Chapter 13 Saskatchewan Public Safety Agency—911 Call Taking and Dispatching for Fire Emergencies

1.0 MAIN POINTS

911 call answering, call taking, and dispatching are critical so that people receive timely emergency response, as lives and infrastructure are often at risk.

We assessed the Saskatchewan Public Safety Agency's 911 call-taking and dispatching processes for fire emergencies. We focused on the Provincial Emergency Communications Centre (PECC), which serves as the emergency dispatching centre for fire emergencies across the province except for Regina and Saskatoon.

In Saskatchewan, 911 was called almost 600,000 times in 2023–24. Located in Prince Albert, PECC received just over 300,000 of those 911 calls. The Agency uses a service provider (CanOps) to operate PECC. The Agency paid CanOps \$13.7 million in 2023–24.

At May 2024, we found the Saskatchewan Public Safety Agency had effective processes, except where it needs to:

Set formal expectations for how quickly 911 fire calls are taken and dispatched to fire departments, and monitor the timeliness and quality of dispatch services.

Our testing of 30 calls found 77% took more than 90 seconds to be taken and dispatched.¹ The ability to collect and share information with fire departments quickly and accurately affects response times. Monitoring the timeliness of 911 call-taking and dispatching services provided by CanOps can help identify and address shortcomings in fire emergency services.

Expand its IT security requirements and monitor the availability of its 911 systems and data, including periodically testing disaster recovery plans.

The Agency relies on the operability of 911 IT systems as an integral part of its public safety operations. If systems go down, an immediate impact on operations occurs. Call processing times—typically measured in seconds—can escalate to minutes, and can mean the difference between life and death.

Properly securing IT systems and testing disaster recovery plans can mitigate and reduce the response time required by IT staff when cybersecurity incidents or disasters occur (e.g., massive outages, ransomware attacks).

> Periodically confirm whether 911 staff have appropriate training certifications.

We found 32 instances where CanOps staff had expired certifications. The lack of formal certification poses risks to effectiveness in handling emergencies.

¹ National Fire Prevention Association standard expects 911 call processing (i.e., call taking and dispatching) completed within 60 seconds 90% of the time.

> Enhance financial oversight of the service provider's budget and spending.

The Agency increased its funding to CanOps from \$9.8 million in 2022–23 to \$13.1 million in 2023–24. We found it requires further analysis of increased administrative positions the Agency now pays for, and the administration fee of \$1.2 million paid to CanOps in 2023–24.

Finally, the Agency requires timely quarterly financial reports from CanOps to confirm it incurred appropriate expenses for delivering 911 services on the Agency's behalf. Paying only for services required and monitoring funds are spent appropriately is good financial management and contributes toward effective use of public resources.

2.0 INTRODUCTION

This chapter outlines the results of our audit, for the period ended May 31, 2024, of the Saskatchewan Public Safety Agency's 911 call-taking and dispatching processes for fire emergencies.

The audit focused on the Provincial Emergency Communications Centre (PECC) in Prince Albert managed by a service provider (CanOps) contracted by the Agency. PECC serves as the emergency call-taking and dispatching centre for fire emergencies for all of Saskatchewan except for Regina and Saskatoon.²

2.1 911 Answering Points in Saskatchewan

The Saskatchewan Public Safety Agency is a Treasury Board Crown corporation created in November 2017 to streamline public safety services in Saskatchewan. *The Saskatchewan Public Safety Agency Act, 2019,* makes the Agency responsible for providing or coordinating emergency management services for Saskatchewan.

The Agency works in partnership with municipalities and First Nations to build the resilience and capacity for local communities to respond to emergencies such as fires and to improve the safety of Saskatchewan residents. Services include a province-wide emergency call taking (Sask911) system for police, medical, and fire emergencies; it's accessible 24/7.

The Sask911 system connects a person dialing the telephone digits 9-1-1 to emergency service providers through a public safety answering point (PSAP).³ Three public safety answering points operate emergency 911 and dispatch services in the province, these include the cities of Saskatoon, Regina and Prince Albert. Saskatoon and Regina call centres operate within each city's police service. Prince Albert's PSAP is called the Provincial Emergency Communications Centre (PECC); this centre serves the entire province except for the cities of Saskatoon and Regina.

 ² Fire dispatch for the city of Saskatoon includes the cities of Warman, Martensville and the town of Dalmeny.
³ Saskatchewan Public Safety Agency 2023–24 Annual Report, p. 4.

The Agency contracted the Canadian Public Safety Operations Organization (CanOps), a not-for-profit organization, to manage PECC in Prince Albert. The Agency paid CanOps \$13.7 million in 2023–24.⁴ PECC dispatches fire emergency calls to over 360 local fire departments throughout Saskatchewan.

2.2 Answering 911 Calls for Fire Emergencies at PECC

Provincial Emergency Communications Centre staff answer emergency 911 calls and, based on the information collected from the caller, transfer the call to an emergency dispatcher. In the case of fire emergencies outside of Regina and Saskatoon, PECC manages dispatch for fires. PECC 911 call takers and fire dispatchers work close together at the same call centre.

Following the National Emergency Number Association (NENA) standards, 911 call takers answer 911 calls from the public, while 911 dispatchers talk to emergency responders (e.g., fire department).⁵

The 911 telephone answering system tracks when the 911 call arrives at PECC and when the 911 call taker answers the call.⁶ PECC fire dispatchers receive calls from a PECC 911 call taker (via a computer-aided dispatch [CAD] system not through a call transfer by the telephone answering system). Information collected from both a caller and responding fire department gets recorded in the CAD system.

