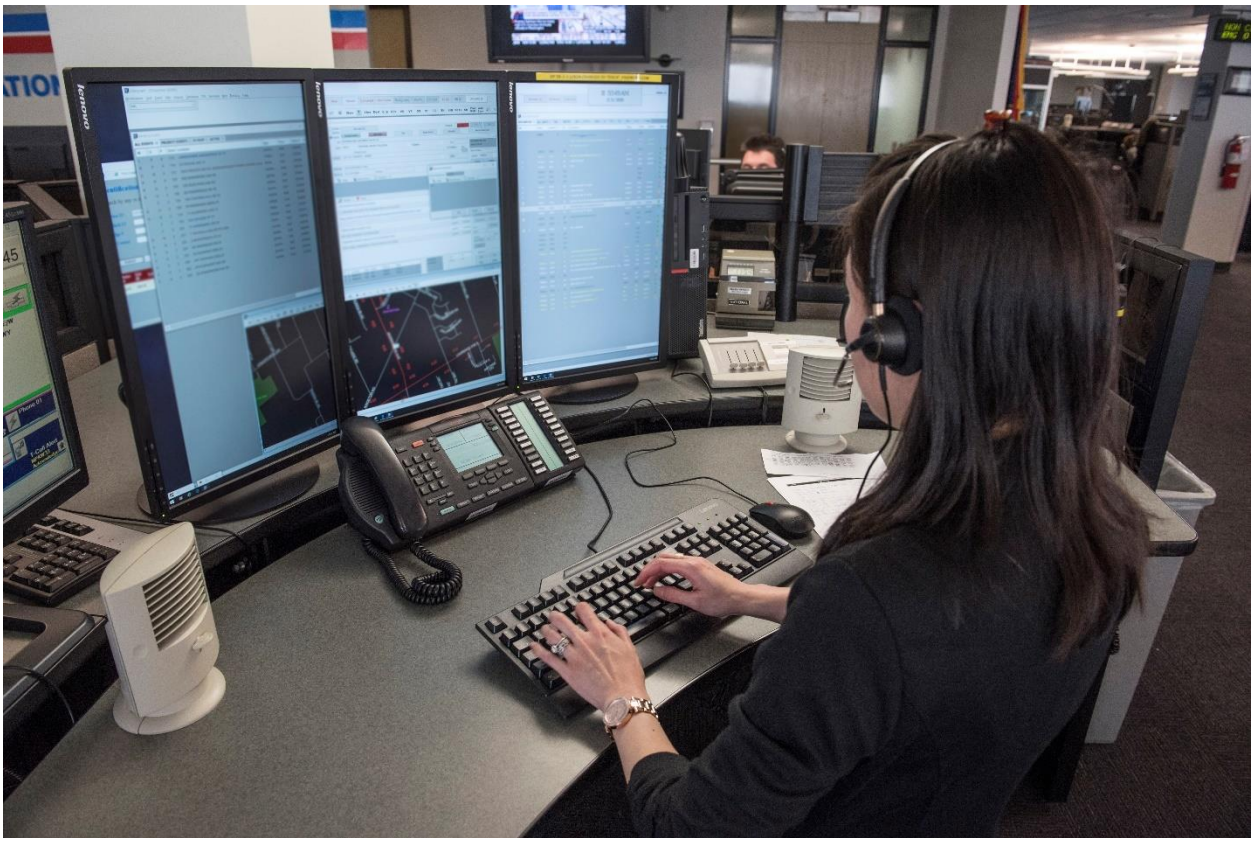

Toronto Police Service – Audit of 9-1-1 Public Safety Answering Point Operations

Better Support for Staff, Improved Information Management and Outcomes

June 14, 2022

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Auditor General

AUDITOR GENERAL TORONTO

Table of Contents

Executive Summary

TPS is one of the largest municipal police services in North America

The Toronto Police Service (TPS) delivers law enforcement and policing services in the City of Toronto. As one of the largest municipal police services in North America, TPS and its Communications Centre serve the city with the largest population in Canada[1]. With a 2022 budget of $1.262 billion, TPS ranks as the second-largest gross expenditure in the City of Toronto's annual operating budget.

Call centre answers all emergency 9-1-1 calls for police, fire and ambulance

TPS Communications Services Unit operates a Communications Centre (call centre) that acts as the Public Safety Answering Point (PSAP) for the City of Toronto. The communications operators at the call centre answer all emergency 9-1-1 calls, including those for fire and paramedic services, across the City and dispatch police services when needed.

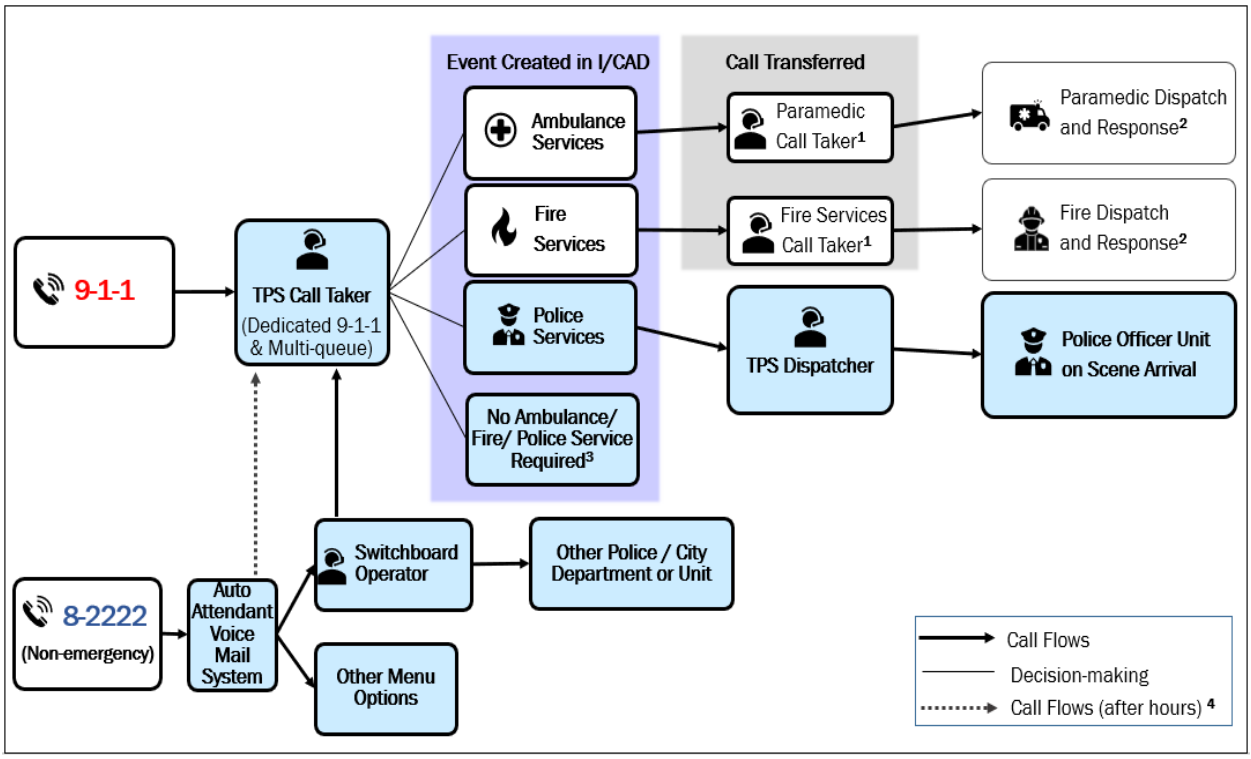
Call centre also answers dedicated non-emergency police line (416-808-2222)

As shown in Figure 1 below, they also transfer calls that request fire and/or ambulance services and answer calls from the dedicated non-emergency police line 416-808-2222 (8-2222) that are transferred from the switchboard operators. The blue shaded boxes in Figure 1 are under TPS's responsibilities. This audit assessed the entire call flow process except the call taking[2] and dispatching functions at Toronto Paramedic Services and Toronto Fire Services.

[1] Based on 2021 Canadian Census data

[2] We analyzed the timeliness of answering the transferred calls from TPS but not the actual call taking functions at Toronto Paramedic Services and Toronto Fire Services.

Figure 1: Call Flow Process for a Call for Service to the Call Centre through the Emergency 9-1-1 Line or the Dedicated Non-emergency Line 8-2222



[1] The call takers remain on the line after the call is answered by the paramedic and/or fire services call takers to determine if police are also required for the call or not
[2] Not in the scope of this audit
[3] Some of these calls could be diverted to other agencies (e.g. 3-1-1 for information on City services) or community-based alternative responders (e.g. 2-1-1 as part of the Toronto Community Crisis Service pilot project) or passed on to the crisis worker who is recently co-located in the call centre as part of TPS's pilot with the Gerstein centre.
[4] During operating hours (Monday to Friday from 7 am to 10:45 pm), the switchboard operator answers the call when the caller presses "0" using the auto attendant system. The switchboard operator may transfer the call to a call taker by routing it to the emergency queue or non-emergency queue, depending on the assistance required. When callers press "0" outside of these hours, the call will be routed directly to the TPS call takers.

Call centre received and responded to over 1.9M calls annually in 2018 and 2019, just under 60% of the calls were to the 9-1-1 line

As shown in Table 1 below, in 2018 and 2019, prior to the COVID-19 pandemic, the call centre received and responded to over 1.9 million calls annually for service, with slightly less than 60 per cent of them on the emergency 9-1-1 line. The remaining calls were received through the dedicated non-emergency line (8-2222). In 2020, the calls for service dropped to 1.7 million and rose slightly to 1.8 million in 2021 - the decrease from 2019 was likely due to COVID-19 pandemic. However, the proportion of emergency 9-1-1 dialed calls was slightly more than 60 per cent for 2020 and 2021 during the pandemic. Over this period from 2018 to 2021, the call centre received an average of about 5,000 calls per day, almost 3,000 of which were 9-1-1 calls.

Table 1: Total Emergency Calls that Dialed 9-1-1, Non-emergency Calls that Dialed 8-2222, and Total Events Dispatched to Police, 2018 to 2021

	All Calls[1]	Emergency 9-1-1- Line[2]	% of Total	Non-emergency 8-2222 Line[3]	% of Total	# of Dispatched Events to Police[4]
2018	1,932,545	1,094,182	57%	838,363	43%	702,307
2019	1,943,326	1,136,110	58%	807,216	42%	733,317
2020	1,682,108	1,039,663	62%	642,445	38%	671,096
2021	1,749,074	1,101,970	63%	647,104	37%	534,344[5]
Yearly Average	1,826,763	1,092,981		733,782		

Source: Management Morning Statistics Reports and information from management

[1]A portion of the calls are transferred to other agencies (fire, ambulance, Ontario Provincial Police, etc.). In 2018 and 2019, there were 349,214 and 270,596 transferred calls to other agencies (discussed in Section A.6.).
[2]Calls that dialed 9-1-1 directly, not including those transferred to 9-1-1 queue by the switchboard.
[3]Calls that dialed 8-2222 and switchboard operators transferred to the TPS call takers.
[4]The total number of dispatched events include dispatch to divisions, Primary Report Intake Management and Entry (PRIME), and parking enforcement. It does not include the vehicle subject related dispatch (e.g. vehicle stops, vehicle pursuits, subject stops) that are initiated by police officers.
[5] TPS could not provide information for November and December at the time of the audit. We were informed that TPS is experiencing technical issues with the new Intergraph Computer Aided Dispatch (I/CAD) reporting repository. TPS advised they will be working directly with the vendor to address and correct all issues that impact the ability to report and analyze data.

TPSB requested the Auditor General to conduct a risk assessment and audits of TPS

At the request of Toronto Police Services Board (TPSB), the Auditor General completed a risk assessment of the Toronto Police Service (TPS) to develop a risk-based audit plan. This plan was independently developed by the Auditor General and sets the audit priorities at TPS over the next five years.

Audit of 9-1-1 in the 2021 Audit Plan

The Auditor General's 2021 Audit Plan included an audit of the Toronto Police Service's 9-1-1 operations.

Objectives for this audit

Our audit objectives were to assess whether the Toronto Police Service's 9-1-1 Communications Centre provides access to emergency services in an effective and timely manner, as well as identifying potential areas of improvement to the efficiency and economy of operations.

Two of the questions we wanted to answer included:

1. Are 9-1-1 services provided in a timely manner, leading to a timely emergency response?
2. Is there optimal use of resources in Toronto for the 9-1-1 Communications Centre?

The Auditor General's other project entitled "Review of Toronto Police Service – Opportunities to Support More Effective Responses to Calls for Service" examines the use of front-line officer resources and the area of response times is examined further.

City Council requested the Auditor General to prioritize the 9-1-1 operations audit and directed the City Manager for an analysis of the feasibility of moving 9-1-1 operations

As part of City Council's decisions discussing the Community Crisis Support Service Pilot at its February 2, 3, and 5, 2021 meetings[3], Recommendation 10 requested the Auditor General to prioritize her planned 2021 audit of the Toronto Police Service's 9-1-1 operations. City Council's Recommendation 12 directed the City Manager for an overview of 9-1-1 operations and an analysis of the feasibility of moving 9-1-1 operations from TPS to a non-police City service. Further, that the City Manager's analysis be informed by any findings made by the Auditor General in the context of her audits of TPS.

Why this audit is important

The call centre operates on a demand-based model. This means TPS cannot directly control the volume of calls the call centre receives – that is based on demand from the public. Communications operators answer the calls and depending on the emergency response needed, transfer the calls to fire or ambulance, or dispatch police services when required. The call centre drives the first level of front-line police resourcing responding to the incoming demands.

The 9-1-1 PSAP operation is an important area to audit for these reasons:

1. The timeliness of call answering is critical so that people receive the emergency response needed as soon as possible, as a person's life or safety can often be at risk.

2. The assessment made by communications operators determines the priority level which then impacts how timely the emergency response is, based on the event type selected and whether the default priority was adjusted or not. If the assigned priority level is too low, the timing of the emergency response could negatively impact the life or safety of a person. If the assigned priority level is too high, it impacts the availability of police officers for other higher priority calls and the efficient use of resources.

3. The decisions and actions of the communications operators determine whether a call is dispatched or not for police services, which has a direct impact on the level of front-line police resourcing required. The majority of calls that require a police response are dispatched to TPS's Primary Response Unit officers.

[3] Agenda Item History - 2021.EX20.1 (toronto.ca)

Findings in 5 areas

We categorized our key findings as follows:

1) Answering calls
2) Assigning call event types and priority levels
3) Dispatch and response times to emergency events
4) New technology, 9-1-1 levies, and other opportunities
5) Community education and awareness

1) Answering Calls

The timeliness of call answering is critical so that people receive the emergency response needed as soon as possible, as a person's life or safety can often be at risk.

9-1-1 service level standard not being met

TPS adopted the NENA industry standard as its service level standard – answer 90% of all 9-1-1 calls within 15 seconds

Throughout 2018 to 2021, the 9-1-1 PSAP did not generally meet its service level standard for answering 9-1-1 calls, which it adopted from the widely accepted industry standard established by the National Emergency Number Association (NENA). The service level standard requires 90 per cent of all 9-1-1 calls to be answered within 15 seconds[4].

There were a limited number of days when the service standard was met. From our research on publicly available information and consultation with our expert advisor, we noted many other jurisdictions are also challenged in meeting the timeframe required in this standard.

Improvement in daily average wait time – more days with a lower daily average wait time in 2021 than in 2018

From TPS's management reports, we found that over this period, there was an improvement in the daily average wait time. As shown in Table 2 below, based on the daily average wait time, the number of days in a year that a caller who dialed 9-1-1 needed to wait for more than 30 seconds to be answered had decreased from 2018 to 2021. For example, in 2018 there were 117 days in which a 9-1-1 call on average needed to wait for more than 30 seconds to be answered, and this decreased to 67 days in 2021.

[4] NENA 9-1-1 call processing standard (https://www.nena.org/page/CallProcessingStnd) requires that "90% of all 9-1-1 calls be answered within 15 seconds and 95% answered within 20 seconds". The Toronto's 9-1-1 PSAP adopts and measures its performances against the first standard but not the second one.

Table 2: A Breakdown on the Number of Days by 9-1-1 Calls Daily Average Wait Time, 2018 to 2021

	Daily Average 9-1-1 Wait Time (# of days)			
	2018	2019	2020	2021
15 sec. or less (the wait time target in service level standard)[1]	66	170	216	123
More than 15 sec. to 30 sec.	182	157	121	175
Subtotal	**248**	**327**	**337**	**298**
More than 30 sec. to 1 min.	103	38	29	62
More than 1 min. to 2 min.	13	0	0	5
More than 2 min.	1	0	0	0
Subtotal	**117**	**38**	**29**	**67**
Total	**365**	**365**	**366**	**365**

Source: Audit analysis of the Morning Statistics Reports
[1]The wait time target in the service level standard prior to December 2020 was 10 seconds

Call answering wait time varies significantly throughout the day

Call volume and available staff resources impact 9-1-1 call answering wait time. We found that the **average 9-1-1 call answering wait time varies significantly throughout the day** (i.e. how timely a call can be answered depends on the time of the day a caller calls for assistance). During non-peak hours in 2021[5], the average answering wait time was seven seconds, but during peak hours[6] it was 28 seconds, which is almost twice the industry standard. In 2021, **at least 13,260 calls** that dialed 9-1-1 **waited more than a minute** to be answered, of these **at least 424 waited more than four minutes**.

The longer the wait, the greater the risk and potential life or safety impact

Since the 9-1-1 line is for emergency situations that require immediate assistance, the longer a caller waits for the call to be answered, the greater the risk and potential impact on the life or safety of people or property as it delays the time for emergency response.

More available staff may be needed for 9-1-1 PSAP to achieve its service levels along with other strategies to support staff and operational needs

TPS should ensure more available and/or deployable staff are in place, particularly during peak period times, to improve 9-1-1 call answering times and achieve its service levels of answering 90 per cent of all 9-1-1 calls within 15 seconds. Also, other strategies are needed to minimize staff sick time, injured on duty, overtime, and to improve the recruitment process, retention, and the health and well-being of the communications operators.

TPS's data and information management are keys to improving its workforce management

TPS's data and information management are keys to improving its workforce management, so that peak and non-peak periods are better staffed to achieve its service levels and reduce answering wait time. This may also improve staff health and well-being, which in turn may help to reduce daily staff absences, unavailable time on the phone, and injured on duty (discussed in Section A.4).

[5] From 11:30 pm to 10:30 am
[6] From 2:45 pm to 9:30 pm

TPS needs better data and information to better manage its workforce and inform decision-making

Data and information are also key for monitoring and improving operational performance. TPS does not currently track the data it needs to conduct the level of analysis required to properly inform their decision-making. The issue with a lack of data and information was also noted in past TPS internal and external reviews of the call centre conducted in 2015 and 2019. It is critical that TPS improve its data and information management in this area, as it can impact the lives and safety of people.

The lack of available data and limitations with TPS's information management created challenges for our audit and a scope limitation

The lack of available data and limitations with TPS's information management created many challenges in completing this audit (described in Exhibit 1) and the results presented in this report required an enormous effort and amount of time by our audit team. These results would be more easily and quickly produced if TPS had the data it needs in an easily accessible and automated format. It's also important to note that the upcoming new system for Next Generation 9-1-1 (NG9-1-1)[7] will not address this issue. The need for better data and information systems should be incorporated into TPS's data strategy going forward. We had a scope limitation for this audit as a result of the limitations with the data available, further described in the Audit Objectives, Scope and Methodology section, and Exhibit 1 in this report.

Answering time for transferred calls can be improved further, particularly for Fire

Transfer time to other emergency service agencies (fire, ambulance, Ontario Provincial Police) averaged less than 30 seconds and is dependent on the call taker availability at those other agencies. The timeliness of answering TPS's transferred calls could be improved further, particularly for Toronto Fire Services calls.

Total non-emergency calls made up 57% of 9-1-1 dialed calls

The emergency 9-1-1 line is for situations that require immediate emergency assistance. However, we found that from January 2018 to July 2021, **of the calls dialed to the 9-1-1 emergency line**, total non-emergency related calls made up **57 per cent** of those calls dialed. The breakdown is shown in Figure 2 below and included:

[7] This is a new digital-based system that will replace the call centre's Enhanced 9-1-1 system.

