opportunity for industry and municipalities to engage with AFRRCS.

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Council and Committee History

- December 6, 2018 Council requested a report be provided by the end of the first quarter of 2019 to update on the implementation of the Alberta First Responders Radio Communications System (AFRRCS) and its implementation in the region.
- November 7, 2017 Council approved an amendment to the 2017 Capital Budget to increase the scope of the First Responders Corporate Radio Replacement Project.
- November 28, 2016 Council approved the 2017 Capital Budget.

Other Impacts

Policy: N/A

Legislative/Legal: Developed a regional buying group with assistance from Legislative & Legal Services.

Interdepartmental: Radios have been purchased and placed in service for Facility Services, Transit, Utilities, Transportation & Agriculture Services, Fleet Services, and Recreation, Parks & Culture.

Master Plan/Framework: N/A