The dispatcher relays necessary information to a local fire department to respond to an emergency. Fire departments depend on the dispatcher for relevant, accurate and timely information to keep themselves and the public safe.

911 call-taking and fire dispatch services are a critical link between the public and emergency responders. Making certain that the appropriate responders arrive quickly during emergency situations helps to save lives and protect infrastructure.

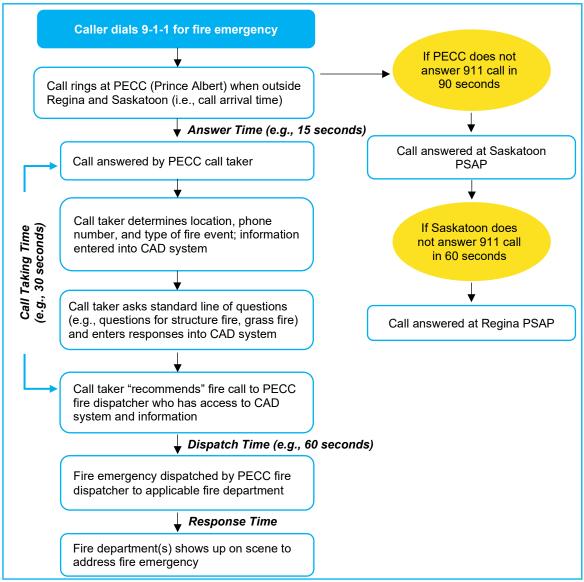
See **Figure 1** for a summary of the call-taking, dispatch, and response steps at PECC for fire emergencies.

⁴ Saskatchewan Public Safety Agency 2023–24 Annual Report, p. 28.

⁵ NENA is a non-profit professional organization in the United States focused on 911 operations, technology, education, and policy issues. NENA standards are developed by public safety and industry volunteers who commit their time, knowledge, and experience to enhancing access to 911 and emergency response services.

⁶ An external data centre provider hosts and manages the telephone answering system.

Figure 1—911 Call Answering, Call-Taking and Dispatching Process at Provincial Emergency Call Centre (PECC)



Source: Based on information provided by Saskatchewan Public Safety Agency as of May 2024. In June 2024, 911 phone systems changed and calls not answered by PECC are now sent to Saskatoon PSAP in 60 seconds (not 90 seconds). CAD: Computer-Aided Dispatch PSAP: Public Safety Answering Point

2.3 Importance of 911 Call Taking and Dispatching

In Saskatchewan, 911 was called almost 600,000 times in 2023–24, up 8.25% from 2022–23. The Provincial Emergency Communications Centre 911 calls in 2023–24 accounted for over 300,000, just over 50% of the provincial total.⁷

Call answering, call taking, and dispatching are critical so people receive timely emergency response as lives and infrastructure are often at risk.

⁷ Saskatchewan Public Safety Agency 2023–24 Annual Report, p. 13.

The Saskatchewan Public Safety Agency has set expectations for timely 911 call answering. In line with NENA standards, the Agency expects to answer 90% of all 911 calls within 15 seconds and 95% of all 911 calls answered within 20 seconds. In emergency response, every second matters.

Availability of the 911 telephone answering and CAD systems is critical to support timely response, appropriate assessment, and proper information sharing of fire emergencies.

For example, in July 2024, certain 911 services across the United States were disrupted due to a flawed software update for Microsoft Windows operating system issued by the cybersecurity firm, CrowdStrike. The inability to call for help in an emergency can increase risks to health and safety.

In a fire emergency, not responding quickly increases the risk of loss of life, property damage, fire spread, and environmental impact.

The Agency must have effective processes to ensure 911 fire emergency calls are answered and dispatched timely to maintain public safety, protect infrastructure, and help minimize damage caused by fire. This includes adequately monitoring contracted service providers to ensure expectations are met.

3.0 AUDIT CONCLUSION

We concluded, for the period ended May 31, 2024, the Saskatchewan Public Safety Agency had, other than the following areas, effective processes for call taking and dispatching of fire emergencies. The Saskatchewan Public Safety Agency needs to:

- Expand its IT security requirements and monitoring to safeguard the continued availability of its 911 systems and data
- Establish and periodically test its disaster recovery plans for critical 911 systems
- Set formal expectations and monitor how quickly 911 fire calls are taken and dispatched to fire departments
- Enhance its 911 quality assurance program to include dispatch services
- Periodically confirm whether 911 staff have appropriate training certifications
- Rationalize the necessary level of service provider staff required for the Provincial Emergency Communications Centre and determine eligible expenses for the administration fee paid to its service provider
- Obtain and review quarterly financial reports from its service provider to confirm appropriate expenses are incurred

Figure 2—Audit Objective, Criteria, and Approach

Audit Objective:

To assess, for the period ended May 31, 2024, the effectiveness of the Saskatchewan Public Safety Agency's 911 call-taking and dispatching processes for fire emergencies.

We focused our audit on the Provincial Emergency Communications Centre (PECC) in Prince Albert managed by a service provider contracted by the Agency, which serves as the emergency dispatching centre for fire emergencies for all areas of Saskatchewan except for Regina and Saskatoon.