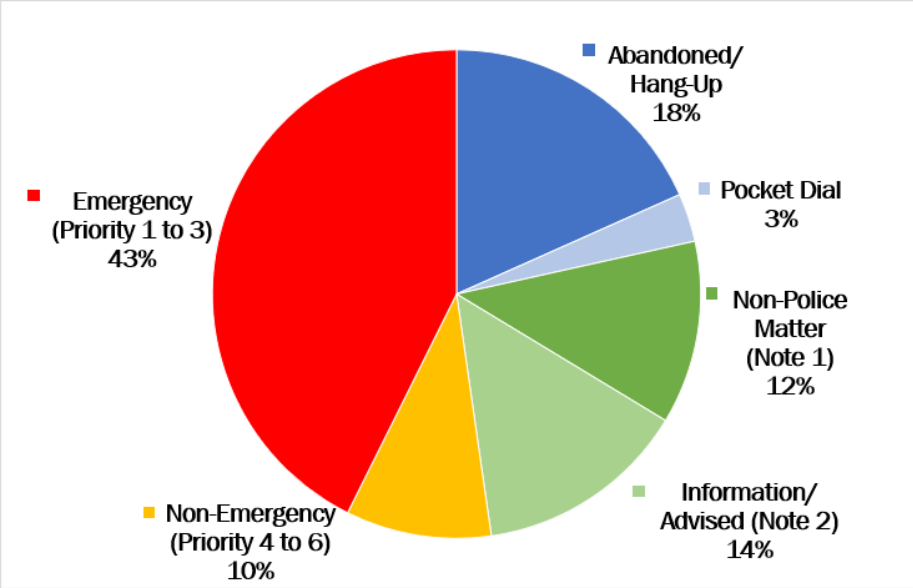
- **18 per cent** were **abandoned or hang-up calls**. A call back had to be made for each of these calls to confirm that emergency assistance was indeed not needed.
- **3 per cent** were related to **pocket dials** from cellular devices. Unless it was clear from the background noise that it was a misdial, call takers had to call back these calls to confirm the misdial.
- **12 per cent** of calls were **not police or other emergency services matters**. The calls were either referred to 3-1-1 or 2-1-1, or the call takers determined that no police response was required.
- **14 per cent** of these calls where callers were asking **for referral information or advice (i.e. "Advised" event type)**(e.g. Collision Reporting Centre, Animal Control, see a lawyer, civil matter, etc.). We found that police service was not dispatched for almost all of these calls. However, these calls took up the time that call takers could use to respond to other calls.
- **10 per cent** of these calls were for **lower priority events** where imminent or potential danger and/or injury was not a factor. Police attendance may be required for some of these events. We found police service was not dispatched for 40 per cent of these calls[8]. However, the call takers' time was occupied by answering these calls rather than other higher priority calls.

Repeat callers dialed 9-1-1 for non-emergency matters

In addition, we found many callers **repeatedly** calling 9-1-1 for low priority non-emergency events where police were not dispatched, as well as for abandoned, hang-up or pocket dialed calls.

[8] This does not represent all lower priority non-emergency calls-for-service that police attended. There were additional lower priority events that came from the dedicated non-emergency line (8-2222), or were officer initiated, walk-ins to police station, etc.

Figure 2: Breakdown of the Types of Calls Received Through the 9-1-1 Line, January 2018 to July 2021



[1] Non-police matter calls were either 3-1-1 or 2-1-1 referrals, or it was determined by the communications operators that no police response was required for a 9-1-1 dialed call.
[2] These calls were for information / advice and assigned as "Advised" event type by call takers. This event type has a default priority 6 and is categorized as a miscellaneous non-emergency event type. It is used when a caller is asking for referral information or advice (e.g. information on Collision Reporting Centre, Animal Control, see a lawyer, civil matter, etc.).

Public needs better clarity on when to call 9-1-1; public education and awareness can help

The high proportion of non-emergency calls that dialed 9-1-1 indicates the need for better clarity and communication to the public on when to use the 9-1-1 emergency line, and the options of TPS's non-emergency line (8-2222) or other alternative non-police resources like 2-1-1 and 3-1-1. Public education and awareness should help to lower the volume of calls for lower priority non-emergency events and calls that do not require police assistance.

TPS initiatives may not be reaching target audiences

TPS has not had a general public education campaign since 2017 and has not had any recent targeted awareness programs. In 2017, TPS and City 3-1-1 staff held a 9-1-1 awareness campaign at the Canadian National Exhibition aimed to increase public awareness on the use of 9-1-1, the 8-2222 line, and the City 3-1-1 number. Afterwards in 2018 the City and TPS launched a "Making the Right Call" advertising campaign. TPS mainly utilizes its website and social media accounts, which may not reach certain target audiences. Also, educational materials should be refreshed and refocused periodically based on results of analysis of calls received with the aim to reduce unnecessary calls to 9-1-1.

Opportunities for TPS to collaborate with the City to improve public awareness

There are opportunities for TPS, in collaboration with the City, to improve public awareness and understanding of the emergency and alternatives including the dedicated non-emergency line and other non-police alternative resources.

2) Assigning Call Event Types and Priority Levels

Communications operators have a very difficult job

Communications operators have a very difficult job – they need to use a high level of judgement and make quick decisions, often under high stress. The potential for making decisions that could have life or death consequences can be a daily occurrence.

Over 85% of the calls in our sample were assessed properly for event type and priority rating

Over 85 per cent of the time, in our statistically valid sample, call takers appropriately assessed the event type of the reported incident and priority rating of the urgency for police response. However, there is room for improvement, particularly for priority rating assignment. The assessment made by communications operators of the event type and priority level impacts how timely the emergency response will likely be. If the priority level selected is too low for that event, the timing of the emergency response could negatively impact the life or safety of a person. If the priority level is too high, it impacts the availability of police officers for other higher priority calls and the efficient use of resources.

Example of a call event that should have been assessed a higher priority level

Here is one example of a call event that should have been assessed at a higher priority level:

> A person was randomly fighting and kicking cars in public, throwing himself into traffic, and reportedly almost got hit by vehicles. This was a risk to life and danger to the person, the civilians around the person, and the drivers on the road, and the reported event was in progress. Multiple calls were received about this incident.
>
> The call was assigned as a Hazard event type and remained with a default priority 2 instead of upgrading it to a priority 1. The incident was taking place during a busy period around 5 pm. Police arrived 19 minutes after the event was sent to dispatch.

Important to further improve for assignment of event type or priority rating as these are 9-1-1 calls

It is important to note that even though we did not find a high percentage of samples with an inappropriate event type or priority rating assigned, given that 9-1-1 calls often involve the life or safety of people, further improvement in this area is needed.

Calls are often not upgraded or downgraded from system default priorities

Communications operators did not often upgrade or downgrade the system default priorities that are set for each type of event. However, we found that sometimes it is necessary to adjust the default priority, depending on the event type and the circumstances and nature of the call.

Opportunities to better support communications operators

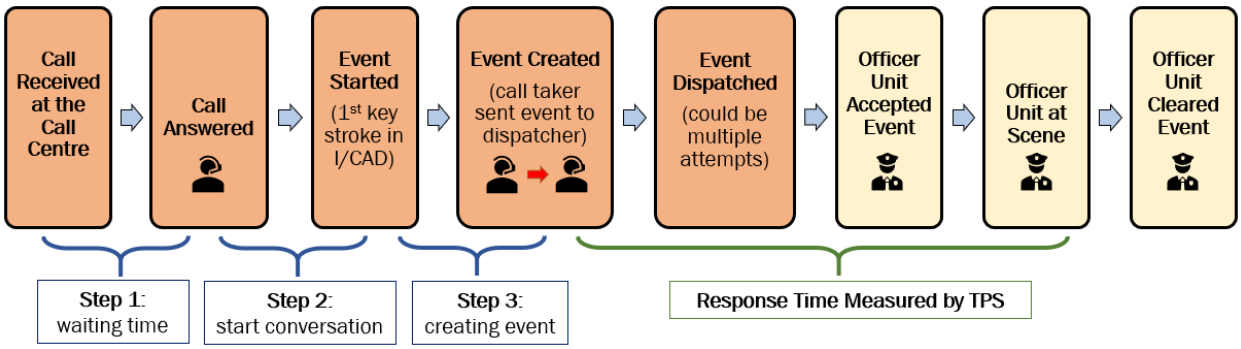
Other opportunities to better support communications operators in performing their call taking and dispatching functions include technological changes to help guide and make their decision-making easier and potentially less stressful, providing improved clarity in their operational manual, and providing additional training.

3) Dispatch and Response Times to Emergency Events

Police response time measurement can be improved

TPS's police response time measurement can be improved by including the time from when a call is received by the call centre and waiting to be answered to when the event for the call is created by a call taker in the system and sent to the dispatcher (represented by Steps 1 to 3 in Figure 3 below).

Figure 3: Action Points (Steps 1-3) that are Currently Excluded from TPS Response Time Measurement



Dispatchers are reliant on the availability of police officers to dispatch events

Dispatch times are included in TPS's response time measurement and can be quite long, however the dispatchers are reliant on the availability of police officer units to accept a dispatched event. They do not dispatch another event to an officer who has not cleared a previously accepted event, as they presume that the officer is addressing the event until it has been cleared. At times, dispatchers may estimate the completion of an event based on the officers' reported "at scene" arrival time and check on the officer unit. However, since there are no TPS guidelines for expected clearance times on the various event types, dispatchers can only use their judgement and experience.

Police officers need to improve communication with their dispatchers

Dispatchers are further challenged in knowing whether officer units are available if officers do not report their "at scene" arrival time or do not inform the dispatchers that they have cleared the previously accepted event and are ready for the next one.

21% of dispatched calls did not report arrival time

We found that from January 2018 to July 2021, about 21 per cent (268,450) of dispatched events did not report "at scene" arrival time. We examined the Automatic Vehicle Location (AVL) records and relevant documentations for 16 of these cases and found that in four of them, there was a delay in the range of 32 minutes to over 1.5 hours for the officer unit to clear the accepted event.

Officers need to consistently advise dispatchers of their arrival and clearance times on call events

If an officer unit does not communicate their availability after finishing the assigned event, the dispatcher would not know the officer unit is available to attend another event.

4) New Technology, 9-1-1 Levies, and Other Opportunities

Changes to system for mandated NG9-1-1 requirements increases risk of fiscal sustainability

Toronto's 9-1-1 PSAP, as well as the PSAPs in other jurisdictions, are facing a fiscal sustainability issue with implementing the mandated changes to 9-1-1 services requirements. The Canadian Radio-television and Telecommunications Commission has mandated a country-wide upgrade to a new digital-based system commonly called Next Generation 9-1-1 (NG9-1-1). This new system will allow callers to send text messages, photos, videos, and other types of data to the call centre. The 9-1-1 PSAP is in the process of implementing the NG9-1-1 requirements. The uptake and impact on the facility requirements, service delivery, and staffing levels of other forms of communication are yet to be determined.

Some funding is in place, but it may not be sufficient

The NG9-1-1 project has an approved project cost of $10.3 million ($8.9 million approved budget and $1.4 million life to date cost) in TPS's 2022 and 2031 Capital Budget. However, it is not clear if that is sufficient funding to upgrade to NG9-1-1 requirements, including the necessary equipment, renovation, facilities, and staffing. An expected cost of $78 million for a new facility requirement is not yet approved.

Police, fire and ambulance NG9-1-1 solutions should be integrated

It will be important to ensure that police/fire/ambulance systems (as well as future alternate response) are integrated in the new 9-1-1 solutions. Also, TPS's strategy for 9-1-1 data analysis tools should include the data needs identified in our report.

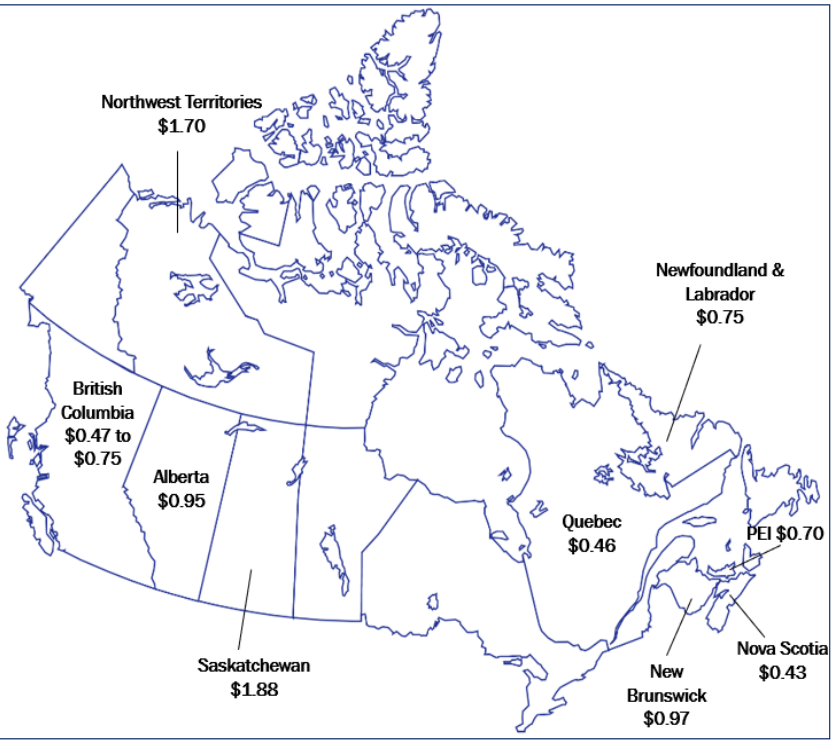
Potential for 9-1-1 levies in Ontario that are legislated in most other provinces

In most other provinces, legislated government 9-1-1 levies are charged to each phone line and remitted by telecommunication service providers to the provincial or local governments, which then distribute the funds to PSAPs. These 9-1-1 levies range from $0.43 to $1.88 per month as shown in Figure 4 below. Legislation does not exist in Ontario for these 9-1-1 levies to be remitted to PSAPs, but Section 259 of the *City of Toronto Act* allows for it.

Telecommunication service providers in Ontario are charging subscribers of certain service plans a non-government 9-1-1 access fee for their own infrastructure costs.

Figure 4: Breakdown of Current Monthly Legislated 9-1-1 Government Levies Charge in Other Provinces, Municipalities, and Territories

Province and Territories	Monthly Government Fee Per Phone Line
Alberta	$0.95 for wireless customers[1]
British Columbia	$0.47 to $0.75[2]
Manitoba	n/a – no user fee levy
New Brunswick	$0.97[3]
Newfoundland & Labrador	$0.75
Northwest Territories	$1.70
Nova Scotia	$0.43
Ontario	n/a – no user fee levy
Prince Edward Island	$0.70
Quebec	$0.46[4]
Saskatchewan	$1.88[5]



[1] Fee increased from $0.44 since September 2021
[2] Municipal levies, varying from different municipalities and not all municipalities are charging the levy. Those municipalities that have levies are charging wireless and/or landline.
[3] Fee increased from $0.53 since January 1, 2021
[4] Fee increased from $0.40 since August 2016
[5] Fee increased from $0.94 since April 7, 2021

Opportunity for potential funding source from government 9-1-1 levies

We were informed that TPS raised the issue of charging 9-1-1 levies in the past with the City and the province but did not receive approval. TPS and TPSB are part of the Interagency Advisory Panel formed in June 2019, and this group is advocating with the Provincial Government for a provincial strategy concerning the implementation and long-term sustainable funding for NG9-1-1 investments and requirements.

Given the fiscal sustainability issues with the upcoming changes, and the need for better data and information systems for the 9-1-1 PSAP operations as outlined in this audit, it would be timely to raise the potential funding source of 9-1-1 levies again.

A government 9-1-1 levy could raise an estimated $28.8M annually for Toronto, or $144M over a five-year period

According to the Canadian Radio-television and Telecommunications Commission – Communications Market Reports open data on retail mobile sector, 85.8 per cent[9] of the total population in Ontario were mobile device subscribers in 2019. Based on this penetration rate and Toronto's population in 2021 of 2.8 million, we estimated a **potential annual 9-1-1 levy of $28.8 million ($144 million over a five-year period)** using a monthly levy of $1 per mobile device subscriber in Toronto. This funding will increase as the population and number of mobile phone users continues to increase and if it also applies to landlines as well.

This potential funding could assist with implementing the NG9-1-1 requirements, as well as with implementing some of the recommendations in this report, such as technological solutions to better support communications operators, improving data and information, and increasing call diversion for non-emergency calls.

City Manager should consider factors and risks outlined in the audit when looking at feasibility of moving 9-1-1 operations to a non-police City service

Toronto's 9-1-1 PSAP model is commonly used in many other jurisdictions. There are other PSAP models used in some other jurisdictions but there is no one best model as it should be designed to meet the unique needs of a given jurisdiction and local context. City Council has directed the City Manager to conduct a review on the feasibility of moving the 9-1-1 PSAP operations from TPS to a non-police City service. This feasibility review should consider the factors listed below and other risks outlined in this audit:

- the potential impact on call answer and response times
- legislative feasibility
- cost/ benefit analysis
- staffing challenges and current collective bargaining agreement
- legal implications of any changes including legal risks, and legal requirements (e.g. using 9-1-1 audio and data records as evidence) for court proceedings
- governance model for PSAP operations
- emerging requirements (e.g. NG9-1-1).

The City's feasibility review should also consider whether the goals and outcomes can be more effectively and efficiently achieved through other strategies.

[9] Mobile subscriber penetration rates, as a per cent of total population. The penetration rate represents the number of subscribers as a percentage of the population.

5) Community Education and Awareness

Opportunities to improve public awareness to better manage call volume

There are opportunities for TPS, in collaboration with the City, to improve public awareness and understanding, including when to call 9-1-1 (and the information to provide upon calling), police non-emergency line (8-2222), TPS online reporting, and other helpful numbers such as 3-1-1 and 2-1-1.

Conclusion

The 9-1-1 PSAP has a crucial role

As the 9-1-1 PSAP for the City of Toronto, TPS call centre has a crucial role in ensuring the safety and security of the public and their properties. It is the first point of contact for those who call for emergency assistance. It also drives the first level of front-line police resourcing responding to the call-for-service demands.

Key success factors of the 9-1-1 PSAP operations

Both internal and external factors affect the success of the 9-1-1 PSAP operations. Internally, TPS needs to support the 9-1-1 PSAP operations by ensuring it has the resources and capacity to answer calls in a timely manner. TPS also needs to ensure there are proper information systems with the data, information and analysis available for regular monitoring and informed decision-making for the 9-1-1 PSAP operations. A proper information system is also needed for supporting other analytical needs such as identifying opportunities for alternate response strategies and informing and developing strategies for public education campaigns.

Externally, the efficiency of the secondary emergency communications centres (e.g. Toronto Fire Services) in answering transferred calls affects the 9-1-1 PSAP operations. The public also plays a key role in the success of the 9-1-1 PSAP operations by calling the 9-1-1 line only for emergency situations that require immediate police, fire, and/or ambulance assistance, and using the non-emergency line or other available non-police alternatives for other situations.

26 recommendations

We made 26 recommendations to TPS in the five key areas outlined in this report. In our view, the implementation of the recommendations contained in this report will further improve TPS's ability to keep Toronto safe.

Thank you

We express our appreciation for the co-operation and assistance we received from management and staff of Toronto Police Service, particularly TPS Communications Centre, Toronto Police Services Board, and Toronto Police Association. We would also like to express our appreciation for the cooperation we received from City Manager's Office, Toronto Paramedic Services, and Toronto Fire Services, in completing our audit.

Background

TPS is responsible for law enforcement in Toronto

Toronto Police Service (TPS) delivers law enforcement and policing services in the City of Toronto. As one of the largest municipal police services in North America, TPS and its Communications Centre serve the city with the largest population in Canada[10]. With a 2022 budget of $1.262 billion, TPS ranks as the second largest gross expenditure in the City of Toronto's annual operating budget.

TPS's call centre is the Public Safety Answering Point for the City

TPS established the 9-1-1 Communications Services Unit to provide an efficient and effective Communications Centre (call centre). This call centre acts as the Public Safety Answering Point (PSAP) for the City of Toronto. It ensures access to emergency services in the City with an objective to generate the appropriate response to calls for service in a timely and appropriate manner.

TPSB requested the Auditor General to conduct a risk assessment and audits of TPS

At the request of the Toronto Police Services Board (TPSB), the Auditor General completed a risk assessment of the TPS to develop a risk-based audit plan. This plan was independently developed by the Auditor General and sets the audit priorities at TPS over the next five years.

Audit of 9-1-1 in the 2021 Audit Plan

The Auditor General's 2021 Audit Plan included an audit of Toronto Police Service's 9-1-1 operations with a focus on examining its effectiveness and efficiency.

City Council requested the Auditor General to prioritize the 9-1-1 operations audit and directed the City Manager to analyze the feasibility of moving 9-1-1 operations

Further, as part of City Council's decisions discussing the Community Crisis Support Service Pilot at its February 2, 3, and 5, 2021 meetings[11], recommendation 10 requested the Auditor General to prioritize her planned 2021 audit of the Toronto Police Service's 9-1-1 operations. City Council's recommendation 12 directed the City Manager for an overview of 9-1-1 operations and an analysis of the feasibility of moving 9-1-1 operations from TPS to a non-police City service. Further that the analysis be informed by any findings made by the Auditor General in the context of her audits of TPS.

[10] Based on 2021 Canadian Census data
[11] Agenda Item History - 2021.EX20.1 (toronto.ca)

Chief oversees operations; TPS Board is the governing body	TPS is led by the Chief of Police with governance and oversight provided by TPSB[12]. The Chief of Police is responsible for administering the police services and overseeing its operations in accordance with the objectives, priorities and policies established by the Board[13].
Legislated 24/7 communications centre	Section 5 of the *Ontario Regulation 3/99 "Adequacy and Effectiveness of Police Services"*[14] under the *Police Services Act* requires that police services must have a communications centre that operates 24 hours a day to answer emergency calls for service. The communications centre can be "*provided by the police force, by another police force, by another municipal emergency service or on a combined or regional or co-operative basis"*.
Upcoming new regulations	We were informed that the Government of Ontario is drafting new regulations to be made under the *Community Safety and Policing Act, 2019*, which will replace the *Police Services Act* once it is in force. The new regulations, expected to take effect in 2022, may impact the provision of 9-1-1 PSAP operations as they examine who can legally provide the services of communications centre, what services are to be related to 9-1-1 communications centre operations, and how the adequacy of those services is defined.
Legislatively, dispatching 9-1-1 calls in Ontario appears to be a function that can only be performed by a police service under draft regulation	The draft regulation for section 14 Alternative Provision of Policing Functions of the *Community Safety And Policing Act, 2019*[15], indicates that the "dispatching members of a police service" is a prescribed policing function where the police service board may enter "into an agreement with another police service board or Commissioner to provide the policing function in the area…". There is also no relevant prescribed entity listed under the draft regulation for the provision of communications centre services. Accordingly, the dispatching of police services seems to be a function that only a police service will be allowed to perform. It is unclear if the call taking function is included as part of the policing functions at this time.