Audit Criteria:

Processes to:

- 1. Plan for timely emergency fire call-taking and dispatch services
 - Educate the public about when to call Sask911
 - Maintain Sask911 call-taking and fire dispatch service expectations (e.g., call processing metrics)
 - Allocate sufficient resources to answer and dispatch PECC Sask911 calls (e.g., trained staff, adequate agreement with service provider)
 - Maintain availability of Sask911 and dispatch systems (e.g., no service interruptions, tested disaster recovery plans)

2. Dispatch fire responders timely (through PECC)

- Use standardized protocols and procedures for PECC Sask911 fire calls
- Appropriately prioritize PECC Sask911 fire calls (e.g., emergency vs. non-emergency)
- Answer and dispatch PECC Sask911 fire emergencies in a reasonable timeframe (including follow up of abandoned calls)

3. Continuously improve emergency fire call-taking and dispatch

- Analyze the quality and timeliness of PECC Sask911 call-taking, dispatch, and response (e.g., sufficient service provider monitoring and reporting)
 - Take corrective action (e.g., quality improvement processes)
- Address complaints
- · Report results to senior management

Audit Approach:

To conduct this audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook—Assurance* (CSAE 3001). To evaluate the Saskatchewan Public Safety Agency's processes, we used the above criteria based on our related work, review of literature including reports of other auditors, and consultations with management. Agency management agreed with the above criteria.

We examined the Agency's policies, procedures, and operational protocols for 911 service delivery, serviceprovider contracts, reports, and other key documents related to call-taking and dispatching processes for fire emergencies. We assessed the Agency's controls related to securing IT systems used in call taking and dispatching. We also interviewed key Agency staff and tested a sample of Sask911 calls to assess the timeliness for answering, dispatching, and response. In addition, we used independent consultants with subject matter expertise to help us identify good practice and assess the Agency's processes.

4.0 Key FINDINGS AND RECOMMENDATIONS

4.1 Contractual Agreement with 911 Service Provider Lacking Key Requirements

The agreement between the Saskatchewan Public Safety Agency and its 911 service provider in Prince Albert is lacking a key performance indicator for call taking and dispatching, key IT security requirements, and has certain clauses not typical in government contracts.

The Agency contracted the Canadian Public Safety Operations Organization (CanOps) to provide 911 call-taking and dispatch services within the Provincial Emergency Communications Centre (PECC) in Prince Albert in March 2018. The contract is set to

terminate in March 2028, with the option to renew for another five years. The Agency maintains standard operating protocols to convey operational standards expected of public safety answering points, including PECC. We found these standard operating protocols were up to date.

An effective service agreement outlines clear expectations, responsibilities, and deliverables for both parties involved in the service relationship. Clear expectations help prevent misunderstandings and disputes and safeguard both parties. An effective agreement should also set out which service expectations will be monitored—often called key performance indicators—and each indicator should specify a performance standard which the service provider must meet.

Under the service agreement, CanOps provides employees, management, and IT resources to support delivery of 911 call taking (for fire, police, and ambulance) and fire dispatch services. CanOps also provides dispatch for enforcement services (e.g., conservation officers) and the Prince Albert Police Service.

Our review of the service agreement found certain key aspects missing. These key aspects should be included in either the agreement or standard operating protocols (referred to in the agreement).

IT Security Requirements and Monitoring

The current agreement with the service provider has significant deficiencies related to IT security requirements.

The Saskatchewan Public Safety Agency relies on the operability of a robust computeraided dispatch (CAD) system as an integral part of its Sask911 operations; CanOps manages this CAD system.

Agency management receives some monthly IT reporting from CanOps about service desk activity, as well as scheduled and unscheduled outages. The reports do not provide insight into how quickly CanOps completed IT service requests compared to service expectations. We found the agreement with CanOps lacks specific provisions for detailed reporting, cybersecurity measures, incident response planning, change management, asset management, and access control. **Figure 3** describes the risks associated with these specific provisions being undefined.

Key Aspect of IT Service Agreement Missing	Associated Risk
Detailed Reporting	Missing critical information on IT system performance, incidents, and risks.
Cybersecurity Measures	Systems and data inadequately secured (e.g., patches not applied in a timely manner, vulnerability scanning not identifying points of weakness). Unpatched systems contain known vulnerabilities prone to exploitation.
Incident Response	Lack of response planning and testing to prepare for and manage the consequences of cyber events.
Change Management	Changes to IT systems may be inappropriately executed, increasing the risk of an adverse effect on the integrity and availability of IT systems and data.

Figure 3—Risks Associated with Lacking IT Security Requirements

Key Aspect of IT Service Agreement Missing	Associated Risk			
Asset Management	Lack of centralized inventory for physical and software assets increases the risk of being unaware of potential points of attack. Accurate asset management is also an essential foundation for patch and vulnerability management.			
Access Control	Inappropriate access may be granted. Compromised user accounts may go undetected and allow unauthorized access to systems and data.			

Source: Office of the Provincial Auditor of Saskatchewan.

CanOps uses the CAD system to compile essential information for the dispatcher and emergency responders (e.g., fire departments). CAD integration and mapping systems let 911 dispatchers know the location of the caller as well as whether the call came from a mobile phone or landline. Additionally, the CAD system can determine which fire departments are closest to the emergency and available to respond.

If the CAD system fails, emergency operations are immediately impacted. Call-taking times typically measured in seconds can escalate to minutes as 911 call takers must resort to manual methods to collect appropriate information from a caller and contact the fire department. When public safety is at risk, timely and informed decisions may save lives, making the role of technology paramount.

The Agency owns all the IT software and hardware at PECC, including the CAD system, and CanOps manages the IT network and systems on the Agency's behalf.

Formal expectations between the Agency and CanOps should be updated to reflect enhanced requirements for cybersecurity, incident response, change management, asset management, and access control. Once established, these enhanced requirements must be implemented and monitored by Agency senior management. For example, vulnerability scanning should be done regularly to identify and remediate security weaknesses, and the Agency should receive related reports. This will enable Agency senior management to effectively monitor IT security and respond to cyber threats proactively.

Strengthening and implementing IT security requirements will enhance the overall IT security and operational integrity of PECC.

1. We recommend the Saskatchewan Public Safety Agency expand its IT security requirements and monitoring to safeguard the continued availability of its 911 systems and data.

Further, we found the Agency and CanOps do not have a formal incident response plan or disaster recovery plans.⁸ There are business continuity plans in place (one each for the Agency and CanOps), although the plans are not up to date, coordinated, or tested regularly. The business continuity plans do not outline detailed steps to restore data, equipment, or key systems after a disaster.

A general incident response plan or disaster recovery plan can reduce the response time required by IT staff when cybersecurity incidents or disasters occur (e.g., massive outages, ransomware attacks).

⁸ Incident response plans are a type of disaster recovery plan focused on cybersecurity threats to IT systems.

Organizations that prepare for adverse events like cyberattacks, or unavailable critical IT systems, are less likely to suffer severe impact. Disaster recovery testing verifies plans can be implemented successfully and critical IT systems, like the 911 telephone answering system and CAD system, can be restored after a disruption. If a disaster recovery plan to restore 911 services does not work as expected, it can lead to extended periods of downtime that may compromise lives.

Without tested disaster recovery plans, the Agency may be unable to restore its critical IT systems, like its CAD system, in a timely manner in the event of a disaster.

2. We recommend the Saskatchewan Public Safety Agency establish and periodically test disaster recovery plans related to critical 911 systems.

We found the Agency established redundancy processes for answering 911 calls. All three PSAPs (Regina, Saskatoon, and Prince Albert) provide roll over and redundancy for each other (e.g., answer 911 calls when unanswered at another PSAP).

Key Performance Indicators

The Saskatchewan Public Safety Agency does not have a targeted timeframe formally communicated in its agreement with CanOps for fire call taking and dispatching, which is a key performance indicator for emergency communications centres.

Good practice indicates agreements should contain key performance indicators and targets to measure progress toward achieving expected results. The agreement between the Agency and CanOps does have several performance indicators outlined and reported on, including the number of 911 calls answered and how quickly; how many 911 calls were dropped (never answered); and the number of calls answered by Regina and Saskatoon PSAPs instead of PECC. However, the agreement is missing a key performance indicator related to how quickly 911 calls are taken and dispatched.⁹

Our review of an Association of Public-Safety Communications Officials' effective practices report indicated at minimum, a provincial emergency communications centre should establish and monitor the following performance requirements (i.e., key performance indicators):¹⁰

- Call-taking time
- Dispatch time, or
- Combined call-taking and dispatch time

⁹ The Saskatchewan Public Safety Agency requires an explanation for more than 10 calls that automatically rolled over and were answered by another PSAP when PECC did not answer the call. Our testing of five weeks of calls found one week where CanOps exceeded this threshold and provided explanations why (e.g., due to staffing shortage).

¹⁰ Association of Public-Safety Communications Officials (APCO) is a voluntary, not-for-profit organization dedicated to the enhancement of public safety communications. <u>apcointl.org</u>.

Given the current internal processes at PECC, we would reasonably expect the Agency to set a combined call-taking and dispatch time for fire emergencies.¹¹ This would allow CanOps and the Agency to evaluate operational effectiveness and address shortcomings.

The lack of a fire dispatch-time target may result in delays in dispatching emergency responders thereby impacting public safety, as well as affecting the Agency's ability to make appropriate resource decisions.

3. We recommend the Saskatchewan Public Safety Agency formally set a timeliness target for call taking and dispatching 911 fire calls to fire departments and monitor success in reaching the target.

See **Section 4.2** for further details on whether 911 calls related to fire emergencies are actually taken and dispatched in a timely manner.

Clauses Not Typically Seen in Other Government Agreements

The service agreement between the Saskatchewan Public Safety Agency and CanOps includes clauses not typically seen in other government agreements.

We assessed the Agency's agreement compared to some other government agreements and found:

- CanOps is required to provide audited financial statements to the Agency six months after year end. Often, we find audited financial statements are provided to government agencies within four months (120 days) of year end.
- No right to audit clause. In other government agency agreements when using a service provider, the agreement specifies that the government agency may conduct a review or audit of the services and financial records, and the service provider agrees to cooperate with the agency.
- > Termination notice of 365 days. Other agreements usually utilize 60–90 days.
- Length of the agreement is 10 years. Typically, government agreements extend to five years with a renewal option.

We suggest the Saskatchewan Public Safety Agency consider revisiting these clauses when it updates its agreement with its service provider.