[12] As stated in Section 31 of the *Police Services Act*, which outlines the Board's specific statutory responsibilities, the Board is "*responsible for the provision of adequate and effective police services"* in Toronto.
[13] Toronto Police Services Board - Board Mandate (tpsb.ca)
[14] O. Reg. 3/99: ADEQUACY AND EFFECTIVENESS OF POLICE SERVICES (ontario.ca)
[15] showAttachment.do (ontariocanada.com)

Financial Highlights

The Communications Services Unit had net operating expenditures of approximately $36.4 million in 2021, an approved operating budget of approximately $40.1 million for 2022, and a total staff complement of 379[16]. Most of the expenditures are for salaries and benefits.

As at January 1, 2022, there were 225 civilian communications operators and 20 supervisors[17]. These staff work on a platoon basis rotating through day, afternoon, and night shifts to provide services covering 24 hours, seven days a week.

Communications Services Unit is responsible for the call centre and other services

In addition to receiving and responding to incoming calls for service, the other responsibilities of the Communications Services Unit include:

- working with other agencies and groups, including other police and emergency service providers to deliver communication systems.
- responding to requests for court and ongoing investigations requirements for audio and data records on 9-1-1 calls.
- maintaining radio communications with police units.
- training and development of communications operators.

Estimated $78 million for new communications centre is placed in unfunded category

In its 2022 Budget Notes, TPS management identified the need for a new communications centre requiring an estimated $78 million, noting that current and future operations cannot be accommodated in the current facility. It was also noted that the required funding needs to be jointly coordinated with other City Emergency Services and that it has currently placed this in the unfunded category. According to the Budget Notes, TPS will be conducting a feasibility study to review requirements and recommend a plan.

TPS call centre answers and transfers the 9-1-1 calls for Toronto Fire Services and Toronto Paramedic Services; Fire and Paramedic do not contribute resources to the 9-1-1 PSAP

Toronto Fire Services and Toronto Paramedic Services rely on TPS to answer and transfer the 9-1-1 calls for their emergency services in the City. These City Divisions maintain their own call taking and dispatching functions and do not contribute any resources to TPS for the emergency call taking function. The Toronto Fire Services and Toronto Paramedic Services call takers answer the calls transferred from the TPS call takers that need fire services and/or ambulance.

[16] The staff complement number excludes PRIME officers. The overall budget of $40.1 million includes the budgeted cost of about $5.9 million relating to PRIME officers.
[17] In addition, there was one Manager and two Assistant Managers who oversee the operations, as well as 10 switchboard operators.

Overall Call Volume

Call centre responded to over 1.9 million calls annually in 2018 and 2019 prior to COVID-19 pandemic

In 2018 and 2019, prior to the COVID-19 pandemic, the Communications Services Unit received and responded to over 1.9 million calls annually for service. Slightly less than 60 per cent of these were received on the 9-1-1 emergency line, while the remaining were received through the dedicated non-emergency line 416-808-2222 (8-2222).

In 2020, the total calls for service dropped to 1.7 million. The decrease from 1.9 million in 2019 was likely due to COVID-19 pandemic, starting with the first Emergency Order issued by the province on March 17, 2020. During the pandemic in 2020 and 2021, 9-1-1 calls were slightly more than 60 per cent of the total calls received. In 2021, the total calls rose slightly from 2020 to 1.8 million mainly due to the increase in emergency 9-1-1 calls, while the non-emergency calls remained consistent with the 2020 level during COVID-19.

From 2018 to 2021, call centre received an average about 5,000 calls a day, about 3,000 of these were 9-1-1 calls

Over this period, the call centre received an average of about 5,000 calls per day, almost 3,000 of which were 9-1-1 calls. Table 3 shows the breakdown of total calls that dialed the 9-1-1 emergency line and those that dialed the 8-2222 non-emergency line, for the years 2018 to 2021.

Given the impact of the COVID-19 pandemic, the 2018 and 2019 data may be more representative of typical call volume and proportion of emergency and non-emergency calls.

Table 3: Total Emergency Calls that Dialed 9-1-1, Non-emergency Calls that Dialed 8-2222, and Total Events Dispatched to Police, 2018 to 2021

	All Calls[1]	Emergency 9-1-1 Line[2]	% of Total	Non-emergency 8-2222 Line[3]	% of Total	# of Dispatched Events to Police[4]
2018	1,932,545	1,094,182	57%	838,363	43%	702,307
2019	1,943,326	1,136,110	58%	807,216	42%	733,317
2020	1,682,108	1,039,663	62%	642,445	38%	671,096
2021	1,749,074	1,101,970	63%	647,104	37%	534,344[5]
Yearly Average	1,826,763	1,092,981		733,782		

Source: Management Morning Statistics Reports and information from management

[1]A portion of the calls are transferred to other agencies (fire, ambulance, Ontario Provincial Police, etc.). In 2018 and 2019, there were 349,214 and 270,596 transferred calls to other agencies (discussed in Section A.6.).
[2]Calls that dialed 9-1-1 directly, not including those transferred to 9-1-1 queue by the switchboard.
[3]Calls that dialed 8-2222 and switchboard operators transferred to the TPS call takers.
[4]The total number of dispatched events include dispatch to divisions, Primary Report Intake Management and Entry (PRIME), parking enforcement. It does not include vehicle subject related dispatch (e.g. vehicle stops, vehicle pursuits, subject stops) that are initiated by police officers.
[5]TPS cannot provide information for November and December at the time of the audit. We were informed that TPS is experiencing technical issues with the new Intergraph Computer Aided Dispatch (I/CAD) reporting repository. TPS will be working directly with the vendor to address and correct all issues that impact the ability to report and analyze data.

9-1-1 Public Safety Answering Point (PSAP) Operations

Call centre is the PSAP for the City with standard to answer 90% of 9-1-1 calls within 15 seconds

As the PSAP for the City, the call centre answers all 9-1-1 calls and then depending on the service requested, may re-route the caller to Toronto Fire Services, Toronto Paramedic Services, or another police force if the requested service is outside of TPS jurisdiction. It also receives and answers non-emergency calls.

Since there is no legislated standard for emergency call-answering, the Communications Services Unit aims to answer emergency calls for service in accordance with the widely accepted industry standard established by the National Emergency Number Association (NENA). This standard was recently revised such that 90 per cent of 9-1-1 emergency calls be answered within 15 seconds.

Call centre answers calls from both the 9-1-1 emergency line and the 416-808-2222 police non-emergency line

The calls for service from the public can reach the call centre either through the 9-1-1 emergency line or TPS police non-emergency line 416-808-2222 (8-2222).

	The 9-1-1 line is intended to be used in emergency situations that require immediate assistance from police, fire, and/or ambulance services. The 8-2222 non-emergency line is intended for situations that are not an emergency but still require police assistance[18].
Dispatchers at call centre dispatch for police services	Once a call is determined to be a request for police service, it is then dispatched by the dispatcher at the call centre.
Communications operators are fully trained for both call-taking and dispatching functions	The call centre is divided into a call taking area and a dispatch area. All the communications operators are fully trained to perform both call taker and dispatcher functions. The communications operators assigned as "call takers" answer emergency 9-1-1 calls[19], calls that are transferred from the switchboard operators to the operational floor[20], and handle internal requests. The communications operators assigned as "dispatcher" assign calls for service to police officers where police presence is required, handle requests for information from officers, and manage multiple radio equipped units.
There is a maximum number of emergency and non-emergency lines	At any time of the day, the call centre must assign a communications operator to each of its dispatch desks because there must be an operator to assign the event to an officer unit for the divisional area. Depending on staff scheduling and the actual number of operators at work, the call centre then assigns the call taker desks. There is a maximum number of phone lines dedicated to answering 9-1-1 emergency calls and non-emergency calls (8-2222). Calls are answered on a "First In – First Out" basis. 9-1-1 calls are prioritized over the calls received from the non-emergency lines. If calls in the 9-1-1 queue already occupied all the phone lines dedicated to 9-1-1 calls, any subsequent incoming 9-1-1 calls would receive a busy signal.

[18] The switchboard operators are the first point of contact for the calls to 8-2222. The switchboard hours are Monday to Friday from 7am to 10:45 pm. When the switchboard is staffed with operators, callers pressing "0" will be answered by the switchboard operators, who then may transfer the call to the operational floor handled by call takers. The call could be routed to the emergency queue or the non-emergency queue depending on the circumstances When callers press "0" after hours, the call will be routed directly to the call takers on the operational floor.

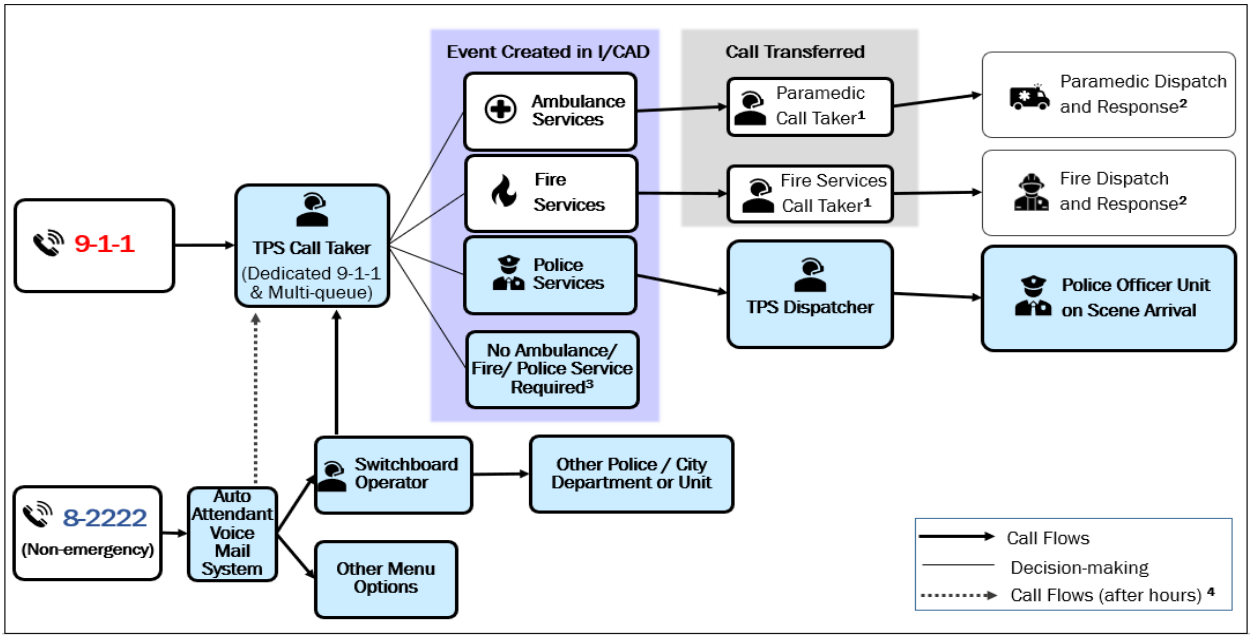
[19] At times, communications operators could be assigned as "dedicated 9-1-1 call taker" who only answer calls that come through the 9-1-1 line.

[20] Calls that dialed 8-2222 would be first answered by an auto attendant voice mail system with options for callers to choose. The caller can also choose to speak to a switchboard operator, who after determining the service requested, may transfer the call to the required unit or the operational floor to be answered by a call taker in the emergency 9-1-1 queue or non-emergency queue.

Recorded message played if no operator immediately available

If there is no available communication operator to answer the call, it is placed in queue and a recorded announcement is played to the first six callers; a second message is played if the call is still not picked up. If there are more than six callers in queue, the seventh call would not get the recorded announcement but just continue ringing until answered. Figure 5 shows the call flow process. The blue shaded boxes in the figure are under TPS's responsibilities. This audit assessed the entire call flow process except the call taking[21] and dispatching functions at Toronto Paramedic Services and Toronto Fire Services.

Figure 5: Call Flow Process for a Call for Service to the Call Centre through the Emergency 9-1-1 Line or the Dedicated Non-emergency Line 8-2222



[1] The call takers remain on the line after the call is answered by the paramedic and/or fire services call takers to determine if police are also required for the call or not

[2] Not in the scope of this audit

[3] Some of these calls could be diverted to other agencies (e.g. 3-1-1 for information on City services) or community-based alternative responders (e.g. 2-1-1 as part of the Toronto Community Crisis Service pilot project)) or passed on to the crisis worker who is recently co-located in the call centre as part of TPS's pilot with the Gerstein centre.

[4] During operating hours (Monday to Friday from 7 am to 10:45 pm), the switchboard operator answers the call when the caller presses "0" using the auto attendant system. The switchboard operator may transfer the call to a call taker by routing it to the emergency queue or non-emergency queue depending on the assistance required. When callers press "0" outside of these hours, the call will be routed directly to the TPS call takers.

[21] We analyzed the timeliness of answering the transferred calls from TPS but not the actual call taking functions at Toronto Paramedic Services and Toronto Fire Services.

Recent Changes

Recent initiatives for crisis calls requiring mental health support

Recent changes include the City and TPS working together on four Community Crisis Support Service pilots for crisis calls requiring mental health support, as part of an alternative community-based response model. Two of these pilots have started in March and April 2022 and the other two will start in July 2022. These pilots cover four areas of Toronto (i.e. Downtown East, North East, Downtown West – Kamaamwizme wii Naagidiwendiiying, and North West) and are partnered with the community agencies to provide a community-based response six days a week to non-emergency crisis calls and wellness checks relating to individuals 16 years of age and older.

The pilots include the dispatch option of a referral to a community crisis support service for 9-1-1 calls where the cause is mental health or addiction crisis and there is no public safety component. As part of the pilot, individuals experiencing or witnessing a mental health crisis can also call 2-1-1 directly for this service.

In addition, TPS began its pilot of a crisis call diversion program in November 2021. This initiative puts a community crisis worker in the 9-1-1 call centre to help divert mental health related calls to a community agency when a police response is not required.

Audit Results

This section of the report contains the findings from our audit work followed by specific recommendations.

A. Answering Calls

A.1. Timeliness to Answer Emergency Calls

Important for 9-1-1 dialed calls to be answered quickly

The 9-1-1 line is for situations in which the caller requires immediate emergency services. The longer an answer delay to a 9-1-1 call, the greater the risk and potential impact on life or safety of the caller or property. A longer call wait time leads to delayed timing to activate the appropriate emergency assistance, resulting in a delay to providing the actual emergency services (i.e. police service, fire service, and/or ambulance), which may be a matter of life and death at times. It is critical and of utmost importance that a 9-1-1 dialed call is answered quickly.

TPS adopted the industry 9-1-1 call answering standard

Unlike some provinces in Canada that have legislation to establish or enhance provincial authority to oversee Public Safety Answering Point (PSAP) operations such as setting standards, policies and guidelines, the Ontario provincial government has not played a direct role in providing oversight of the PSAP or enacting legislation that sets standards for emergency call-answering. As a result, TPS voluntarily adopted the industry 9-1-1 call answering standard developed by the National Emergency Number Association (NENA)[22] as its service level standard for emergency calls.

Standard for call answering wait time for 90% of calls increased by 5 seconds from "within 10 seconds" to "within 15 seconds" since December 2020

NENA updated the 9-1-1 Call Processing standard in April 2020 by requiring **90 per cent of all 9-1-1 calls arriving at the PSAP to be answered within 15 seconds**. TPS adopted this updated standard in December 2020. The previous NENA standard required 90 per cent of all 9-1-1 calls arriving at the PSAP be answered within 10 seconds during the busy hour (i.e. the hour each day with the greatest call volume). Although the previous NENA standard was for the hour with the greatest call, TPS applied it to all 9-1-1 calls not just those received during the busy hour.

[22] NENA is a non-profit organization that is solely focused on improving 9-1-1. Its work includes developing standards for 9-1-1 technology and operations, providing education and training for 9-1-1 professionals, and informing policy makers about issues facing 9-1-1. https://www.nena.org/page/mission2017

Service Level Not Met and Average Answer Delay More than 15 Seconds

9-1-1 PSAP not meeting service level standard

Due to the data limitation (discussed in Section A.5), we reviewed the limited available service level data and found that the 9-1-1 PSAP did not generally meet its service level standard for answering 9-1-1 calls throughout 2018 to 2021; there were a limited number of days when the service level was met. From our research on publicly available information and consultation with our expert advisor, we noted many other jurisdictions are also challenged in meeting the timeframe required in this standard.

Table 4 provides a breakdown of the number of days that the 9-1-1 PSAP met its service level on a daily basis. The limitation in data resulted in a scope limitation on the information available to us for this audit (discussed in Audit Objectives, Scope and Methodology Section of this report).

Table 4: Number of Days TPS Met 9-1-1 Service Level Standard on a Daily Average Basis

	2018		2019		2020		2021	
	# days	% of days	# days	% of days	# days	% of days	# days	% of days
Met Standard (>=90%)[1]	2	1%	6	2%	53	14%	10	3%
Not Met Standard (<90%)[2]	363	99%	359	98%	313	86%	355	97%
Total	365		365		366		365	

Source: Audit analysis of the Morning Statistics Reports

[1]Prior to December 2020, the 9-1-1 answering service level was measured using 90 per cent of all answered within 10 seconds; afterwards it is measured using the 15 seconds threshold.
[2]Of these, the number of days under 65 per cent were: 233 days in 2018; 210 days in 2019; 79 days in 2020; and 166 days in 2021. TPS management uses 65 per cent as an operational guideline to flag significant 9-1-1 answering wait time.

Improvement in daily average wait time – more days with shorter daily average wait time in 2021 than in 2018

TPS management uses various reports for monitoring, including the report which shows the daily average answering wait time. From these reports, we noted that there was an improvement of the daily average wait time for 9-1-1 calls from 2018 to 2021. As shown in Table 5 below, based on the daily average wait time, the number of days in a year that a caller who dialed 9-1-1 needed to wait for more than 30 seconds to be answered decreased from 2018 to 2021. For example, in 2018 there were 117 days in which a 9-1-1 call on average needed to wait for more than 30 seconds to be answered, which decreased to 67 days in 2021.

Table 5: A Breakdown on the Number of Days by the 9-1-1 Calls Daily Average Wait Time for 2018 to 2021

	Daily Average 9-1-1 Wait Time (# of days)			
	2018	2019	2020	2021
15 sec. or less (the wait time target in current service level standard)[1]	66	170	216	123
More than 15 sec. to 30 sec.	182	157	121	175
Subtotal	**248**	**327**	**337**	**298**
More than 30 sec. to 1 min.	103	38	29	62
More than 1 min. to 2 min.	13	0	0	5
More than 2 min.	1	0	0	0
Subtotal	**117**	**38**	**29**	**67**
Total	**365**	**365**	**366**	**365**

Source: Audit analysis of the Morning Statistics Reports

[1]The wait time target in the service level standard prior to December 2020 was 10 seconds

Limitation on daily average wait time in management reports

The limitation with this information, however, is that the answering wait time information in the management reports only shows the average wait time on an overall daily basis. A call that comes to the call centre during the busy periods in the day could have a much longer wait time than a call that comes during the non-peak periods.

Average 9-1-1 answering wait time varied depending on the time the call came to the call centre

Due to the data limitation (discussed in Section A.5), call data was not available to assess the actual answering wait time for each emergency call. As illustrated in Figure 6, from our analysis of the daily call data at each 15-minute interval (this is the most granular information available) for the year 2021, we found how timely a call could be answered by a call taker largely depends on the time that the call comes to the call centre. Correspondingly, the call centre's ability to achieve its service level also varied throughout the day. The data limitation resulted in a scope limitation for this audit (discussed in Audit Objectives, Scope and Methodology Section of this report).