Overall, the lack of a robust service agreement may result in misunderstandings, increasing the risk 911 services are not delivered effectively and public safety expectations are not met.

¹¹ The Saskatchewan Public Safety Agency is unable to distinguish how much time it takes for a 911 call taker to answer a call and for the 911 fire dispatcher to dispatch a call at PECC as there is not a separate telephone system transfer between the call taker and dispatcher. Therefore, assessing a combined time would be necessary.

4.2 911 Fire Calls Not Always Taken and Dispatched Timely

The Saskatchewan Public Safety Agency requires timeliness targets for taking and dispatching 911 fire calls and needs to monitor whether those targets are met. Certain fire emergency calls we tested took longer than expected to be taken and dispatched.

Informally, CanOps expects Provincial Emergency Communications Centre 911 call takers to transfer calls to dispatchers within 30 seconds and fire dispatchers to dispatch fire calls within 60 seconds (for a total of 90 seconds). Our review of good practice found the National Fire Prevention Association standard indicates 90% of 911 call processing (i.e., call taking and dispatching) completed within 60 seconds.¹² The agreement between the Agency and CanOps references the National Fire Prevention Association standards, but does not include a specific target for taking and dispatching 911 fire calls.

We tested 30 dispatched fire emergency calls to assess timeliness of the call taking and dispatch. We found PECC:

- Dispatched calls within the CanOps expectation of 90 seconds for seven calls (23% of calls tested)
- > Took between 90 seconds and 5.5 minutes to dispatch 23 calls (77%)

The ability to collect and share information with emergency responders (fire departments) quickly and accurately can affect response times. See **Recommendation 3** about the Agency setting and monitoring a key timeliness performance target for taking and dispatching 911 fire calls to fire departments. Timeliness results compared to the target should be reported periodically to Agency senior management, so lengthy dispatch times can be assessed and addressed.

Monitoring the timeliness of 911 call-taking and dispatching services provided by CanOps may identify ways to improve fire response times and make emergency services more efficient, which may reduce the risk of infrastructure and environmental damage caused by fire or loss of life. Agency management indicated it plans to review 911 fire services in 2024–25, which it anticipates will identify process improvements to make fire emergency services more effective.

For the 30 fire emergency fire calls tested, we also assessed how long the fire department took to acknowledge the fire emergency calls after dispatch. The relevant fire department acknowledged 21 calls (i.e., 70% of calls tested) within five minutes. After five minutes, the PECC 911 dispatcher starts calling other possible contact numbers for the fire department (e.g., fire chief mobile phone number).

¹² The National Fire Prevention Association is a global, non-profit organization that promotes safety standards, education, training, and advocacy on fire and electrical-related hazards.

One call we tested took more than 12 minutes. We found delays were often associated with volunteer fire departments. In some cases, the fire department did not contact PECC to acknowledge the call when they were already enroute to the fire emergency. Dispatching emergency responders to a fire quickly makes for both a safer and more effective response.

CAD integration across the province could increase call-taking and dispatching efficiencies through data integration between CAD systems. Otherwise, 911 dispatchers are often asking the same questions already asked by 911 call takers. Agency management indicated it plans to continue to expand CAD integrations.

4.3 Emergency 911 Fire Calls Answered Timely

The Saskatchewan Public Safety Agency has set an expectation for answering 911 fire calls timely, and CanOps is meeting it.

The Agency refers to the National Emergency Number Association (NENA) 911 call answering standard in its policy, which is shared with its service provider (CanOps).¹³ The NENA standard expects 911 call takers to answer 90% of all 911 calls within 15 seconds and 95% answered within 20 seconds.

We tested 30 fire emergency 911 calls to the Provincial Emergency Communications Centre from January 2023 to May 2024. We selected calls from various fire categories including structure fires, vehicle fires, train fires, and grass fires. We found call takers answered all 911 calls within the expected 15 seconds. Our findings were consistent with the Agency's reports generated from the 911 telephone answering system.

The Agency's 911 telephone answering system is able to track the point at which the call is received at the Prince Albert PSAP and the point at which the phone is answered by the 911 call taker. The Agency monitors the 911 answering times for all three PSAPs on a monthly basis. See **Figure 4** for results for the Prince Albert PSAP from January to April 2024.

Figure 4—Percentage of 911 Calls Answered in 15 Seconds at the Prince Albert PSAP from January 2024 to April 2024

January 2024	February 2024	March 2024	April 2024
98%	98%	98%	97%

Source: Saskatchewan Public Safety Agency call-answering tracking sheet. May 2024 not yet compiled.

According to the Agency's annual report, in 2023–24, all three Sask911 PSAPs answered 911 calls within 15 seconds 93% of the time and answered calls within 20 seconds 95% of the time. Both measures meet industry standards (i.e., NENA standard).¹⁴

Having a key performance indicator and target for answering 911 calls helps CanOps to measure and the Agency to monitor whether call takers answer 911 calls in a timely manner.

 ¹³ NENA is a non-profit professional organization in the United States focused on 911 operations, technology, education, and policy issues.
¹⁴ Saskatchewan Public Safety Agency 2023–24 Annual Report, p. 15.

In June 2024, the Agency indicated it plans to implement NG911 (Next Generation 9-1-1), which is an Internet Protocol (IP)-based communications system. NG911 gives PSAPs the ability to receive 911 communications through text messages, and receive video footage and photos. NG911 also provides emergency location tracking directly from a smartphone. The implementation date of these features has yet to be determined nationally.

4.4 Standard Protocols Followed for 911 Fire Call Taking

The Saskatchewan Public Safety Agency utilized appropriate standard protocols and procedures for 911 fire call taking that supports obtaining consistent and relevant information from callers about fire emergencies.

The Agency uses a set of standard fire protocol questions for each different fire emergency to determine the nature of the fire incident. We found protocol questions align with good practice. The Agency prioritizes every fire call as an emergency with a few exceptions (e.g., certain carbon monoxide detector calls, controlled burn calls).¹⁵

Fire protocol questions are programmed into the CAD system. The system prompts Provincial Emergency Communications Centre staff on which questions to ask callers based on the type of fire incidents. There are over 80 types of fire incidents (e.g., shed, grass, forest, building, vehicle, boat). Typical fire call-taking questions about a structure fire include:

- Do you see flames or smoke?
- What type of building is involved?
- How many floors or storeys are there?
- Are there people trapped inside the building (how many, location)?
- > Where is the fire/smoke?
- Is anyone injured (how many)?
- Are there any hazardous materials inside?

The call taker records the caller's answers in the CAD system so the fire dispatcher can communicate these details to the fire department. Providing appropriate and detailed information to fire departments allows them to be ready to prepare and respond appropriately when they arrive on scene at the fire.

A voice recording of every 911 call is also retained at PECC, which provides a verifiable record of the incident and the call taken. We listened to a sample of recordings to confirm the appropriate questions were asked in a calm manner and to verify accurate information was recorded in the CAD system.

We tested 10 fire emergency call recordings and found PECC call takers handled each call as expected by asking the caller the standard questions required to relay appropriate information to the fire departments in eight of the 10 calls. For the other two calls, the call taker handled the calls reasonably as they were non-routine callers (i.e., call from a child, call from a passerby not at fire scene).

Having standard protocol questions for varying fire emergencies, promotes call takers gathering consistent and appropriate information to relay to responding fire departments.

¹⁵ A controlled burn is the practice of intentionally setting a fire for land management and fire prevention. Agricultural landowners are expected to report the start and conclusion of controlled burns so 911 call takers are aware of those fire locations.

4.5 Abandoned 911 Calls Tracked and Followed Up

The Saskatchewan Public Safety Agency appropriately tracked and followed up on abandoned 911 calls.

We found the Agency has a specific guideline for responding to abandoned 911 calls. An abandoned call is one where the caller hangs up after dialing 911 but before speaking to a call taker. The policy requires Provincial Emergency Communications Centre staff to call the phone number back. If PECC staff determine the caller may be in danger, they contact the police.

We reviewed five abandoned calls and found in three instances PECC staff called the number back and determined whether there was an emergency. One instance involved a fire alarm in a school and staff transferred the call to the police to investigate. The other two abandoned 911 calls were not called back because they were obvious misdials as the 911 call taker could hear the callers walking around and talking in the background.

Prank calls are traceable and can be investigated by the Agency. We also observed PECC staff can track the number of times they receive abandoned calls from a certain phone number. If the calls become a nuisance from the same phone number, they refer that phone number to the police.

We also reviewed the Agency's five-year trend report to determine trends in abandoned calls as a percentage of total 911 calls at PECC from 2019–23. We found abandoned calls accounted for 18% of all 911 calls in 2019, 16% in 2022, and 18% in 2023. Typically, 15% of 911 calls at emergency communications centres are abandoned; the Agency's percentages are comparable.

The Agency continually educates the public about proper use of 911 and what constitutes a real emergency (see **Section 4.10** for further details) to reduce abandoned 911 calls.

4.6 Quality Assurance Program Requires Broadening

The Saskatchewan Public Safety Agency needs to broaden its quality assurance program and ensure quality assurance evaluators complete quality assurance assessments fairly and consistently. The results from the broader quality assurance program should be reported to Agency senior management.

The Agency's quality assurance program monitors the quality of 911 calls taken and the timeliness of 911 calls answered, but it does not monitor the quality of 911 calls dispatched or the combined timeliness of the calls taken and dispatched. See **Section 4.2** about the need for the Agency to evaluate the timeliness of 911 call taking and dispatch.

The Agency has a quality assurance policy for the Provincial Emergency Communications Centre and a quality unit within CanOps randomly monitors 911 calls taken (including fire emergency calls); however, it does not conduct quality assurance assessments on fire dispatch. The Agency's quality assurance policy outlines criteria for CanOps staff to use for quality assurance monitoring. The quality assurance unit within CanOps evaluates about 20 calls randomly selected per day (approximately 2% of total 911 calls received). All PECC call takers are also monitored, whether full time or temporary.

At present, the CanOps quality assurance unit listens to 911 calls daily recorded by voicerecording software, but does not review the CAD system documentation. Listening to the voice recordings as well as comparing them to the system documentation can help identify gaps between what was said and actions taken by the call taker.

The quality assurance unit at CanOps is made up of one independent staff member who is not a PECC supervisor or manager. We found the quality assurance unit staff member did not have training certifications outlined in **Section 4.7**, and therefore may not be appropriately qualified to undertake quality assurance evaluations. Evaluators need to be properly trained, independent, and periodically assessed to ensure they evaluate calls consistently, fairly, and equitably. For example, CanOps or Agency management may want to select and evaluate at least one 911 call taken and dispatched, then ask the quality assurance evaluations result, management should then discuss and rectify any discrepancies.