Data limitation for the audit resulting in scope limitation

Average 9-1-1 answering wait time below 15 seconds for periods that met service standard

Figure 7 below shows how the average service level achieved by the call centre relates to the average 9-1-1 answering wait time throughout the 24-hour basis for year 2021. It shows that **when the call centre met its 9-1-1 service level standard, its average answering wait time was consistently below 15 seconds.** In contrast, during the time when the call centre consistently performed below its 9-1-1 service level standard, its average 9-1-1 answering wait time for each 15-minute interval was consistently above 15 seconds. The average answering wait time gradually **increased** as the service level **decreased.**

Figure 6: Average 9-1-1 Service Level and Average 9-1-1 Answering Wait Time in a 24-hour Basis, 2021

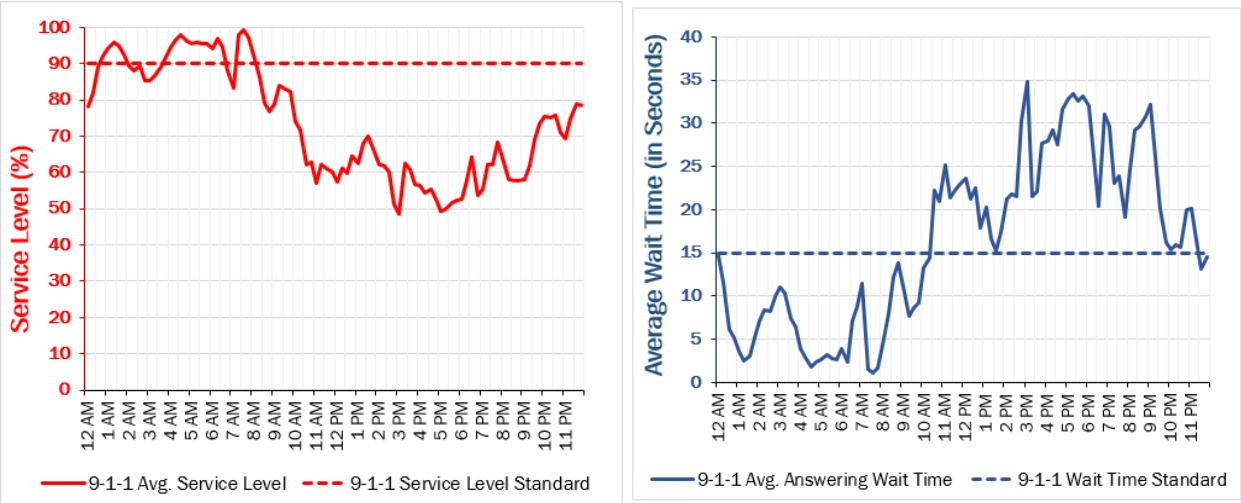
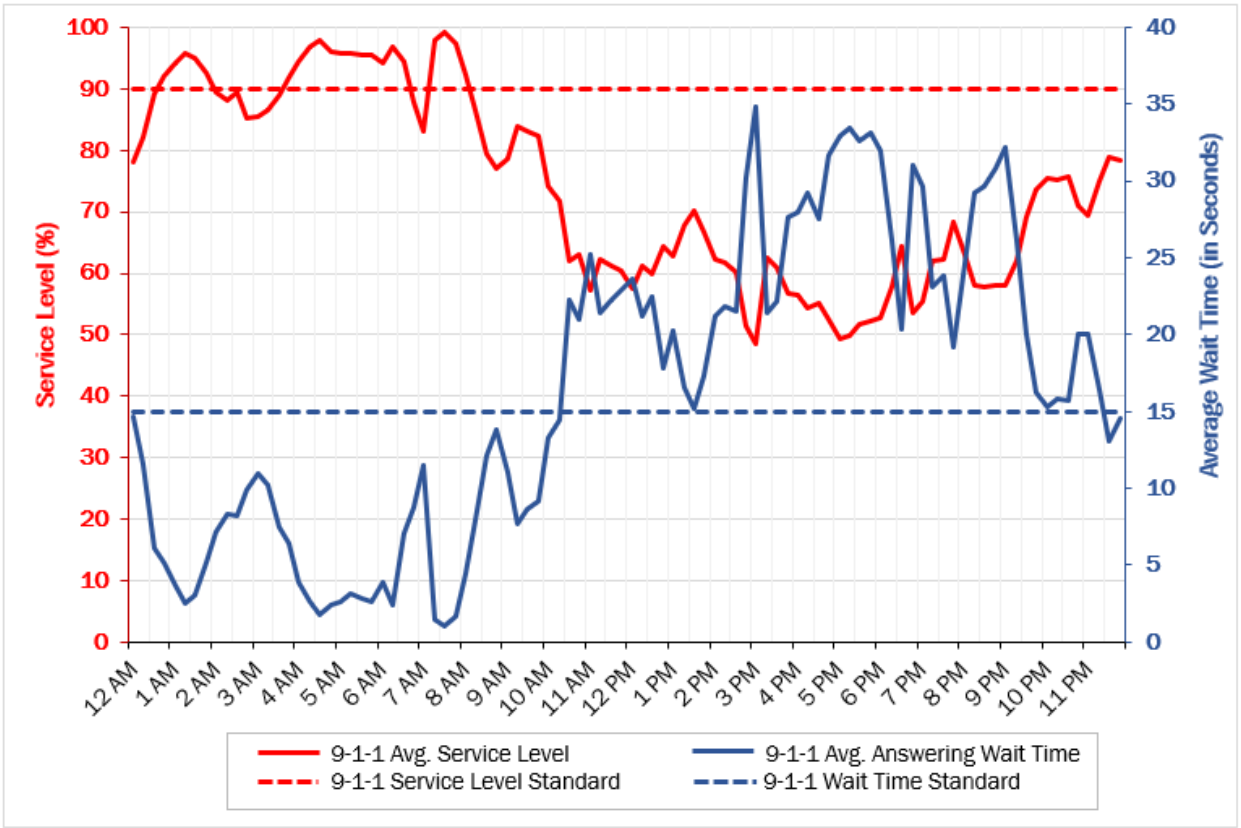


Figure 7: Negative Correlation between Average 9-1-1 Service Level and Average 9-1-1 Answering Wait Time, and Comparison with the Service Level Standard and Wait Time Standard in a 24-hour Basis, 2021



Average answering wait time varies significantly between peak and non-peak hours

As shown in Table 6, the call centre's service level and the corresponding 9-1-1 answering wait time vary significantly between the peak and non-peak periods based on call volume received throughout the day (call volume is discussed in Section A.2). Specifically,

- During the non-peak periods from **11:30 pm to 10:30 am** when the call centre was very close to meeting its 9-1-1 service level standard (with many of the time intervals in this period met or exceeded the standard), its average 9-1-1 calls answering wait time for each of the 15-mintue intervals was consistently below 15 seconds, with an **average answering wait time of about seven seconds** for each 15-minute interval.

- During the time from **10:30 am to 2:45 pm** when an average of 62 per cent of calls were answered within 15 seconds, the **average answering wait time was 21 seconds**.

- This further **increased to 28 seconds answering wait time during the peak time period from 2:45 pm to 9:30 pm** when an average of 57 per cent of calls were answered within 15 seconds. Note that the average wait time during this period was almost double the service level standard wait time of 15 seconds and was four times the wait time during the non-peak periods.

- Both the average answering wait time and service level performance started to improve after 9:30 pm.

Table 6: Average 9-1-1 Service Level and Average 9-1-1 Answering Wait Time for Non-peak and Peak Periods throughout the 24-hour Basis in 2021

	Average 9-1-1 Service Level % per 15-minute[1]	Average Wait Time (in seconds) per 15-minute Interval[1]
11:30 pm to 10:30 am[2] (non-peak period)	89	7
10:30 am to 2:45 pm	62	21
2:45 pm to 9:30 pm[3] (highest peak period)	57	28
9:30 pm to 11:30 pm	73	17

Source: Audit analysis of the phone application system reports

[1] Calculation limited to average per 15-mintue interval (not average for all calls within the period) due to lack of available data.
[2] Non-peak period during the year based on the 9-1-1 call volume received (call volume is discussed in Section A.2 of the report).
[3] Peak period during the year based on the 9-1-1 call volume received.

Longest Answering Wait Time

Many 9-1-1 calls waited more than a minute, and some waited more than 4 minutes to be answered

Given the data limitation, we cannot determine the actual wait time for each 9-1-1 call that the call centre received. The available data only shows the longest answering wait time for each of the 15-minute intervals and that **at least one call** had to wait that amount of time before it got answered. Based on this limited information, we noted at least **13,260 calls** that dialed 9-1-1 in 2021 **waited more than a minute to be answered**, and of these **at least 424 calls waited more than four minutes** before getting answered. The 9-1-1 answering wait time in the service level standard is 15 seconds.

Most frequent longest wait in a day was between 3 and 4 minutes; few days where the longest wait was between 10 to 11 minutes for some calls

Using the information available for the years 2018 to 2021 of the longest wait on a daily basis, we found that **most often, the longest answering wait time for a 9-1-1 call in a day was between three and four minutes for the years 2018, 2019, and 2021**. This was slightly lower in **2020 to between two and three minutes**, which most likely was due to less call volume received as a result of the COVID-19 pandemic. However, there were a few days over this period where the longest answering wait time for some calls was between 10 and 11 minutes.

Longest wait of the day happened more often between 5 pm and 6 pm

We also noted that the daily longest wait time happened more often between 5 pm and 6 pm for each of the years from 2018 to 2021. Table 7 shows the top three timeslots in which the highest daily wait time occurred from 2018 to 2021. In each of the years over this period, the second and third daily longest wait time varied each year. This also shows the importance of management having this type of detailed information and analytics available to make operational and workforce planning decisions, to ensure service levels are met.

Table 7: The Top Three Timeslots in which the Daily Longest 9-1-1 Answering Wait Time Most Frequently Happened for 2018 to 2021

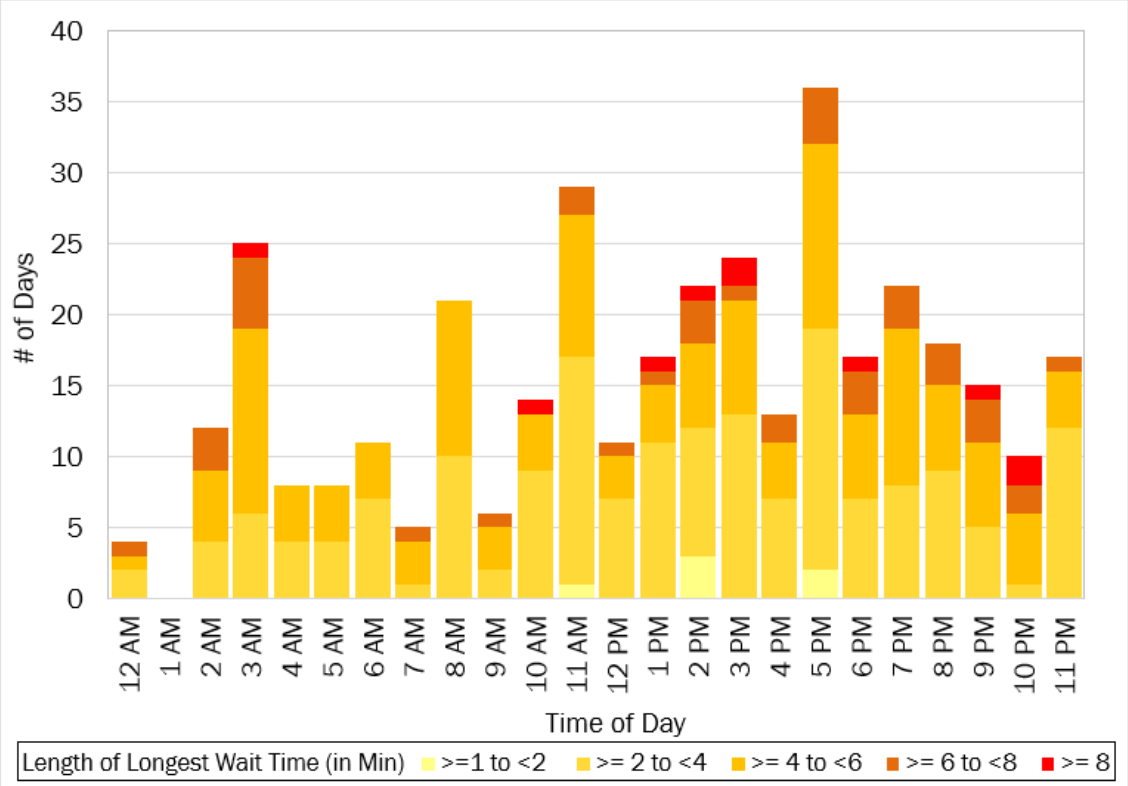
	The Time of the Day where the Daily Longest 9-1-1 Answering Wait Time Happened (the number of days it happened in this timeslot in the year)		
	Highest Occurrence	Second Highest	Third Highest
2018	5 to 6 pm (36 days)	11 am to 12 pm (29 days)	3 to 4 am (25 days)
2019	5 to 6 pm (38 days)	3 to 4 am (34 days)	8 to 9 pm (30 days)
2020	5 to 6 pm (41 days)	3 to 4 pm (35 days)	2 to 3 pm (34 days)
2021	5 to 6 pm (44 days)	8 to 9 pm (31 days)	6 to 7 pm (30 days)

Source: Audit analysis of the Morning Statistics Reports

Specifically, for the pre COVID-19 years of 2018 and 2019, Figure 8 and 9 show the breakdown of when the daily longest 9-1-1 answering time happened by timeslot for those years respectively. The daily longest waits were all beyond the wait time standard of 15 seconds. The darker coloured bars in the graph represent the longer wait times.

For example, in 2018, the most total occurrences in the year where the longest 9-1-1 wait of the day happened was between 5 pm and 6 pm; but there were more occurrences where the longest wait time was beyond six minutes between 3 am to 4 am. In 2019, the most total occurrences in the year of the longest 9-1-1 wait of the day also happened between 5 pm and 6 pm. However, the most occurrences where the longest wait time was beyond six minutes was also between 5 pm and 6 pm.

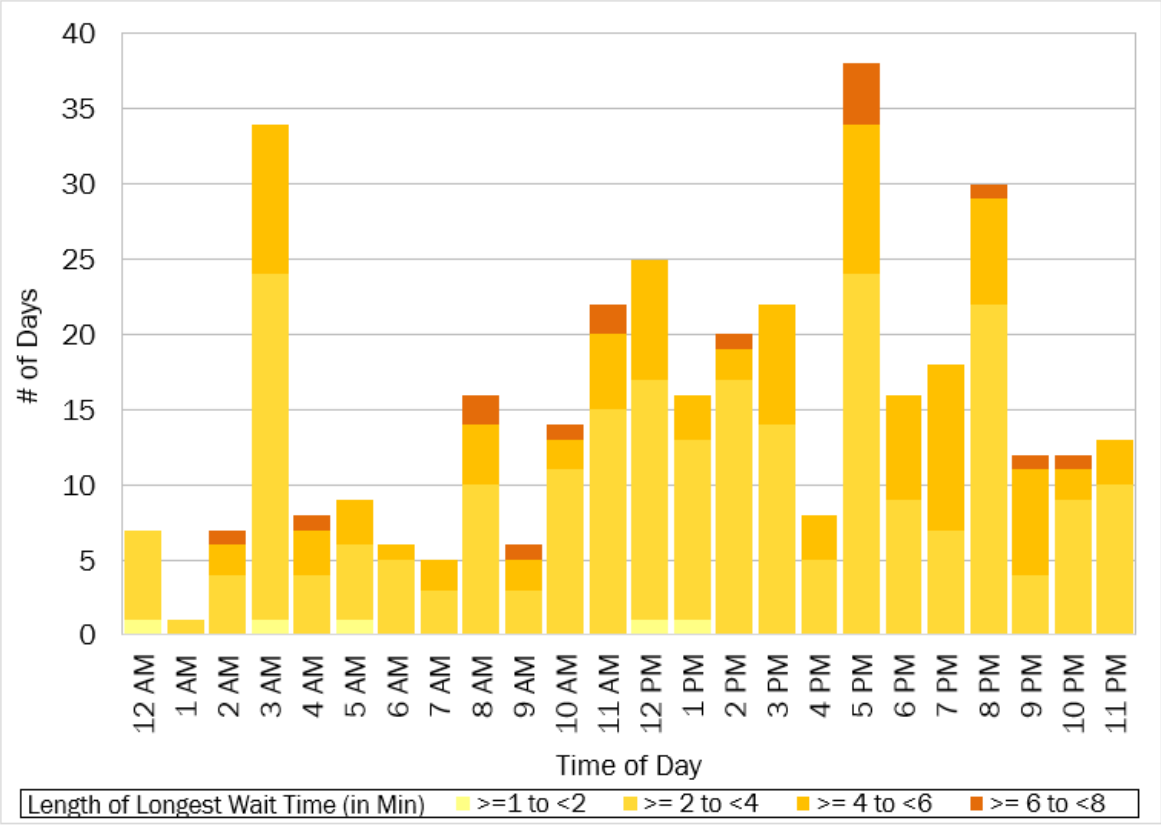
Figure 8: Breakdown on the Timeslot of the Day in which the Longest 9-1-1 Wait Happened, 2018[1]



Source: Audit analysis of the Morning Statistics Reports

[1] None of the days in 2018 had the longest daily wait happen between 1 am to 2 am (therefore this figure does not have a bar for that timeslot).

Figure 9: Breakdown on the Timeslot of the Day in which the Longest 9-1-1 Wait Happened, 2019



Source: Audit analysis of the Morning Statistics Reports

The longer the wait, the greater the risk and potential impact on life or safety of people

Since the 9-1-1 line is for emergency situations in which the caller requires immediate emergency service from police, fire, and/or ambulance, the longer a caller needs to wait for the call to be answered (the calls are answered on a first-come-first-serve basis), the greater risk and potential impact on the life or safety of people or property as it delays the time for emergency response.

Further improvement needed to address the long wait times

Although there could be times where callers dialed 9-1-1 for a non-emergency matter (to be discussed in Section A.7), given the intent of 9-1-1 and the potential nature of the calls, the long answering wait time needs to be addressed. For example, we noted a caller in 2021 waited slightly more than eight minutes in order to request ambulance service for a possible urgent health matter. In another example we noted a caller, requiring police assistance for a possible domestic violence situation that involved past history of physical assault and arrest, waited slightly more than six minutes before the call was answered.

A.2. Impact of Call Workload on Call Answering Capacity

Call wait time affected by call volume

Understanding the call workload is important in order to determine staffing capacity requirements that will provide timely emergency call answering services. Based on the readily available data for 2021, we found that when 9-1-1 dialed calls started increasing, the average answering wait time also started increasing (and the corresponding decline in service level performance as previously noted). Emergency call volume followed the time of day, with the lowest volume at 4:45 am, gradually increasing until 5:45 pm and then started declining again.

More than double the number of calls received during peak periods

As shown in Table 8, the call centre received and answered more than double the number of emergency calls in each of the 15-minute intervals during the high call volume periods where performance levels were not met, compared to the low call volume periods (non-peak) where service levels were generally met.

Table 8: The Difference of 9-1-1 Call Volume during Peak and Non-peak periods, and the Impact on the Service Level and Answering Wait Time, 2021

	9-1-1 Service Level	Avg. 9-1-1 Answering Wait Time per 15-min.	Avg. 9-1-1 Calls Answered per 15-min.[1]
11:30 pm to 10:30 am (non-peak period)	Generally met or close to meeting	7 sec.	21
10:30 am to 2:45 pm	Not met and gradually declining	21 sec.	41
2:45 pm to 9:30 pm (highest peak period)	Not met	28 sec.	44
9:30 pm to 11:30 pm	Not met but gradually improving	17 sec.	35

Source: Audit analysis of the phone application system reports

[1] # of calls answered is generally the same as received during the 15-minute interval

About 50% more calls answered per call taker when less than 65% of calls answered within service standard

Based on the daily average number of call takers at work[23] and the total daily 9-1-1 calls answered throughout the years 2018 to 2021, we found that on average, each call taker answered about 50 per cent more calls on the days when the call centre performed significantly lower than the service level standard (i.e. less than 65 per cent of calls were answered within 15 seconds) than those days when it met or exceeded the service level standard (i.e. 90 per cent or more calls were answered within 15 seconds on a daily basis).

[23] Not a count of the number of individual call takers who worked in the different shifts each day, but a system calculated average number of call takers at work for a day using total staff logged in time throughout the 24-hour period (i.e. average number of call taker to cover the entire day).

A.3. Impact of Staffing on Call Answering Capacity

Call Answering Capacity – Development of Minimum Staffing Requirements and Schedules

Staffing requirements and scheduling should align with forecasted workload

The number of call takers available on the phone at various times of the day is the call centre's answering capacity to handle the 9-1-1 call workload. Regular analysis should be done by management to manage organizational performance and see if staffing requirements and scheduling needs to be updated to align with potential changes to the workload by time of day and the types of calls that are being received.

No supporting documents for minimum staffing requirements

TPS has a minimum call taker staffing requirement for different time periods throughout the day to schedule call takers. However, there is no supporting documentation to show how the minimum staffing level was determined. During the four years from 2018 to 2021, TPS only adjusted the staffing requirements in 2020. There is no supporting documentation on how and why the adjustments were made.

No documentation for workforce planning

We were informed there is no TPS documentation for workforce planning to determine staffing needs for minimum staffing requirements. We were advised the minimum staffing requirements were based on call volume and service levels.

Opportunities to improve staffing requirements and scheduling to better align with call workload

We compared the 9-1-1 call volume in 2021 to the staffing requirements for the different time periods. We found that they generally follow the call volume pattern (i.e. higher number of call takers were generally to be scheduled for periods with higher call volume), but there could be opportunities for improvement to better align the staffing requirements and scheduling to call workload. For example:

- 11:30 pm to 2:45 am had a low average answering wait time of 8 seconds for each 15-minute interval (i.e. significantly below wait time required in service level of 15 seconds), yet the minimum staffing requirement was 18 call takers. This is the same number of call takers required for the time period from 10:30 am to 2:45 pm when the call volume was double for each 15-minute interval and had a much higher average wait time of 21 seconds.

- Potential to start the time period with the highest number of required call takers earlier at 1:45 pm (currently starts at 3 pm) to align with the start of the higher call volume period. If there is a budget restriction or other factors, TPS could keep the same length of this time interval (7.75 hours) by ending it at 9:30 pm (so the length of this time interval stays the same but only shifting it to start earlier).

Recommendations:

1. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to re-evaluate and establish new minimum staffing requirements for Communications Services, ensuring staffing levels are sufficient to achieve TPS's 9-1-1 service level standard, and using improved data and information to include:

    a. Consideration of staff absenteeism rates and other detractors/ factors, the underlying causes of not adhering to the current minimum staffing requirements, and aiming to minimize overtime where possible, for the different timeslots (considering peak and non-peak periods).

    b. Re-balancing the workload amongst staff and staffing resources as needed throughout the day to meet operational needs while also enhancing staff's mental health and well-being.

2. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to review the current staffing levels, shift deployment and start hours, and scheduling system for communications operators to ensure the assignment of the actual number of operators at work aligns with its planned minimum staffing requirements (that TPS re-evaluates as part of Recommendation 1) as required to achieve its service levels and handle its call volume. Depending on the results of TPS's evaluation of minimum staffing requirements, TPS should consider:

    a. Requesting an overall staffing increase of communications operators for TPS Communication Services.

    b. Hiring part-time call takers, particularly to help address peak periods and spike incidents.

A.4. Staff Resourcing – Challenges Impacting Staff Availability

Daily Staff Absences – Sick Time

Daily absences affect sufficient staffing levels

Staffing levels impact the capacity to answer calls on a timely basis, as explained above. Communications operators have a difficult and demanding job. They are the first contact for people in extreme distress, and they need to sometimes make split second decisions that could potentially affect the safety of both civilians and police officers. A factor that can affect staff absenteeism is the stressful and demanding work environment. The lack of available staff, due in part to daily absences from time off sick, creates a challenge to maintaining sufficient staffing levels.

The impact of absenteeism on staffing levels will depend on the number of absent staff and the length of notice provided, combined with the ability to quickly fill those positions in time for each shift. If the positions cannot be easily filled, it may also result in increased overtime for staff on the previous shift, if asked to provide additional coverage. Absenteeism is an important factor to consider when determining minimum staffing requirements and scheduling.

Only three days over three years with no staff absent due to sickness

From our analysis, we found that almost every day there were call takers who were absent due to sickness. There were only three days from 2018 to 2021 with no staff absent due to sickness.

TPS does not track absenteeism

The number of call takers who were off sick ranged from one to 32 staff in any given day. There was no breakdown of these daily absences into shifts on the management report and TPS does not track the staff absenteeism rate, which we found to be an extremely labour-intensive and manual process to attempt to calculate, given the limitations in the data and information available.

Daily absences could significantly affect the capacity of a shift

Since call takers work in different shifts to cover the 24-hour day, a high number of call takers off sick from the same shift could have a significant impact on the call answering capacity planned for the time periods covered by that shift. This depends on how much notice the staff provided for sick time off and the ability to find a replacement or get call takers of the previous shift to work overtime.

For example, we compared the minimum staffing requirements for 2021 to the actual number of call takers at work for 25 random days. These days had a range of daily absences from three to 11 call takers. As shown in Table 9, we found the call centre had about the required number of call takers for the periods that it required the lowest number of call takers (covering the non-peak hours) but were significantly under the required minimum staff for the other periods that it required a higher number of call takers (to cover the higher call volume peak periods). Specifically, for the period from 7:15 am to 9 am, the actual number of call takers met the required number of 13 staff, but during the period from 3 pm to 10:30 pm, the call centre was short by seven call takers.

Table 9: Comparison of the Minimum Number of Call Takers Required with the Actual Number of Call Takers at Work for 25 random days in 2021

Time Period[1]	TPS Minimum Call Taker Staffing Requirement	Avg # of Call Takers at Work[2] (25 random days in 2021)	Unmet # of Required Call Takers
7:15 am – 9:00 am	13	13	-
9:15 am – 2:45 pm	18	**14**	**4**
3:00 pm – 10:30 pm	20	**13**	**7**
10:45 pm – 2:30 am	18	**13**	**5**
2:45 am – 7:00 am	11	10	1

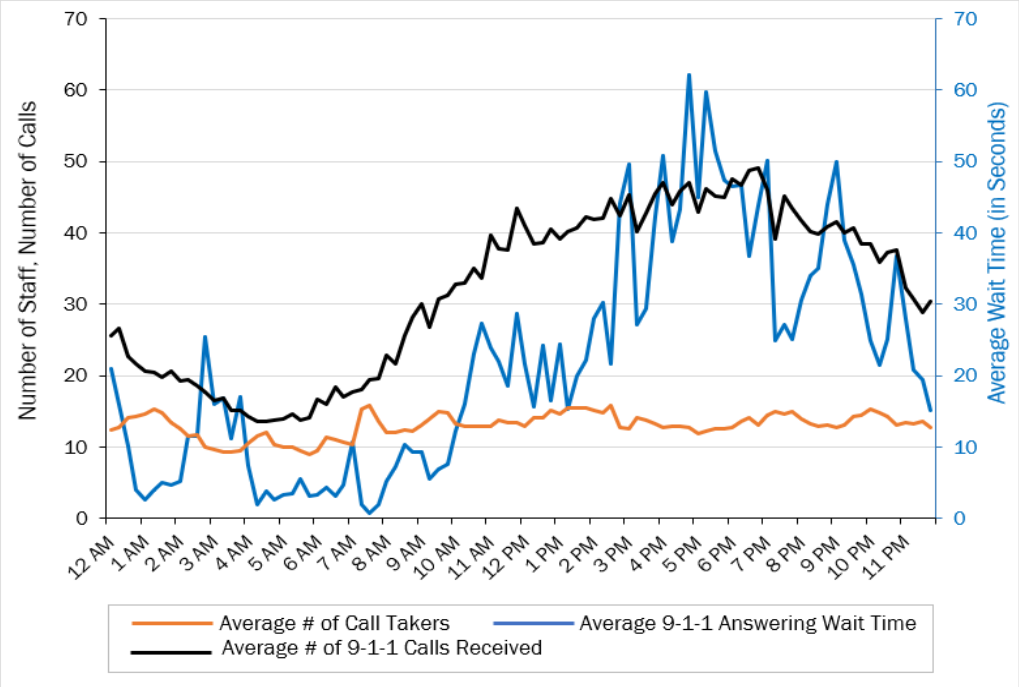
Source: Audit analysis of the phone application system reports

[1]The time period covers until the end of the 15-minute interval. E.g. the time period 7:15am to 9am covers from 7:15am up to 9:15am.
[2]This is the total available time of call takers based on the total logged in time of the call takers to the queue for the time period.

Example of how less than the minimum required level of staff may lead to high average wait time

Figure 10 shows how the unmet staffing level during the periods where the call centre received a high volume of incoming 9-1-1 calls may have led to the high average 9-1-1 calls answering wait time for these 25 days. For example, when the call centre received a high and increasing number of incoming 9-1-1 calls during the period around 10:30 am to 11 pm and with four to seven less call takers at work than required, the 9-1-1 average wait time was consistently above 15 seconds, with the longest average wait time of slightly more than a minute. In particular, the wait was highest at the peak hours between 2:30 pm and 8 pm with seven call takers less than required, while the call centre received the highest number of calls. In contrast, the lower call volume periods from 12 am to 10:30 am when it was mostly staffed with the required number of call takers, the average wait time was below eight seconds.

Figure 10: The Impact of the Number of Call Takers at Work and the 9-1-1 Call Volume on the Average 9-1-1 Answering Wait Time, on a 24-hour basis for the 25 random days in 2021



High daily absences can lead to increase in overtime work

In addition to the call answering capacity, the high daily number of communications operators absent due to sickness also increased the overtime work for operators, which can affect the mental wellness, as well as the work morale of the communications operators. As such, the use of overtime is not a sustainable solution to staffing shortages.

Significant overtime hours worked for each year 2018 to 2021; equivalent to almost 12 operators for 2021

From our review of overtime data, we found an overall decreasing trend in overtime payment and hours of overtime work by call takers, except for the year 2020 where there was a slight increase from 2019. TPS management indicated that more staff were off during the COVID-19 pandemic, so they requested that the staff who were able to work overtime help cover the absences of those staff who were off due to the pandemic.

However, as illustrated in Table 10, there was a consistently high number of overtime hours worked by communications operators from 2018 to 2021. For example, the overtime hours worked in 2021 was equivalent to 3,017 eight–hour shifts or 11.6 operators using a 260 working day basis.

Table 10: Breakdown of Overtime Cost and Overtime Hours Worked by Communications Operators in each Year from 2018 to 2021

	2018	2019	2020	2021	% Change 2018 to 2021
Overtime ($)*	$1,674,834	1,523,433	1,590,694	1,524,887	-9%
Overtime (hours)*	28,916	25,922	26,556	24,141	-17%

*Overtime cost and overtime hours worked by call takers and/or dispatchers (including supervisors / manager performing the call taking / dispatching functions)

Overtime work was needed almost every day and was highest during peak periods

Our review of 2019 and 2020 overtime shift schedule data found:

- Overtime was consistent through the days in a week except for Wednesday, which had less occurrences because it was a training day, so more operators were available at the call centre this day of the week
- Overtime was needed almost every single day; 361 days in 2019 and 356 days in 2020 throughout the 24-hour period
- The time period that required the most overtime work was consistent in 2019 and 2020. Overtime work was highest during the high call workload periods around 9 am to 2 pm (with a significant decrease between 2:15 to 3 pm), followed by 3 pm to 11 pm.

Unavailable ("Not Ready") Time of Communications Operators

Another factor that reduces call takers' availability to respond to incoming 9-1-1 calls is when they are not available for calls due to post-call processing time, taking time to recuperate between calls, etc. This is referred to as 'Not Ready' time and should be accounted for when determining staffing requirements.

"Not Ready" time is when the call taker is not available to take a call

There are three main components that make up the total time a call taker is logged into the phone system:

- **Idle time** – the time a call taker spends **waiting with no calls** to take
- **Talk time** – the time a call taker spends **answering a call**
- **'Not Ready' (unavailable) time** – the time that the call taker **takes to recuperate between calls or spends post-call processing time on a previously answered call.** For new hires, this may also include the time for debriefing with their trainers between calls when needed.

At the call centre, a call taker can activate a **"Not Ready"** button on the phone to indicate their unavailability to take a call.

Post-Call Processing Time and Occupancy Time

TPS does not separately track post-call processing time, included in 'Not Ready' time

TPS does not separately track the amount of post-call processing time that call takers spend finishing the previously answered calls. This work time on calls is included in the total "Not Ready" time, including those times call takers were taking the needed time to recuperate between calls, and the time for debriefing of calls for new hires.

Staff occupancy time cannot be measured

Without separately tracking the different components of 'Not Ready' time, the actual staff occupancy time cannot be measured. Occupancy time is the talk time together with post-call processing time, that shows how busy the call takers are during the total logged in work time.

Important to measure occupancy time to ensure healthy and balanced workload

Given the nature of the calls and the stress levels involved in answering them, it is important to measure the call takers' occupancy time to ensure a healthy and balanced workload for call takers at each shift throughout the day. A prolonged period of a high occupancy time may indicate excessive workloads that could lead to undesirable outcomes, including staff burnout, job dissatisfaction, negative impact on health and well-being of staff, and high turnover. On the other hand, a very low occupancy time may indicate opportunity for improving staff performance and/or workforce planning.

'Not Ready' Time

TPS expects less than 25% "not ready" time

TPS expects that call takers be "not ready" less than 25 per cent of their work time and monitors this indicator using a monthly report.

We reviewed the 2021 monthly "not ready" time reports and noted that the average "not ready" time was fairly consistent amongst the five platoons, with one of the platoons having a lower average proportion of "not ready" time than others. We were informed that this platoon had more experienced communications operators and was better staffed. In total, there were 23,629 hours of reported "not ready" time in 2021. This is equivalent to about 2,954 eight-hour work shifts.

About one-fourth of operators had 25% or more "not ready" time for all the months they worked in 2021

The total "not ready" time varied amongst the call takers. There were 62 communications operators[24], about one-fourth of the total operators who worked, that had 25 per cent or more of their work time as "not ready" for all the months they worked in 2021. Again, data is needed for TPS to be able to break down and understand this trend, with the view of meeting operational needs while supporting the wellness of its communications operators.

[24] Our analysis included operators who worked at least three months in the year 2021 to take into account any short-term sickness.

'Not Ready' Time of Dedicated 9-1-1 Call Takers versus Multi-Queue Call Takers

Multi-queue call takers have higher talk time than dedicated 9-1-1 call takers

A call taker can be logged into the call centre's phone system as a dedicated 9-1-1 call taker who only answers 9-1-1 dialed calls, or as a multi-queue call taker who answers both the 9-1-1 dialed calls and 8-2222 non-emergency calls transferred from switchboard operators.

Our review of a 5-week daily report found the multi-queue operators had a higher talk time than those of dedicated 9-1-1 operators. This may be because dedicated 9-1-1 operators only handle 9-1-1 calls, while multi-queue operators handle both types. It may also indicate the non-emergency calls required more time to address.

No significant difference in the proportion of 'not ready' time for dedicated 9-1-1 and multi-queue call takers

There was no significant difference in the proportion of "not ready" time for those logged in as dedicated 9-1-1 and multi-queue operators based on the 5-week reports. This may indicate the impact on the call takers from the 9-1-1 dialed calls is not significantly different from non-emergency calls. However, as previously noted, since there was no separate reporting of time to recuperate between calls and actual post-call processing time, further analysis would be required to fully understand if different types of calls have higher after work processing time and impact on the well-being of call takers.

Recommendations:

3. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to improve TPS's data to understand the time required for communications operators to meet operational needs, by establishing separate time codes to track the time a communications operator:

a. Spends on processing a previously answered call.

b. Needs after handling a traumatic call (either at their desk or away from their desk).

c. Needs to recuperate before being available for the next call.

This will allow TPS to have more information on how certain calls affect the mental health and well-being of its communications operators, and the actual occupancy time needed to handle and complete a call, as well as the processing time.

4. **Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to analyze TPS's data (using new time tracking codes from Recommendation 3) on the time needed by communications operators to handle traumatic calls, in combination with additional feedback received from staff, and use these insights in developing additional strategies to assist the communications operators in their mental health and well-being. In doing so, TPS should leverage strategies used by other agencies.**

Longer-term Absences/Leave - Injured on Duty (IOD), and Long-term Disability

Long term absences are increasing and impact the ability to have sufficient staffing levels

In addition to daily absences and unavailability on the operations floor, longer-term absences impact the ability to have sufficient staffing levels to achieve the service standards for call answering timeliness. There has been an increasing number of communications operators on Injured on Duty (IOD) and leave of absence at the Communications Services Unit, with 11 in 2018 and 30 in 2021[25].

We were also advised that the threshold to be considered for replacing an operator who is off on extended IOD is an absence of two years. Upon two years of absence, the Communications Services Unit can submit a request for replacement to the Resource Management Committee, which determines if there is any likelihood the operator could return and authorizes the replacement. The Resource Management Committee is scheduled to meet quarterly.

Replacements for operators off due to IOD can take over three years

Some of the staff on IOD have been away for more than two years and their positions remain vacant. It would be helpful for the Communications unit to be able to have additional available staff sooner than the required two-year time lapse (without impacting the individual on IOD), where possible and depending on the circumstances. The lead time to replace staff in the call centre is very long. Taking the time for recruitment, hiring, and training of up to 1.5 years into account, it could take over three years to staff one vacant position with a fully qualified staff member.

[25] Measured as at the beginning of each year; those leaves that expand past a year are not counted twice. These numbers of staff on IOD include communications operators and supervisors in the different platoons, staff at other support functions (e.g., Phones section), and those moved to another unit or transferred to the Human Resources Unassigned Group or resigned/ retired.

Additional human resources challenges

The Communications Services Unit also has challenges when their operators return to work but have been reassigned to other duties in other units of TPS for medical reasons and accommodation. We recognize that operators are working pursuant to a collective bargaining agreement, however it would be helpful for TPS to have the ability to hire additional surge staffing positions to be able to address its operational requirements and to ease the pressure on all operators.

Recommendations:

5. **Toronto Police Services Board direct the Chief, Toronto Police Service (TPS), in consultation with TPS's Corporate Services Command, to determine the feasibility of filling vacancies sooner than the required two-year time lapse for communications operators who are on Injured on Duty assignment (but not replacing the position), to address its operational requirements.**

6. **Toronto Police Services Board direct the Chief, Toronto Police Service (TPS), in consultation with TPS's Corporate Services Command – Legal Services, and the Toronto Police Association, to evaluate the 'return to work' criteria for those communications operators Injured on Duty, so that either they are only fit to return if that means fit to return to their previous job site, working at the 9-1-1 Communications Centre, or if TPS needs to employ them elsewhere, that TPS is able to hire additional surge positions in the 9-1-1 Communications Centre to address its operational requirements.**

Retention Challenges with Trainees

New hire needs to pass both the call taker and dispatcher training to become permanent

There are additional challenges in achieving staffing levels due to the retention level of trainees. After being hired as a communications operator, a new hire would need to pass both the call taker and the dispatcher recruitment training to become a permanent communications operator. Currently, the probationary period is twelve months.

Only 53% and 39% of new hires remained after recruitment training in 2018 and 2019 respectively; loss of 22% of successful call takers

We reviewed the recruitment training data for the pre-COVID years 2018 and 2019 and as shown in Table 11, we noted a high per cent of loss for each step of the recruitment training process, resulting in **keeping only 53 per cent of new hires in 2018 and 39 per cent in 2019.** We also found there was a **consistent 22 per cent loss in successful call takers who did not pass the dispatcher recruitment training process**. This highlights additional challenges for TPS in hiring, training, and retaining new communications operators for the call centre and a potential loss in opportunity to retain those who may assist in alleviating the call taker shortage.

Table 11: Breakdown of New Hire Loss during Recruitment Training Process

Year	# of New Hires	% Loss from Call Taker Training				% Loss from Dispatcher Training				
		% Failed Call Taker Class	% Failed Call Taker on Desk Training	% Left before Dispatch Training	% Remain after Call Taker Training	% Failed Dispatch Class	% Failed Dispatch on Desk Training	% Left before Completion of Dispatch Training	% Loss from Successful Call Taker to Successful Dispatcher	% Total New Hires Remain after All Trainings
2018	79	0%	10%	24%	68%	4%	10%	11%	-22%	53%
2019	36	11%	22%	28%	50%	0%	6%	18%	-22%	39%

Extending probation period may help retain staff

Communications Services management advised us that a probation period of longer than one year may help to retain some additional new hires as this would give them more time for training and help operators to be better prepared.

At the end of the audit, we were informed that the board entered into a Memorandum of Understanding (MOU) with the Toronto Police Association at the end of April 2022 to have a pilot program to increase the probation period to 18 months for new hires in 2022, with the option to extend another year depending on the results of the pilot program.

Opportunity to consider hiring part-time staff

The challenges described above may also highlight opportunities for change. Toronto Paramedic Services has benefited by hiring part-time call takers who are dedicated to the call taking functions (i.e. not doing any dispatching functions). This strategy may help address the challenge with the loss of new call takers who do not pass the dispatcher recruitment training process, and also provide greater flexibility to staff during peak periods to achieve service levels. We recognize this would not necessarily provide immediate benefits due to the time required to recruit and train call takers, part-time or full-time, but can help to build staffing capacity in the longer term.

Recent MOU entered to allow dedicated call takers

We were also informed at the end of the audit that the board entered into another MOU at the end of April 2022 with the Toronto Police Association for a one-year fixed term contract pilot to allow up to 10 members to be employed as dedicated call takers, who passed the call taker portion of training, but were unsuccessful in the dispatch training. The MOU includes a requirement for an assessment of the success of this pilot and to consider future implementation of this program based on the outcome of this pilot.

Retention Challenges with Permanent Staff

Retention challenge extends beyond new hires to full-time permanent staff

In addition, we noticed the Communications Services Unit's challenges in retaining communications operators extends beyond new hires to full-time permanent communications operators. Based on the information provided by management, the number of retirements and resignations vary year to year, but on average from 2018 to 2021, about 14 per cent of full-time permanent operators left the Communications Services Unit each year due to retirements or resignations. For example, in 2018 a total of 29 operators left (six retired and 23 resigned) and in 2021 a total of 40 operators left (three retired and 37 resigned).

Recommendation:

7. **Toronto Police Services Board direct the Chief, Toronto Police Service, in consultation with the Toronto Police Association, to explore and develop recruitment strategies to address the shortage in communications operators and challenges in retaining trainees and full-time permanent staff, including:**

    a. **The feasibility of hiring dedicated call taker/ dispatcher positions, and potential to retain qualified individuals who did not pass dispatcher training as call taker only beyond one year permanently, depending on the results of the pilot program.**

    b. **Increasing the probation period for communications operators beyond one year permanently, depending on the results of the pilot program that recently began.**

Improving Recruitment Process to Help with Retention

Other ways to improve the retention rate of new hires is to ensure the screening process is rigorous and that candidates truly understand, accept, and are able to handle the stressful work environment of a 9-1-1 communications operator, before they are hired.

Psychological assessment has not been part of the recruitment process for operators

TPS has a clinical psychological assessment services contract that covers conducting pre-employment psychological examinations for candidates, including a pre-hire evaluation of civilian communications operators at the Communications Services Unit. However, we noted that a psychological assessment has not been a part of the recruitment process for the communications operators. Given the intense and stressful work environment, a psychological assessment would be helpful to match the candidates to the job before hiring.

Management wasn't aware psychological assessments were available in TPS

We were told that Communications Services management was not aware that this contracted service was available until recently, as this information had not been communicated to them. Management is planning to include the use of a psychological assessment in the new-hire recruitment process in 2023.

Prospective recruits will be exposed to real-life experience of call centre

Another positive change is also planned for the upcoming recruitment process. We were informed for the April 2022 recruitment that new candidates for hire, after a background check and prior to a job offer, will have an orientation tour of the operational floor, to expose the candidates to the real-life experience of working at the call centre. The intention is for candidates to better understand the stressful work environment of a 9-1-1 communications operator, so that candidates will be fully aware and accept this before being hired and starting their training.