The Agency provides a call evaluation form that the CanOps quality assurance unit completes. The form includes interview questions, telephone protocols/skills (e.g., remain calm) and ratings assigned for each call reviewed. Calls exceeding a 90% call-rating score are considered compliant with call-taking protocols.

Interview questions listed on the evaluation form confirm whether a call taker asked the caller the following:

- Incident address
- Caller's telephone number
- Main complaint (e.g., house on fire)

We found CanOps provided detailed results of the evaluations to call takers and their supervisors, and summary results to Agency management monthly (showing the percentages of compliant and non-compliant calls). From January to December 2023, the report conveyed a 98% or better compliance rate; the Agency received no details from CanOps about actions taken to address non-compliance.

Broadening the Agency's 911 quality assurance program will not only provide insight into the quality of 911 communications for Agency senior management, but also will support service improvements.

4. We recommend the Saskatchewan Public Safety Agency broaden its 911 quality assurance program to include dispatch services.

4.7 Monitoring Required to Confirm All 911 Staff Have Valid Training Certifications

The Saskatchewan Public Safety Agency is not sufficiently monitoring whether 911 staff have valid training certifications.

The Agency has a policy requiring training for all 911 call takers and supervisors. CanOps delivers certain training in-house and staff receive other training online through the Association of Public-Safety Communications Officials (APCO). CanOps has three certified APCO instructors at the Prince Albert PSAP who conduct in-house training.

The Agency's policy requires every 911 fire dispatcher to have the following training:

- > APCO Public Safety Telecommunicator training (about 40 hours)
- > APCO Fire Communications training (about 40 hours)
- Sask911 Map training (about 40 hours)
- Emergency Fire Dispatch training (about 20 hours)
- ProQA (answering/questioning protocol tool) training (about 8 hours)
- On the job training on Sask911 Standard Operating Protocols and operating systems (about 2–3 months)

Recertifications are required every two years. We tested the certifications of six PECC fire call-taking staff and found:

- > Three staff had current and valid certifications
- > Three staff did not have current certifications (two expired in 2023 and one in 2022)

We also assessed the staff-training tracking sheet maintained by CanOps and found 32 instances where CanOps staff had expired certifications. In addition, one staff's training information was not current in the tracking sheet.

While uncertified fire dispatchers may possess some skills and experience, the lack of formal certification poses risks to both their effectiveness in handling emergencies and the overall safety and efficiency of emergency response operations.

5. We recommend the Saskatchewan Public Safety Agency periodically confirm whether 911 staff at the Provincial Emergency Communications Centre have appropriate training certifications.

4.8 Improved Financial Oversight of Service Provider Budget and Spending Needed

The Saskatchewan Public Safety Agency has not rationalized the necessary number of staff needed to support the budgeted amount paid to its service provider, CanOps. Also, the Agency did not obtain and assess quarterly financial reports from CanOps during 2023–24.

According to the Agency's annual report, it paid CanOps \$13.7 million in 2023–24 (2022–23: \$9.6 million).¹⁶

We found Agency senior management approves CanOps' submitted budget annually, but not timely. The Agency did not approve the 2023–24 budget request until November 2023, well beyond the start of CanOps' fiscal year (April 2023). We also found the Agency had not yet approved the 2024–25 budget for CanOps at June 2024.

Good practice in financial management is to establish and approve budgets before the start of each fiscal year.

We reviewed the CanOps 2023–24 budget request and found CanOps outlined a line-byline budget summarizing staff required to operate PECC on behalf of the Agency each year. The budget request also included variance explanations for any significant changes (e.g., requested budget increases). The Agency does not document whether it identified issues with requested funding or how it resolved such issues.

As shown in **Figure 5**, the number of PECC staff required according to the 2023–24 budget request increased by 20.75 full-time equivalent staff (or 23%) from the prior year. By comparison, the 2023–24 approved budget funding for CanOps increased by \$3.3 million or 34%.

We also assessed the volumes of 911 calls received by PECC in 2023–24 (as shown in **Figure 5**) and found they increased by 9%. The total increases in budgeted funding and staffing levels for PECC do not appear completely supported by a proportionate increase in call demand. We do acknowledge salary budget increases may be a result of economic increases as well as increased staffing levels. A detailed review of the 2023–24 budget also showed the Agency paying for some new administrative positions (financial analyst, client support manager, administrative assistant).

	2021–22	2022–23	2023–24	2024–25
Total Budget to Be Paid to CanOps	\$9,427,400	\$9,819,100	\$13,190,862	\$13,968,400 ^A
Total PECC FTE Staff	87.35	90.35	111.1	110.4
Total 911 Calls Received by PECC	288,319	281,661	307,919	Not Available

Source: Budget and FTE staff based on financial reports provided by the Saskatchewan Public Safety Agency. 911 calls based on the Saskatchewan Public Safety Agency's 2023–24 annual report.

^A 2024–25 Budget submitted by CanOps was not approved by the Saskatchewan Public Safety Agency as of June 2024.

¹⁶ Saskatchewan Public Safety Agency 2023–24 Annual Report, p. 28.