Limited help from HR in recruitment process

Communications Services management further told us that there is limited human resources (HR) and hiring support for the call centre recruitment and hiring processes. The communications operators and supervisors are the ones who organize and perform the scheduling, phone interviews, testing, selection, and orientation. This is not the most efficient use of the staff's time and is adding additional workload to the operators and supervisors.

Recommendation:

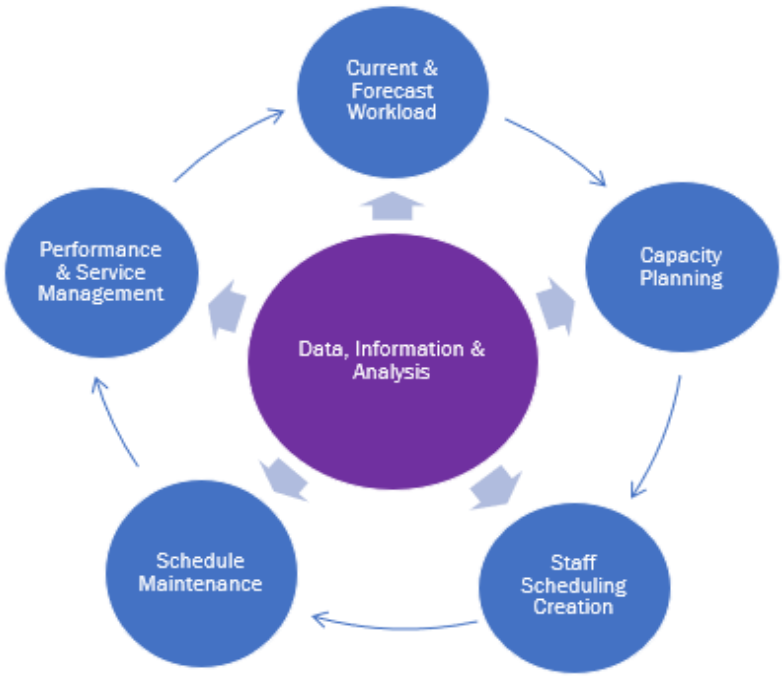
8. **Toronto Police Services Board direct the Chief, Toronto Police Service (TPS), in consultation with TPS's Corporate Services Command, to identify and provide the necessary human resources and hiring supports to Communications Services, so the communications operators can maximize their time in performing call answering and dispatching services.**

A.5. Data and Management Information is Not Readily Available for Effective Resource Management

In order for TPS to effectively manage staffing levels and scheduling to achieve its service levels, it is imperative that the call centre has timely, complete, and accurate call and operational performance data, information, and analysis that is readily available. This is not only required for effective workforce management, but also assists management in their oversight and informs their decision-making to improve timeliness of call answering.

Effective workforce management ensures a sufficient number of call takers available on the phones	The European Emergency Number Association (EENA), which is the European counterpart of the NENA, published an operations document for effective workforce management in PSAPs. This document, along with other research studies that we found, indicated that effective workforce management for 9-1-1 call centres ensures having a sufficient number of call takers available on the phones (within the limitation of physical seats in the call centre) to handle all potential emergency calls within an acceptable answering wait time. This allows the public prompt access to the required emergency services.
Data, information and analysis are key for effective workforce management	As shown in Figure 11 below, data, information and analysis are necessary for management of a call centre to understand and forecast call workload, determine staffing capacity requirements, create and maintain staffing schedules, and manage performance, so that service levels are achieved consistently [26]. It also assists management in measuring against performance targets and in making necessary adjustments to handle call volume and workload changes.

Figure 11: Factors in the Workforce Management of a Call Centre



Source: European Emergency Number Association Operations Document – Workforce Management in PSAP Operations, 2015

[26] European Emergency Number Association (EENA) Operations Document – Workforce Management in PSAP Operations, 2015 (https://eena.org/knowledge-hub/documents/managing-human-resources-in-a-psap/)

Data and Management Information is Not Readily Available for Effective Resource Management

We found that call and operational performance data are not being completely and accurately tracked and are not readily available.

Manual spreadsheet used is prone to human input and calculation errors and contains limited information

Since the call and performance data are found in many different sources, staff at the Communications Services Unit have been manually pulling some of the data into a daily spreadsheet that management uses as a monitoring tool. This manual process is not an efficient use of staff's time. The manually generated report is also prone to human input and calculation errors and contains only limited information. For example, the daily average performance data tracked does not show performance for peak and non-peak hours, and it does not capture the time that call takers are not available to answer calls.

Basic call management data is not readily available

Basic call management data (i.e. received, answered, transferred, and disconnected time of a call) is not readily available for analysis and to review trends. This data is only accessible for a specific period of time from the telecommunication provider, and TPS staff do not have the knowledge to extract specific call data information from its call application system. We were advised that other clients of the telecommunication provider have elected to have a data warehouse and with that service, they have access to the raw data and resources to run reports without a limitation on the time period or information available. TPS has not elected this option, but it would be valuable data and information to monitor performance and inform decision making. This limitation in data resulted in a scope limitation on the information available to us for this audit (see Audit Objectives, Scope and Methodology section in this report).

Key information and data not tracked

Other information and data to inform staff resources and performance management are also not tracked and/or readily available. The following are examples of key information and data needed for effective workforce management and service and performance management that are not readily available:

- Operational information and data including:
  - service level performance and the related answering wait time for different periods
  - call volumes and arrival patterns by hour and day of week
  - time when call volume exceeded the phone line capacity
  - average call duration
  - number of call takers at work for different periods

- Staffing information and data including:
  - staff absenteeism for different shifts
  - call handling time (average call duration and after call processing time)
  - time spent on off-phone activities (e.g. scheduled and unscheduled breaks, idle time, etc.) at the different time periods.

No integration between phone application and I/CAD systems

There is also no integration between the phone application system that records the call data (e.g. call duration) and the Intergraph Computer Aided Dispatch (I/CAD) system that records the event of the calls answered (e.g. event type and chronological history of the incident reported). This lack of integration of information does not allow for analysis of call handling time on specific event types to understand the impact of those calls on the call centre's answering capacity. This hinders the ability for tactical planning for predictable and unexpected events (e.g. sporting or entertainment events, extreme weather) and changes in call patterns and types, and the potential training needs (e.g. call handling time for certain event types is higher than expected).

Integrated systems provide data to better measure response time

This lack of integration between the phone application system and the I/CAD system also does not allow TPS to measure the entire response time for its priority categories from when the calls are received to the arrival of the police officer units (response time is discussed in Section C of the report).

Good practices for resource management found in other jurisdictions

With improved data for resource management, TPS may want to consider good practices we found in PSAPs of other jurisdictions:

- Major hiring campaigns, analysis of hiring data and dropping unnecessarily difficult test requirements
- Analysis of call data to identify peak call volume times and then increasing staff at those times
- Encouraging vacation, scheduling hiring and training campaigns during the months with lower call volume.

Data limitation resulted in scope limitation for the audit

During our audit we had to expend considerable resources to correct the identifiable errors in TPS's manual spreadsheets and compile limited available information from various reports into a single database to conduct our audit analysis. Even so, there was still a limitation to the data that we could obtain as illustrated previously in Section A.1. For example, the basic call data was not available to conduct an analysis on an individual call level but was limited to an average basis for each 15-mintue interval and for a limited time period.

The lack of available data and limitations with TPS's information management created many challenges in completing this audit (described in Exhibit 1) and the results presented in this report required an enormous effort and amount of time by our audit team. These results would be more easily and quickly produced if TPS had the data it needs in an easily accessible and automated format. We had a scope limitation for this audit as a result of the limitations with the data available, further described in the Audit Objectives, Scope and Methodology section in this report.

Data Issues and Limitation in Resource Management are not New

Data limitations are not new to the Unit

Data limitations and the challenges it poses to understand operational performance are not new to the Communications Services Unit. Although TPS was aware of these data limitations, there was no resulting improvement made to its data and information management system used.

- In 2015, Communications Services management requested another TPS unit to conduct a review on the call centre to explore the possible factors for not meeting service standards. The internal review noted data limitation and challenges in conducting the analysis at that time.

- An operations review conducted by an external consultant in 2019 indicated issues similar to those we have found in this audit, including a lack of capacity planning and forecasting, limited knowledge in creating the true requirement to attain the targeted service level, no automation of reports, manual reports contain errors, fundamental data and reports are not captured or available, and the current reporting data is below industry standards.

TPS starting a plan to develop a data strategy in late 2021

During our audit in late 2021, TPS started to set a path to develop an Information Management Framework and Data Strategy to build TPS data driven capabilities. We were informed that calls for service data is one of the key data sources that the framework and strategy will work on. The areas of work for this data source include data governance (e.g. data dictionary, standards, key performance indicators, data storage and access), data quality, systems integration, expansion of reporting database, and data reporting standards to support operational and strategic needs and to align with national reporting.

It is critical that TPS improve its data and information management in the 9-1-1 operations area, as it can impact people's lives and the safety of people and/or properties. It's also important to note that the upcoming new system for NG9-1-1 will not address this issue. The data and information needs identified in this report need to be incorporated into TPS's data strategy, NG9-1-1 implementation, and I/CAD system going forward, including the interconnection required between information systems.

Recommendations:

9. **Toronto Police Services Board direct the Chief, Toronto Police Service, to review and determine the management information needs of Communications Services and improve the data available, ensuring the data is accurate, collected efficiently, and readily available in a timely manner.**

   The results of data analysis should be used to inform strategies and action plans to address operational improvements, including but not limited to:

   a. **Enabling accurate and robust data analysis of its calls for service, workload, deployment of staffing resources, and communications operators' activities.**

   b. **Developing strategies for how to improve timeliness of answering 9-1-1 dialed calls.**

   c. **Identifying further areas of training opportunities for communications operators.**

   d. **Identifying areas where further call diversion can be made.**

10. **Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to ensure the data and information management needs of Communication Services are included and addressed in TPS's data strategy, Next Generation 9-1-1 implementation related to data analysis, and any future upgrade of TPS's Intergraph Computer Aided Dispatch system, including the need for interconnection between the information systems.**

A.6. Transferring Calls to Other Emergency Service Agencies

Calls transferred to Fire, Ambulance and the OPP

The call centre answers all 9-1-1 calls for service for the City, which may require police, fire, and/or ambulance services. Depending on the emergency, callers are transferred to Toronto Paramedic Services (Ambulance), Toronto Fire Services (Fire), Ontario Provincial Police (OPP), or other police organizations, while the call takers remain on the line to determine if police are also required or not[27]. Police services are not always required for these transferred calls, but there are times when police are required, including events when two or more agencies are required to respond to an event.

About 30% of 9-1-1 calls received were transferred to other emergency agencies annually

Over the years 2018 to 2021, the call centre annually transferred about 30 per cent of the 9-1-1 calls received to other emergency agencies. Most of the transferred calls were to Toronto Paramedic Services. Table 12 shows the total numbers of these transferred calls to Ambulance, Fire, OPP[28], or other non-PSAP agencies from 2018 to 2021.

Table 12: Total Number of 9-1-1 Calls the Call Centre Transferred to Other Agencies, 2018 to 2021

Year	Ambulance	% of Total	Fire	% of Total	OPP	% of Total	Others	% of Total	Total
2018	294,238	84	33,704	10	17,426	5	3,846	1	349,214
2019[1]	230,744	85	23,095	9	13,582	5	3,175	1	270,596
2020[2]	256,915	85	27,882	9	13,363	4	3,451	1	301,611
2021	303,690	86	29,097	8	15,561	4	4,403	1	352,751

Source: Audit analysis of data from telecommunication service provider reports

[1] The information for this year (2019) is incomplete. The reports for March and April 2019 cannot be provided by TPS, hence missing data for these two months.
[2] The information for this year (2020) is incomplete. The April report only contains data for three days, hence missing data for the 27 remaining days in April.

[27] Some of these calls could be diverted to other agencies (e.g. 3-1-1 for information on City services) or community-based alternative responders (e.g. 2-1-1 as part of the Toronto Community Crisis Service pilot project), or passed on to the crisis worker who is recently co-located in the call centre as part of TPS's pilot with the Gerstein centre. This section in the report is focused on calls transferred to other emergency service agencies.
[28] Ontario Provincial Police (OPP) is responsible for traffic related occurrences that take place on the major highways that run through Toronto (Highway 400, 401, 404, 409, 427, and 27 – south of the boundary of Highway 401). All other occurrences that take place on these highways are the responsibility of TPS, but OPP would still be notified of any related traffic problems.

Call answering delays from receiving agencies increases wait time for other 9-1-1 callers

Due to the nature of 9-1-1 calls, it is important for the receiving agencies to answer the transferred calls promptly. Any call answering delays could result in slower response time and potentially loss of life and/or increased damage to property. Also, since the call taker is required to stay on the line until the call is connected with the requested emergency service agency's call taker, any call answering delays from the receiving agencies, impacts how soon TPS call taker would be available to answer another 9-1-1 emergency call.

Callers confused with further wait for another call taker

We also noted from our samples reviewed (discussed in detail in Section B) that the answering delays from the receiving agency could cause frustration or confusion to callers, particularly when the callers had already waited for TPS call taker to answer the call, then must wait additional time for another call taker.

Callers need to repeat information to receiving agency

Adding to the frustration is that since TPS's I/CAD system does not integrate with Fire and Ambulance, any information that the caller provides to TPS call taker (e.g. address, phone number, description of situation), must be repeated when the receiving agency answers the call.

Toronto Fire Services can further improve on timeliness to answer transferred calls from TPS

We reviewed the available data for the years 2018 to 2021 and found that most of the transferred calls were answered within 10 seconds. This is mainly because Toronto Paramedic Services had the highest volume of transferred calls and on average almost 96 per cent of calls transferred were answered within 10 seconds during this period. As shown in Table 13, amongst the transferred agencies, Toronto Fire Services was the slowest in answering the transferred calls, with an average of 58 per cent of the calls answered within 10 seconds and 40 per cent answered within 10 to 19 seconds. It is important to note that the time the caller needs to wait for the transferred calls to be answered is in addition to the time that the caller has already waited for TPS call taker to answer the call when the caller dialed 9-1-1.

Table 13: Timeliness of Transferred Calls Answered by Ambulance, Fire, OPP, and Others during 2018 to 2021

	Average % of Transferred Calls Answered			
	< 10 sec.	10 - 19 sec.	20 - 29 sec.	30 sec. or over
Ambulance	96	4	0	0
Fire	58	40	2	0
OPP	76	21	3	0
Others	75	21	3	1

Source: Audit analysis of data from telecommunication service provider reports

Table 14 below shows that the timeliness of answering the transferred calls has decreased over the years from 2018 to 2021. In 2018, about 98 per cent of the calls transferred to Ambulance were answered in less than 10 seconds, this decreased to 93 per cent in 2021. The OPP had the most decline in timeliness of answering transferred calls. In 2018, OPP answered about 84 per cent of transferred calls in less than 10 seconds but this decreased to 69 per cent in 2021.

TPS does not monitor or share information on timeliness of answering transferred calls with Toronto Fire or Paramedic Services

TPS does not monitor or communicate with Paramedic Services or Toronto Fire on how long it generally takes the transferred calls to be answered. It is important that this information be shared, so that those entities can monitor and take corrective action when needed to address their call answering timeliness. Also, where trends are decreasing, TPS should consider meeting with the other agency, to determine if any changes are needed to the protocols to ensure call takers receive the timely emergency response needed.

Table 14: Decreasing Trend from 2018 to 2021 on Timeliness of Answering Transferred Calls from TPS by Other Agencies

	% of Transferred Calls Answered by Other Agencies under 10 Seconds				Decrease from 2018
	2018	2019	2020	2021	
Ambulance	98	97	94	93	-5%
Fire	58	59	59	56	-2%
OPP	84	80	71	69	-15%
Others	78	75	76	74	-4%

Source: Audit analysis of data from telecommunication service provider reports

Recommendation:

11. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to regularly provide the information on timeliness of transferred 9-1-1 calls to Toronto Paramedic Services, Toronto Fire Services, and other agencies where appropriate, with the view to working together to meet the 9-1-1 emergency call service level standards. TPS and the other agency(ies) should meet, when needed, to determine if any changes are needed to established protocols to ensure the safety of citizens.

A.7. Managing Call Volume Demand through Public Education and Awareness

9-1-1 line is for emergency situations

The emergency 9-1-1 line is for the public to call in any situation that requires immediate emergency assistance from the police, fire and/or ambulance service. Intuitively, the situation should involve "potential for danger and/or injury is present or imminent", usually indicating "danger to life", or "danger to property or major event in progress".

Calls to 9-1-1 line that are not emergency delay the answering time for those requiring immediate emergency assistance

As discussed earlier, call volume impacts the call centre's capacity to answer incoming emergency calls on a timely basis. Therefore, the more callers that dialed 9-1-1 for situations that do not require immediate emergency assistance or are for a non-police related matter, the longer the answering wait time for calls that indeed require immediate emergency assistance.

TPS has a priority system to reflect urgency of a call event type

TPS has established a priority system in order to reflect the urgency of a call event type. After assessing the circumstances described by the caller, the call taker would assign a priority rating to the event from the call that reflects the urgency of the reported event (this is discussed in Section B of the report).

About 43% of total calls that dialed 9-1-1 from January 2018 to July 2021 were emergency calls

From our review of the January 2018 to July 2021 call event data in the I/CAD system, we noted 1.6 million (43 per cent) of the 3.8 million calls that dialed 9-1-1 were considered by call takers as an emergency that required immediate emergency services (i.e. about 57 per cent were non-emergency related calls – see the breakdown below for descriptions and action required). This proportion of less than half of the 9-1-1 dialed calls being emergency calls was consistent on a yearly basis for these periods, with a decreasing trend from 46 per cent in 2018 to 40 per cent in 2020 (it was 42 per cent for the first seven months of 2021). This reduction could be due to the impact of COVID-19 pandemic. The remaining calls that dialed 9-1-1 were not rated as high priority emergency calls by the call takers who answered the calls, specifically they were assigned as:

18% of the 9-1-1 calls were abandoned or hang-up calls with an increasing trend from 2018 to 2021

- 701,971 (18 per cent) were abandoned / hang-up calls. Each of these calls requires a call back by either the dedicated resources at the call centre or by the call taker who received the call, if the phone number shows on the call taker's screen. Although 98 per cent of these calls did not require police service to be dispatched, calling back each of them still consumed the call centre's resources. We noted an increasing trend of these types of calls. They accounted for 14 per cent in 2018 but increased to 22 per cent in 2020 (and 22 per cent for the first seven months in 2021).

Pocket dials accounted for 3% of the 9-1-1 calls

- **122,310 (three per cent) were pocket dial calls** where the cellular device called 9-1-1 and the cellular owner was not dialing the phone. Unless it was clear from the background noise of the call that it was a misdial, call takers had to call back these calls to confirm the misdial. This type of call was consistently at three per cent on a yearly basis for this period.

12% of the 9-1-1 calls were not matters for police or other emergency services

- **464,746 (12 per cent) of calls were not matters for police or other emergency services.** The calls were either referred to 3-1-1 or 2-1-1 or were calls where the call taker determined there would be no police response to a 9-1-1 dialed call. These types of calls averaged about 12 per cent on a yearly basis for the period 2018 to 2021.

14% of the 9-1-1 calls were asking for referral information or advice, almost all of these did not require the dispatch of police to attend

- **538,670 (14 per cent) of calls where callers were asking for referral information or advice** (i.e. "Advised" event type) (e.g. Collision Reporting Centre, Animal Control, see a lawyer, civil matter, caller advised of accidental misdial, etc.) and police dispatch was generally not required. We found that for almost all of these calls, police service was not dispatched (only 0.3 per cent or 1,756 events were dispatched). However, these calls took up the time that call takers could use to respond to other calls. The proportion of this type of call was consistent at 14 per cent annually over the period from 2018 to 2021.

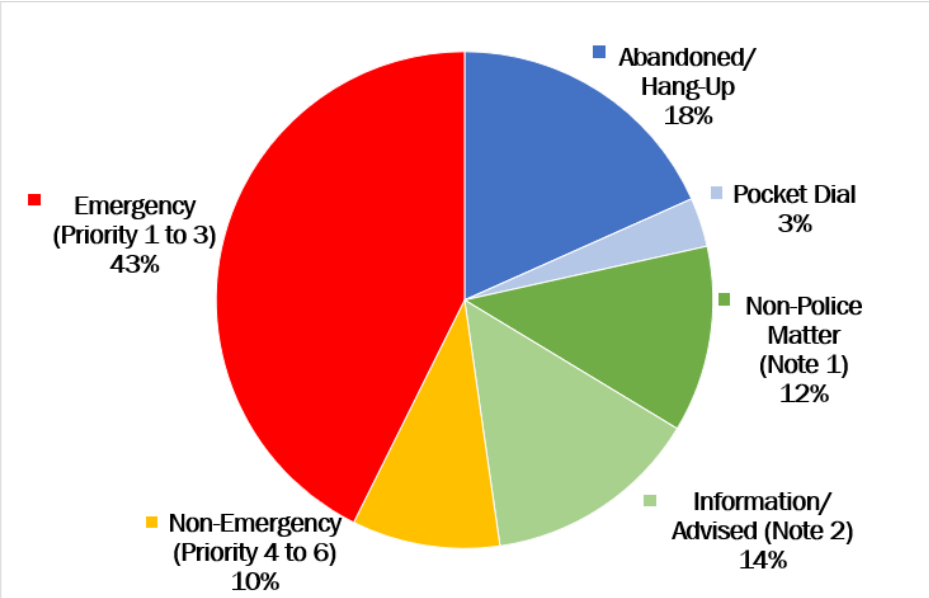
10% of the 9-1-1 calls were for lower priority events

- **369,160 (10 per cent) were calls for lower priority events (priority four to six)** where imminent or potential danger and/or injury was not a factor, usually indicating non-emergency call events. Police attendance maybe required for some of these calls. We found **40 per cent of these calls were not dispatched**[29] but the call takers' time was occupied by answering these calls rather than other higher priority calls. There was a decreasing trend of this type of call from 12 per cent in 2018 to eight per cent in 2020 (it remained at eight per cent for the first seven months of 2021). This decrease could be due in part to the COVID-19 pandemic that affected the overall call volume to 9-1-1.