FTE: full-time equivalent

The Agency did rationalize the optimal level of staffing required to operate PECC (e.g., call takers, dispatchers, supervisors) in 2022. The analysis considered the expected call volumes and the average call-handling time. This resource analysis indicated the need to increase PECC operational staffing levels (e.g., call takers and dispatchers). The analysis did not outline the rationale for additional administrative positions (e.g., financial analyst).

The Agency not rationalizing PECC staffing levels increases the risk it is paying for unnecessary staffing positions for 911 services.

6. We recommend the Saskatchewan Public Safety Agency rationalize the necessary level of Provincial Emergency Communications Centre staff to support funding approvals for its service provider.

The Agency also approves an annual administrative fee paid to CanOps each year as part of the approved budget request. This administrative fee increased from \$547,000 in 2021–22 to \$1.2 million in the 2024–25 budget request. The budget request provided to the Agency from CanOps does not provide any detailed information as to what this fee is used for in regard to PECC (i.e., what expenses the fee covers). The Agency had not approved the 2024–25 budget for CanOps at June 2024.

According to its 2022–23 audited financial statements, CanOps generated \$1.2 million in other revenue from sources outside of Agency funding. Without the Agency sufficiently scrutinizing what the administration fee is used for, there is an increased risk that Agency funding for public safety communications is used for other non-Agency programs by the service provider.

The Agency needs to formalize expectations for what costs it considers eligible for the administrative fee provided to CanOps. Otherwise, there is a risk public money is not used for intended purposes.

7. We recommend the Saskatchewan Public Safety Agency determine eligible expenses for the administration fee it pays to the Provincial Emergency Communications Centre service provider.

We also found the Agency did not obtain and assess quarterly financial reports from CanOps during 2023–24.

Under the Agency's service agreement, CanOps is required to provide quarterly financial reports detailing budgeted and forecasted revenues, expenses, net profit or loss, along with variance analysis. Without receiving such financial information, Agency senior management may not know about any budget overages and not address them in a timely manner.

Further, CanOps does not have to provide audited financial statements to the Agency until six months after year end (September 2024), so as of June 2024, the Agency does not know whether CanOps exceeded the approved 2023–24 budget. CanOps did exceed the approved budget in 2022–23 by \$233,000 and the Agency provided additional funding to cover the overage in 2023–24.

Under the service agreement, CanOps is required to report to the Agency any expenditures in excess of budget at the time anticipated. The Agency did not receive any such notifications of budget overages or surpluses during 2023–24.

Without timely, periodic financial reports from CanOps, there is an increased risk budget overages may occur requiring future Agency funding, rather than identified and mitigated earlier.

8. We recommend the Saskatchewan Public Safety Agency obtain and review timely quarterly financial reports from the Provincial Emergency Communications Centre service provider to confirm appropriate expenses are incurred for delivering 911 services.

4.9 Complaints about 911 Fire Calls Evaluated

The Saskatchewan Public Safety Agency formally logs complaints and inquiries about 911 services provided at the Provincial Emergency Communications Centre and responds to complaints in a timely manner.

The Agency maintains a complaints policy. The policy states the Agency is responsible for public and client (e.g., fire department) consultations and/or complaints regarding service delivery, contracts, investigations, and inquiries related to PECC. Complaints involving the service provider (CanOps) are discussed and followed up with the support of the service provider, as required.

Complaints/inquiries may come through email or phone. All complaints/inquiries and related responses are tracked in a ticketing system, assigned, and closed once complete.

Our review found many of the fire-related complaints involved fire boundaries (may affect who pays for a fire emergency response), dispatch concerns, or call transcript requests.

We assessed two logged complaints related to 911 fire services. In both cases, the Agency investigated the complaint and provided a response, the investigation support aligned with the details of the log; staff sent the response in a timely manner (less than a month later).

Investigating complaints from the public and clients as well as responding timely and consistently helps identify process improvements needed and supports fair treatment of complainants.

4.10 Public Education Initiatives about 911 and Fire Safety in Place

The Saskatchewan Public Safety Agency uses a formal education strategy and engages the public through its Facebook page and website about appropriate use of 911 and fire safety.

The Agency has a *Public Education Strategy 2022–2026*, which strives to increase fire safety awareness and emergency preparedness within urban, rural and First Nations communities. The strategy includes safety presentations at various locations (e.g., schools, libraries, community centres) about fire and 911 using a variety of tools (e.g., presentations,

brochures, fridge magnets). We found, in 2023, the Agency visited over 40 locations and connected with over 1,250 students.

The Agency provides emergency information on fridge magnets to help children in rural or remote communities describe their area to dispatchers (e.g., directions from a landmark).

The Agency did see an increase in unintentional 911 calls with new emergency 911 settings on smartphones in 2023. Those settings not only make it easier to call 911 without unlocking a smartphone, but also make it easier to call 911 when not intending to do so. We found the Agency posted information about how to turn off this emergency 911 setting on smartphones to avoid unintentional 911 calls.

We found the Agency also has a brochure, '911 Use It, Don't Abuse It', intended to inform proper 911 use and reduce unintentional or abandoned calls, including details about when to call 911, how to prepare children to call 911, and promoting an understanding of impacts of prank calls.

Educating the public on the proper use of 911 informs people about how and when to call 911, what information to provide, and helps to reduce inappropriate calls to 911.

5.0 SELECTED REFERENCES

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