  Figure 12 shows a breakdown of these calls.

[29] This does not represent all lower priority non-emergency calls-for-service that police attended. There were additional lower priority events that came from the dedicated non-emergency line (8-2222), or were officer initiated, walk-ins to police station, etc.

Figure 12: Breakdown of the Types of Calls Received Through the 9-1-1 Line, January 2018 to July 2021



[1] Non-police matter calls were either 3-1-1 or 2-1-1 referrals, or it was determined by the communications operators that no police response was required for a 9-1-1 dialed call
[2] These calls were for information / advice and assigned as "Advised" event type by call takers. This event type has a default priority 6 and is categorized as a miscellaneous non-emergency event type. It is used when a caller is asking for referral information or advice (e.g. information on Collision Reporting Centre, Animal Control, see a lawyer, civil matter, etc.).

Although the calls from 9-1-1 are prioritized over the non-emergency calls on the 8-2222 line, the latter may impact the availability of call takers to answer the 9-1-1 call, as it is the same staff (multi-queue call taker) taking both non-emergency and 9-1-1 calls.

Public education and awareness need to increase

Public awareness and education need to increase, which in turn should help to reduce the volume of 9-1-1 calls that are not an emergency or police matter and may also decrease the demand for front-line police resourcing. See Section E for further discussion on community education and awareness.

TPS is planning to leverage technology to automate service delivery and help manage call volume

TPS recently started planning for a Digital Workflows project as part of its Platform & Transformation Program. The project includes leveraging platforms to divert calls to automate service delivery, by using digital technology to help manage the lower priority and/or low risk calls, thereby the call centre and police resources can be focussed on handling urgent emergency calls. For example, using fully automated responses to divert lower priority calls such as parking complaints where a caller can self-report the complaint incident via a link that the call taker provided. The caller can then receive text status updates and can also cancel the request if needed. This kind of self-service reporting can also be used for calls where immediate danger has passed, but police investigative follow-up may be required, such as a "break and enter" that happened earlier, and the thieves are no longer on site.

The project will start with low-risk areas, with the ones where existing call diversion and self-reporting capabilities are in place but not highly utilized (i.e. online reporting), then move to mid-risk situations in the developing digital solutions. The project has not been rolled out yet and was still in the very early stages at the time of our audit.

Recommendations:

12. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to analyze TPS's call-for-service data to identify callers and locations that repeatedly call 9-1-1 for non-emergency matters (priority 4 to 8), or those who repeatedly call the police non-emergency line for non-police matters.

The results of this analysis should be used to inform a targeted education/awareness program to raise awareness of the proper use of 9-1-1, the police non-emergency line, and the availability of other non-police City resources.

13. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to accelerate the Digital Workflows project and use data analytics to identify other opportunities and technological tools to create efficiency in the call handling process for communications operators, and to further explore other areas for call diversion. In implementing this recommendation, TPS should consider any best practices and leverage any existing tools already used by other agencies.

Impact of Repeat Callers

Many non-emergency related calls to the 9-1-1 line were from repeat callers

Also, we found many callers **repeatedly** calling 9-1-1 for low priority non-emergency related calls where police were not dispatched, as well as for abandoned, hang-up or pocket dialed calls. For example:

- Amongst the many repeat callers who called 9-1-1 for advice where no police were dispatched, one phone number had a total of 3,141 calls over the period January 2018 to July 2021 (i.e. over 800 calls yearly), followed by the next highest one with 2,287 calls.

- More than 570 phone numbers[30] had at least 20 abandoned or hang-up calls, amongst them about 100 phone numbers had at least 50 abandoned or hang-up calls over the period January 2018 to July 2021, with the highest having 688 calls, followed by the next highest with 448 calls. Many of the repeat abandoned or hang-up calls were made from phone numbers associated with hospitals or coffee shops located in hospitals.

- More than 40 phone numbers[31] had at least 20 pocket dials over the same period.

Calls should be analyzed to identify potential reasons for the high number of repeat non-emergency related calls to 9-1-1

TPS advised us that some of these callers may have mental health issues and some may be seniors with dementia. However, these types of non-emergency related calls (e.g. abandoned calls and pocket dials, repeated calls for lower priority events where police were not dispatched) should be analyzed to identify potential reasons for the high number of calls. In some cases, follow-up to increase awareness and understanding may be needed. Depending on the results of the analysis, the feasibility of introducing a fee may need to be explored, for callers with numerous repeat frivolous calls where mental health is not the cause, to aim to reduce this negative impact on staff resources which in turn impacts the ability for emergency 9-1-1 calls to be answered on a timely basis.

Another Canadian province has adopted the use of fees to discourage unnecessary calls to 9-1-1. In Alberta, fines of $5,000 for first time offenders, and $10,000 for repeat offenders are allowed under the Alberta *Emergency 911 Act* for frivolous calls[32] to the 9-1-1 lines.

[30, 31] TPS management informed us that some of these phone numbers were from phones with unsubscribed mobile services, phones with no SIM card, or from international roamers.

[32] The Alberta *Emergency 911 Act* does not define frivolous or vexatious 9-1-1 calls. According to the Alberta 9-1-1 Standards version 2.0, a frivolous or vexatious calls is "*any deliberately made non-emergency 9-1-1 call that could potentially tie up public safety resources unnecessarily…waste time and abuse the service or staff resources in non-emergency situations. Accidental calls to 9-1-1 including pocket dials will not normally be considered frivolous or vexatious*".

Recommendation:

14. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to use TPS's data to identify callers who are repeatedly making pocket dials, abandoned, and hang-up calls on the 9-1-1 line. TPS should consider a strategy to reduce these types of calls, in consultation with its Corporate Services Command – Legal Services, and the Toronto Police Services Board, including the feasibility of introducing a fee for this unwanted behaviour that impacts TPS's resources.

B. Assigning Call Event Types and Priority Levels

B.1. Event Type and Priority

Communications operators have a challenging job

Communications operators have a difficult job. As the point of first contact for people in extreme distress, they need to use a high level of judgement and make quick decisions based on the information provided by the caller during some very stressful calls. They are called upon to make split second decisions potentially affecting the safety of both civilians and police officers. Some other factors, such as language barriers, phone reception issues, background noises, the caller not being clear or not answering the call taker's questions, increase the challenges.

TPS manuals to guide operators

TPS's Communications Services Unit has two operational manuals that contain policies and procedures to guide how communication operators conduct their daily business and how to respond to the various types of calls and incidents.

TPS has a default priority rating to indicate urgency of a call event

TPS has established about 185[33] event types and their associated default priority ratings to indicate the urgency of the situation for emergency response, with the more urgent incidents receiving lower numeric values. Event types and a priority rating system to classify calls received is a common practice used in other jurisdictions.

Call taker assigns the event type and priority rating to the answered call

Depending on the information provided by the caller, the call taker then assigns the event type and priority rating to the call to signify what type of incident the call is about, whether it requires police/fire/ambulance assistance, and how urgent it is to dispatch for police services, if police services are required. If further information on an event is obtained later (e.g. subsequent calls), the call taker and/or dispatcher can make subsequent adjustments to the initially assigned event type and/or priority rating by the call taker.

[33] Not including the administrative event types

Each event type is assigned a default priority rating in the I/CAD system, but operator can adjust it when needed

TPS uses priority 2, 4, 6 and 8[34] for its default priority ratings to indicate the urgency of the type of event. Each event type is assigned one of these default priorities in the I/CAD system. Based on the information conveyed by the caller, the communications operators can upgrade or downgrade the default priority rating of an event to better reflect the urgency of the situation, or the operators can use the default priority rating to the call event if it is suitable for the circumstances.

Priority 1 to 3 for emergencies; priority 4 to 6 for non-emergency situations

Communications operators would assign priority 1 to priority 3 for emergencies that require immediate emergency assistance; priority 4 to priority 6 are lower priority events for non-emergency situations where police attendance is or may be required. Table 15 provides descriptions and examples of event types for each of the default priorities.

[34] Default priority 8 is used for administrative and miscellaneous event types

Table 15: Description of Priority Ratings and Example Event Types

Priority Ratings	Description	Example Event Types with the Default Priority Rating
Emergency		
Priority 1 (Hot Shot upgrade from another priority)[1]	Most urgent situations that require upgrade from another priority and dispatcher may assign the event to any unit from anywhere across the City. It is used with any call that poses a threat to life, limb, property, evidence or arrest. Usually indicating a danger to life.	Shooting in progress, homicide in progress, echo tiered response (e.g. not breathing)[2, 3]
Priority 2 (and upgrade to priority 1/downgrade to priority 3)	Emergency situations that require immediate emergency assistance such as danger to life, potential danger and/or injury is present or imminent.	Attempt suicide, assault just occurred/in progress, bomb threat, break and enter just occurred/in progress, fire, medical complaint, shooting, robbery, theft of vehicle
Non-emergency		
Priority 4 (and downgrade to priority 5)	Non-emergency situations where potential for imminent danger and/or injury to person or property is not a factor.	Assault (happened earlier, not just occurred), disorderlies, landlord and tenant dispute, traffic obstruct, unwanted guest, noisy party
Priority 6 (and downgrade to priority 7 /upgrade to priority 5)	Non-emergency situations where potential for danger and/or injury is not a factor.	Advised (for information or referral), harassment, found property

Source: TPS's operational manual

[1] This is not a default priority rating, but communications operators can assign priority 1 to the event when needed by pressing the "Hot Shot" button. This highest priority rating alerts officers that a significant event is occurring. All Hot Shot events are to be dispatched immediately whenever possible and the dispatcher may assign any officer unit from anywhere in the City (i.e. not restricted to assigning officer unit from the division responsible to the area where the event is occurring).
[2] The example event types for priority 1 all have a priority 2 by default. These examples are used in the table to illustrate the types of event that can be assigned a priority 1 by communications operators based on the circumstances of the call.
[3] Echo tiered response is a medical related event e.g. choking, not breathing, suffocation.

Important to assign an appropriate event type to correctly prepare the police officer for the event

It is important to assign an appropriate event type as it indicates what the incident is mainly about and prepares the police officer unit(s) to the nature of what they are going to face when they get to the scene. It also impacts management reporting for analysis of the event types where police services responded.

15 calls (8%) in our sample of 191 calls were not assigned the most appropriate call event type

From our review of 191 statistically valid, randomly selected call samples (154 were 9-1-1 calls and 37 non-emergency calls from 8-2222), we found 15 (eight per cent) where the **event type** assigned did not properly reflect the circumstances of the calls according to the Call Taker Manual. Of these, 14 were 9-1-1 dialed calls (nine per cent of our 9-1-1 samples). The remaining one was for an 8-2222 non-emergency call.

Correct priority rating is key as it signifies urgency for emergency response

It is even more crucial to assign an appropriate **priority rating** to the event, as it signifies the urgency for emergency response, which plays a key part in when the callers will get the assistance they need and the efficient deployment of police service.

24 calls (13%) in our sample of 191 calls were not assigned a priority rating that aligned with TPS's manual

From our 191 call samples, we found 24 (13 per cent) where the assigned **priority rating** did not align with guidance in the Call Taker Manual to reflect the urgency of the circumstances described in the calls. Of these, 23 were 9-1-1 calls (15 per cent of our 9-1-1 samples) and one was a non-emergency call. Of these 24 samples:

- 10 of these should have been assigned a higher priority,
- 12 should have been assigned a lower priority (including one non-emergency call), and
- two should have been cancelled.

10 calls should have been rated higher priority

10 call samples should have been assigned a higher priority.

For example, a person was randomly fighting and kicking cars in public, throwing himself into traffic, and reportedly almost got hit by vehicles. This was a risk to life and danger to the person, the civilians around the person, and the drivers on the road, and the reported event was in progress. Multiple calls were received about this incident.

The call was assigned as a Hazard event type and remained with a default priority 2 instead of upgrading it to a priority 1 (Hot Shot). The incident was taking place during a busy period around 5 pm. Police arrived 19 minutes after the event was sent to dispatch.

12 cases should have been rated lower priority

12 call samples should have been assigned a lower priority (11 of them were 9-1-1 calls and one of them was from 8-2222 non-emergency).

For example, a caller who appeared to be experiencing a mental health related issue called about being chased about an hour ago by a group of strangers. At the time of the call, the caller was safe and planned to wait for police inside a shelter. The potential for imminent danger was not a factor. The caller indicated that he had been taking his medicine regularly.

This call was assigned a person in crisis ('emotionally disturbed person') event type with a default priority 2 instead of downgrading it to a priority 4. The call came during the busy period at around 6:30 pm. Police arrived 20 minutes after it was sent for dispatch.

A case where a person's life was in danger versus a case where a person had no immediate danger were both assigned a priority 2

Comparing the above two samples, both were assigned a default priority 2. It took about the same time (about 20 minutes) for police response from the time it was sent to dispatch. But one involved risk to the lives or safety of persons and was in progress, and the other one did not have any potential of imminent danger. Also, although both took about 20 minutes in these examples, the average TPS response time for priority 2 in 2021 was 45.9 minutes, which is much longer, so the impact could be greater in other situations, depending on availability of police officers at that time.

2 cases should have been cancelled

Two call samples should have been canceled.
For one of them, the call taker put in the cancellation for police service in the event chronology instead of the event disposition, resulting in police still attending the scene. In the other case the police services were no longer needed, but the event was not canceled.

We recognize that there are other factors that would impact police response time. For the purposes of this audit, we cannot estimate the impact on actual response time for our sampled events if the priority rating was more appropriately assigned to reflect the circumstances of the incident.

However, for events that should have been assigned a higher priority rating, it may have resulted in a faster response to address the urgent nature of the event. For those that should have been assigned a lower priority rating, the police unit would otherwise have been available to attend other more urgent calls, resulting in more efficient use of police resources. For the two cases where request for police services should have been canceled, the officer wouldn't have needed to attend if the events had been canceled properly, and resources would have been available to attend other higher priority events.

Further improvement on event type and priority rating assignment is important given the nature of calls

It is also important to note that even though we did not find a high per cent of samples with an inappropriate event type or priority rating assigned, given that 9-1-1 calls often involve the life or safety of people, it is important for TPS to further improve in this area.

B.2. Upgrading and Downgrading Priorities

Default priorities were not often adjusted; about 5% of all events had priority rating adjusted from default

Communication operators did not often adjust the default priority rating set for the event type. Our analysis of all the 4.2 million events created from the 4.6 million calls-for-services (excluding system-generated abandoned calls[35]) received from January 2018 to July 2021 found only 191,060 events (about five per cent) had an adjusted priority rating.

Adjusting the default priority rating is sometimes necessary and helps to identify the more urgent cases for dispatch

However, we found that sometimes it is necessary to adjust the default priority of an event to better reflect the urgency of the circumstances. This adjustment makes it easier for the dispatchers to identify the more urgent cases to dispatch to police officers, which leads to better alignment of police response to events.

22 of 24 call samples should have adjusted the default priority

This can be demonstrated from the 191 samples that we reviewed. Of the 24 call samples where we found an inappropriate priority rating assigned by call takers, for 22 of them, the call taker did not adjust the default priority.

Some event types had more frequent adjustments than others

We found some event types had more frequent adjustments than others. For example, more than 85 per cent of holdup, jumper, echo tiered response[36], and sound of gunshots events created during January 2018 to July 2021 had an adjusted default priority. Of all the events in this period where the default priority rating was changed, 95 per cent were to upgrade the default priority rating. There is an opportunity to review the default priority rating for those event types where communications operators frequently adjust the default priority rating.

Improved data and analysis would allow TPS to have this type of information to monitor trends and continuously improve

In the event types identified where call takers often adjusted the default priority rating, and through discussion with TPS management, it is likely that many of the default priority adjustments for these events were done to upgrade from the default priority 2 to priority 1. They likely had good reason to do so given the nature of most of these event types, such as holdup, jumper, and sound of gunshots that is happening or just occurred. However, improved data, information management system, and analysis would allow the 9-1-1 PSAP to have this type of information readily available and to monitor trends and address any continuous improvement that may be needed in its manuals and training for communications operators.

[35] Excluding System Generated Abandoned calls from the calculation because the system always automatically assigned a priority 9 to these calls and they always needed to be adjusted.
[36] This is a medical related event including choking, not breathing, suffocation.

B.3. Supporting Staff

Given the challenges and demands on the job, TPS should consider opportunities to better and/or further support its communication operators in performing their call taking and dispatching functions. Based on our review of samples, as well as through research and consultation with our expert advisor, we noted the following areas where there may be opportunities to improve the call taking process to make it more efficient and effective.

1. Technological Improvements

Making technological improvements

An automated system can be explored and incorporated to streamline the call taking process, reduce the level of actions that call takers must undertake, and guide decision making, which in turn can help reduce stress levels for call takers.

Potential system automation to support the call takers

An example of a system that provides technological assistance to communications operators is the Criteria Based Dispatching program which includes a series of automated questions or options and prompts to guide information gathering and decision making of the call takers during the interaction with the callers. Research shows that the Criteria Based Dispatch program, which was originally developed for paramedic emergency responders, has been adapted for police dispatch in some jurisdictions (e.g. King County, WA, Washington, DC, Tucson, AZ) in the United States. From our meeting with Toronto Paramedic Services, we also learned that its call centre has benefited from using a Medical Priority Dispatch System, a triage tool used for call handling.

Potential system automation to help the dispatchers

We noted system automation can be considered for procedures where communication operators always do the same action. For example, from our call samples we noted that dispatchers need to adjust the “in progress” and “just occurred” event type as time passed. For example, if the police unit has not responded to an in-progress incident (e.g. “Theft just occurred” with a default priority 2) within 15 to 30 minutes, the dispatcher needs to adjust the event type to the one with a lower default priority rating (e.g. “Theft” with a default priority 6). System automation would help and release the dispatchers from keeping track of the time elapsed for the different events and assist the dispatchers in adjusting the event type and priority as needed. In our call sample, the dispatcher did not adjust the event type to the one with the lower priority rating as time elapsed.

Potential to refine timeframe for specific event types

Our expert advisor also commented that a reasonable timeframe for "just occurred" would be from less than one minute to about six-and-a-half minutes, as beyond this time frame it is less likely to lead to an arrest for theft or burglary. There may be opportunity for TPS to refine the timeframe for the "just occurred" type of event (currently TPS uses 30-mintues as the timeframe) to better align its use of police resources.

Recommendations:

15. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to explore technological tools that can assist TPS's communications operators in assigning event types and in prioritizing the urgency of the call for service, to ensure the assessment is consistent with TPS policies and to help reduce stress levels for TPS's communications operators.

16. Toronto Police Services Board direct the Chief, Toronto Police Service to identify where system upgrades can be made to automate manual processes that must be made by communications operators during the call. Such processes can include but are not limited to:

- **a. Adjusting the default priority rating for certain factors on calls.**
- **b. Selection of call source for 9-1-1 dialed call.**
- **c. Adjusting the event type and priority rating for certain types of calls based on the amount of time elapsed from when the event started.**

2. Opportunities to Update or Improve Clarity in Call Taker Manual

More Clarity is Needed in Call Taker Manual

We found that more clarity is needed for certain event types to ensure consistent use amongst call takers and that the manual should be updated where appropriate to reflect current practices. For example, we found a discrepancy between how the event types of "Check Well-being", and "Pocket dial" are being used compared to the Manual. The use of general "catch-all" event types (e.g. Check Address, Unknown Trouble) should be better clarified so that these event types will not be used when other specific event types should be used to better describe the circumstances of the event and to provide more assistance to the officer responding to that call for service.

Also, for events that fall within the "Shop Theft Release" program, the call takers are required to enter "SHOP THEFT" in the text of the call notes so that the Divisions can vet these calls and confirm that they fall within the mandate for handling by phone or if they require an officer to attend. However, there is no procedure in the Manual to prompt the call takers to ask this.

Opportunity to review default priority rating for some event types

As previously noted, there is an opportunity to review the default priority rating for those event types where frequent adjustments are being made by communications operators to the default priority rating. In addition, our expert advisor advised some event types relating to "civil matters" (e.g. Get Belongings, Landlord and Tenant Dispute) could have a lower default priority rating than currently assigned.

Distinguishing danger to life vs. damage to property

Call taker manual - danger to life or property

Our expert advisor advised that in many other jurisdictions, the highest priority event (Hot Shot/Priority 1) typically involves a danger to life and not property. TPS hotshot calls are used for "*any call that poses a threat to life, limb, property, evidence or arrest*". It is to alert officers that a significant event is occurring.

Also, TPS priority 2 event types include both cases related to physical danger and danger to property; our expert advisor indicated that some other jurisdictions clearly differentiate emergency calls involving immediate threat to life versus immediate and substantial risk of major property loss or damage.

Recommendation:

17. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to review and update TPS's Call Taker Manual to ensure:

a. Clarity of all event types and the related procedures.

b. That the event type's default priority rating is consistent with police response expectation and urgency of the type of event.

When reviewing and updating the manual, also consider the following potential changes to specific event types and priority ratings outlined in the report:

- **Whether danger to life versus damage to property (in situations where it may be lower priority) could be better distinguished in priority ratings.**
- **Default priority ratings for events relating to civil matters.**
- **Further defining 'catch-all' event types (e.g. check address).**

3. Further Training Opportunities for Communications Operators

Further training opportunities noted from our sample review

Based on our review of samples, we noted an opportunity to ensure call takers' practices in disconnecting transferred calls to other emergency agencies are consistent with the requirements in the manual that the call taker is to remain on the line until it is evident that police response is not required, or when advised that police are not required.

Other opportunities we noted in our sample review included:

- An assigned event type should be updated when information from subsequent calls indicates a different event type than the one initially assigned
- Consistent event type should be used for the same type of call
- Key information of an event should be included in the event chronology in the I/CAD system to assist the dispatcher and responding police unit.

Recommendation:

18. Toronto Police Services Board direct the Chief, Toronto Police Service to explore training opportunities for communications operators to further improve their skills, particularly regarding assignment of event type, adjustment of the default priority rating, updating an event based on information on related subsequent call(s), and inclusion of key notes in the event chronology.

C. Dispatch and Response Times to Emergency Events

C.1. Response Time Calculation

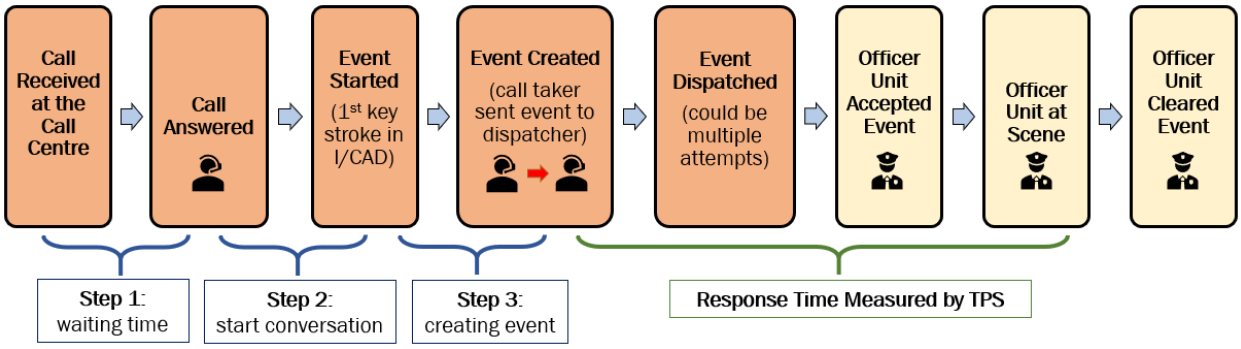
This audit examined the process and/or actions taken by call takers and dispatchers that may affect police emergency response time.

Other observations and the overall conclusion on TPS emergency response time is included in the Auditor General's project entitled "Review of Toronto Police Service – Opportunities to Support More Effective Responses to Calls for Service".

TPS response time does not include the time from when call is received to when the event is entered in the system

From the caller's perspective, the police emergency response time would start from the time when the 9-1-1 call reached the call centre, until the emergency service arrived on scene. However, as shown in Figure 13, TPS measures the response time from when the event was created in the I/CAD system (when the call taker sends the event to dispatcher) to when the unit arrives at scene. This measurement does not include the time from when the caller is waiting for their call to be answered to the time when the call taker created the event in the I/CAD system (represented by Steps 1 to3 in Figure 13 below).

Figure 13: Action Points that are Currently Excluded from TPS Response Time Measurement



The following are the additional times incurred during the call process that are not currently included by TPS in the response time measurement:

- **Step 1 in Figure 13** – this is the call answering wait time as discussed in Section A. The average answering wait time varies throughout the day depending on when the call arrived at the call centre and can be significant.

- **Step 2 in Figure 13** – this is the time during which the call taker has answered the call but has not yet started typing about the call into I/CAD (first key stroke). This could be the time the call taker is trying to understand or getting the required information from the caller to start creating the event. TPS currently does not have information to measure this time. From our observation, this time varies as it depends on how the caller responds to the call taker's questions, including clarity in the response.

- **Step 3 in Figure 13** – this is the time after the call taker started typing information about the call into the I/CAD system (first key stroke) to when the event is created and sent to the dispatcher. Based on our analysis of the 9-1-1 data for January 2018 to July 2021, this time on average ranged from **one minute 18 seconds (1.3 minutes) to three minutes six seconds (3.1 minutes)** depending on the priority of the event as shown in Table 16 below.

Response times are longer if all steps are included

In summary, including these above times in the response time calculation would place TPS further from its response time goals.

Table 16: The Average Time Spent from the Time the Call Taker Created a Call Event in I/CAD to the Time the Events were Sent to the Dispatcher

Priority	Average Time from Event Creation to Send to Dispatcher (in minutes)
1	1.3
2	2.5
3	3.1
4	3.0
5	2.7
6	2.6
7	2.4
8	2.3

Source: Audit analysis of January 2018 to July 2021 I/CAD data

C.2. Dispatch Times

The priority rating assigned by the call taker serves as a guideline to help the dispatcher in determining the priority for dispatching the response. The importance of assigning the appropriate priority rating by the call taker was discussed in Section B.

Dispatch time limited by officer availability

Dispatch time is limited by the availability of officer units. A dispatcher cannot dispatch an event until an officer unit is available to respond. Where police officers are tied up on events, including the lower priority events, they will not be available to respond to another event.

In our sample review, the dispatcher often noted "no unit available" or "no unit respond" when dispatch was attempted. Furthermore, we noted that at times, when the dispatcher tried to dispatch the event again 30 minutes to a few hours later, there were still no officer units available. Dispatchers may make multiple dispatch attempts before successfully dispatching an event to an officer unit.

From our review of the data for January 2018 to July 2021, we found dispatchers generally dispatch officers to an event in accordance with the priority rating of the event.

Informing Dispatcher of Availability

New event is not assigned to an officer unit until current one is cleared

Dispatchers do not dispatch another event to an officer who has not cleared a previously accepted event. Based on the dispatcher's experience and type of event assigned, a dispatcher could check on an officer unit if they have not heard back from them in a reasonable amount of time given the circumstances. There are no guidelines for expected clearance times on the various event types, so the dispatcher is using their judgement and experience in doing so.

Dispatcher may assume an officer is busy on the assigned event until informed otherwise

When an officer unit accepts an event, the dispatcher would presume that the officer unit is addressing the accepted event until the unit cleared the event. Although dispatchers routinely check on officers at events if they have not heard from the officer after some time, it depends on dispatchers of whether and when to check on officers.

Clearing an event allows assignment of the next one

When an officer unit arrives on scene, the officer should press the "at scene" button to report the arrival time or let the dispatcher know to report that time if the "at scene" button is not available (e.g. police unit is on bicycle or foot patrol) or if they cannot press the button due to the circumstance. Similarly, when the officer has finished with the assigned event and is ready to proceed to the next one, the officer would notify their availability by pressing a clearance button or telling the dispatcher.

Dispatcher needs to know arrival and departure times from events

The indication of clearance/closure of an event is particularly important when the officer unit has not reported their "at scene" arrival time, as the dispatcher would not be able to reasonably estimate the completion time of an event for the unit without first knowing of its arrival time.

Officers on 21% of dispatched calls did not report arrival time on scene

Our data analysis revealed that from January 2018 to July 2021, about 21 per cent (268,450) of dispatched events did not report "at scene" arrival time. We examined the Automatic Vehicle Location (AVL) records and relevant documentation for 16 of these cases and found that in four of these cases, there was a delay in the range of 32 minutes to over 1.5 hours for the officer unit to clear the accepted event.

Officers need to consistently advise dispatchers of their arrival and clearance times on call events

If an officer unit does not communicate their availability after they have finished with the assigned event, the dispatcher would not know the unit is available to attend another event.

Not knowing the availability of officer units delays the timeliness to dispatch, which in turn delays TPS response time to events. As previously noted, due to the nature of emergency calls that may involve life and death matters, it is important to minimize the delay in response times.

Other factors may affect police response time

Other factors may impact the timeliness of police response time, such as:

- The unit dispatched may not be the closest to the event location, but the dispatcher had no other unit available
- Police dispatched when not really needed for the call made, possibly due to incorrect event type or priority rating assigned, or inaccurate or insufficient call information received
- Manual note taking and reports taking up officer's time.

Our recommendation on improving 'at scene' arrival reporting and considering an automated technology solution, as well as a more fulsome discussion about response times can be found in the Auditor General's project entitled "Review of Toronto Police Service – Opportunities to Support More Effective Responses to Calls for Service".

Recommendations:

19. **Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to analyze TPS's call answering data to identify the call taker time that impacts the police response time, and evaluate the feasibility to further reduce this time interval in the view to understand and improve the overall response times for citizens, especially for high priority emergency (priority 1 to 3) calls.**

20. **Toronto Police Services Board direct the Chief, Toronto Police Service to ensure the clearance of a call-for-service event is communicated in a timely manner by officers, so that the dispatcher is aware of the availability of the officer units to be assigned for other calls for service.**

D. New Technology, 9-1-1 Levies, and Other Opportunities

D.1. NG9-1-1 Requirements and Funding

CRTC mandated a country-wide upgrade to NG9-1-1 in 2017

The Canadian Radio-television and Telecommunications Commission (CRTC) regulates telecommunications providers in Canada. The telecommunications providers are the telephone and cell service providers that create the networks that connect 9-1-1 calls to the emergency call centres. In 2017, CRTC mandated a country-wide upgrade to the telecommunication networks to a digital or Internet Protocol (IP)-based 9-1-1 system, commonly referred to as Next Generation 9-1-1 (NG9-1-1) to provide more than just voice services for emergency call centres.

NG9-1-1 will allow for callers to send text messages, videos and photos in addition to voice phone 9-1-1 calls

NG9-1-1 will provide a digital system for PSAPs that will allow sending text messages or photos, videos, and other types of data to 9-1-1 operators, in addition to making the voice 9-1-1 calls. This transition will be complex and costly and will occur gradually over several years.

NG9-1-1 and a new IP platform will enhance capabilities to locate calls

We have been advised by TPS that the current 9-1-1 system in Toronto is dated and there are challenges in accurately pinpointing the origin of calls made on wireless devices in an urban environment from high rise and underground structures. We have also been advised that with changes made as a result of NG9-1-1 and a new IP platform, that TPS will have enhanced capabilities to locate calls made from wireless devices.

TPS and TPSB are part of the NG9-1-1 Interagency Advisory Panel advocating for sustainable provincial funding for NG9-1-1	TPS, as well as other jurisdictions, is facing a fiscal sustainability issue with implementing the mandated NG9-1-1 requirements. TPS and the Toronto Police Services Board (TPSB) are part of the NG9-1-1 Interagency Advisory Panel formed in June 2019 to advocate with the Provincial Government for a provincial strategy concerning the implementation and long-term sustainable funding for NG9-1-1 investments and requirements.
TPS moving forward with NG9-1-1	TPS is in the process of modernizing its technology to be compatible with NG9-1-1 requirements (e.g. substituting the physical phones with soft phones). The uptake and impact on the facility requirements, service delivery, and staffing levels, of other forms of communication, including real-time texting and video calls, is yet to be determined.
Additional resources may be required to address the mandated NG9-1-1 requirements	The NG9-1-1 project has an approved project cost of $10.3 million ($8.9 million approved budget and $1.4 million life to date cost) in TPS's 2022 and 2031 Capital Budget. However, it is not clear if the funding will be sufficient to cover the upgrades needed as a result of NG9-1-1 requirements, such as those needed for equipment, renovation, facilities, and staffing. An expected cost of $78 million for a new facility requirement is not yet approved. According to the Budget Notes, TPS will be conducting a feasibility study to review requirements and recommend a plan.
Advised that no sharing of costs and resources available with other PSAPs	We were informed by TPS that there has been no discussion on cost sharing with other PSAPs or regions as each are stand-alone entities responsible for their own procurements. Also, we were advised by TPS that there is very limited potential to share resources such as staffing, technology, equipment, and facilities for NG9-1-1 implementation, as each entity are stand-alone entities responsible for their own projects and resources.
Toronto Fire Services is using a different vendor for its NG9-1-1 solution	TPS is working towards the NG9-1-1 implementation and has awarded a contract for the NG9-1-1 solution to replace the existing E9-1-1 (Enhanced 9-1-1) telephone system. Toronto Paramedic Services also plans to use the same vendor, but Toronto Fire Services is going to be using a different one. According to TPS, the different vendors will not cause an interconnectivity issue in the front-end systems of the three emergency service entities, however it will be important to ensure this potential risk is fully mitigated.
Integration between police/fire/ambulance is an important consideration	Also, since the NG9-1-1 solution is not intended to and will not provide the information sharing on call events required, there is still a need to create an interface of the I/CAD system (event system) amongst the three entities, to allow interconnectivity in communication on 9-1-1 calls and call events.

Adding video and text capabilities will be a complex process

According to a recent research study[37], call takers will need to spend additional time providing instructions to callers while using multi-media. For example, how to take a video (zoom, focus, angles) for the call takers to fully understand the situation from the caller. This challenge may be intensified further because the caller would likely already be in distress. Challenging video calls may make the call taker's job even more stressful, resulting in the need for a higher number of staff, as absenteeism may increase due to the higher stress level.

Operational and governance issues regarding privacy and custodianship of multi-media with NG9-1-1 have also added complexity to the implementation.

CRTC has requested the telecommunications providers to update networks by March 1, 2022; new deadlines for other upgrades have not been set

CRTC has requested all telecommunications providers to update their networks to be ready for NG9-1-1 Voice[38] by March 1, 2022. We were informed by TPS that the telecommunications provider is ready for NR9-1-1 Voice but no PSAP is live with this feature yet. Given the COVID-19 pandemic, CRTC suspended other NG9-1-1 deadlines established in the NG9-1-1 framework. To date, it has not established new deadlines for outstanding obligations including real-time text messaging (NG9-1-1 Text Message), which is the second method of communication to be supported on the NG9-1-1 networks. TPS has set internal milestone timelines for the implementation of NG9-1-1 such as renovation, equipment set-up, and roll-out of real-time texting.

Recommendation:

21. Toronto Police Services Board direct the Chief, Toronto Police Service, in collaboration with Toronto Paramedic Services and Toronto Fire Services, to achieve live-time interconnectivity in communication on 9-1-1 calls and events amongst these entities, both currently, and in the implementation of the Next Generation 9-1-1 solution moving forward. This should include consideration of an interface of the Intergraph Computer Aided Dispatch system to allow for improved communication during 9-1-1 call transfers and events, and to specifically assist with communication where Toronto Police Service are no longer required by Toronto Paramedic Services and/or Toronto Fire Services as applicable, so as to avoid unnecessarily committing police resources.

[37] The Design and Evaluation of Emergency Call Taking User Interfaces for Next Generation 9-1-1, Feb 16, 2022

[38] NG9-1-1 Voice is a service that enables the provision of an IP-based 9-1-1 voice call.

D.2. 9-1-1 Levies and Fiscal Sustainability

9-1-1 levies for 9-1-1 services are remitted to PSAPs in most provinces

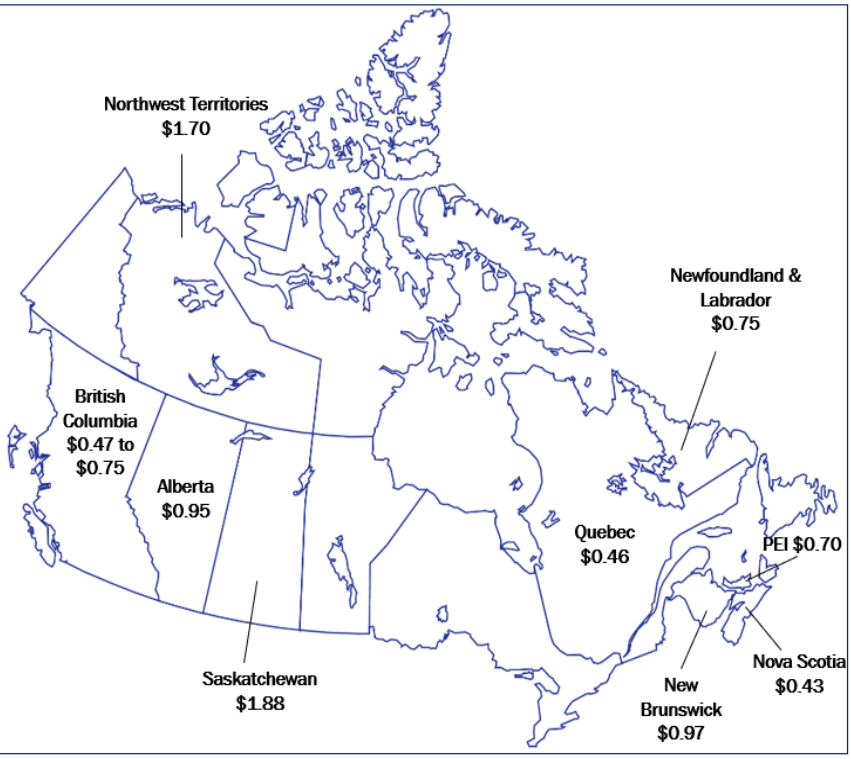
Most provinces have legislated provincial government 9-1-1 levies that they charge to mobile phone users and/or landline users for the provision of 9-1-1 services. As shown in Figure 14, the levy varies by province, ranging from 43 cents to $1.88 per month per phone. British Columbia has a municipal 9-1-1 levy charge by selected municipalities, varying from 47 to 75 cents for the monthly levy.

The telecommunication companies in those provinces collect the fees and after deducting a portion to cover administrative costs, remit the fees to the provincial or local governments, which then distribute the money to the local 9-1-1 call centres.

This government 9-1-1 levy is in addition to the emergency access fees that telecommunication providers charge their customers.

Figure 14: Breakdown of Current Monthly Legislated 9-1-1 Government Levies Charge in Other Provinces, Municipalities, and Territories

Province and Territories	Monthly Government Fee Per Phone Line
Alberta	$0.95 for wireless customers[1]
British Columbia	$0.47 to $0.75[2]
Manitoba	n/a – no user fee levy
New Brunswick	$0.97[3]
Newfoundland & Labrador	$0.75
Northwest Territories	$1.70
Nova Scotia	$0.43
Ontario	n/a – no user fee levy
Prince Edward Island	$0.70
Quebec	$0.46[4]
Saskatchewan	$1.88[5]



[1] Fee increased from $0.44 since September 2021
[2] Municipal levies, varying from different municipalities and not all municipalities are charging the levy. Those municipalities that have levies are charging wireless and/or landline.
[3] Fee increased from $0.53 since January 1, 2021
[4] Fee increased from $0.40 since August 2016
[5] Fee increased from $0.94 since April 7, 2021

Ontario does not yet have the legislation for PSAPs to receive 9-1-1 levies, although most other provinces do	Legislation does not exist in Ontario to charge and remit 9-1-1 levies to PSAPs, although Section 259 of the *City of Toronto Act* allows for it. Telecommunication service providers in Ontario are charging subscribers of certain service plans a non-government 9-1-1 user fee for 9-1-1 for their own infrastructure costs.
Advised that TPS raised the issue of 9-1-1 levies in the past but did not receive approval	TPS management informed us that TPS raised the issue of 9-1-1 levies in the past with the City and the province but did not receive approval. The levies were to support the 9-1-1 PSAP functions, upgrade the 9-1-1 PSAP infrastructure and equipment, use data, information, and analysis to understand the complex environment and make more informed decisions, and for future investment in technology. We also recognize that the Interagency Advisory Panel, as mentioned earlier, is advocating with the Provincial Government for a provincial strategy concerning the implementation and long-term sustainable funding for NG9-1-1 investments and requirements.
Timely to raise the issue again for 9-1-1 levies in Ontario	Given the fiscal sustainability issues with the upcoming NG9-1-1 changes, and the need for a better information management system for the 9-1-1 PSAP operations as outlined in this report, it would be timely to raise the potential funding source of 9-1-1 levies again. For example, New Brunswick increased its 9-1-1 levy in January 2021 to prepare for the switch to NG9-1-1 service, and Saskatchewan increased its levy in April 2021 to fund its system upgrades and technology.
Estimated potential annual 9-1-1 levy revenue of $28.8M ($144M over 5-year period)	According to the Canadian Radio-television and Telecommunications Commission – Communications Market Reports open data on retail mobile sector, 85.8 per cent[39] of the total population in Ontario were mobile device subscribers in 2019. Based on this penetration rate and Toronto's population in 2021 of 2.8 million, we estimated a **potential annual 9-1-1 levy of $28.8 million ($144 million over a five-year period)** using a monthly 9-1-1 levy of $1 per mobile device subscriber in Toronto. This potential revenue will increase as the population and number of mobile phone users continues to increase and if it also applies to landlines as well.
Potential funding could assist with NG9-1-1 implementation as well as other technological solutions and improvements needed	This potential funding could assist with implementing the NG9-1-1 requirements, as well as with implementing some of the recommendations in this report, such as technological solutions to better support communications operators, improve data and information, and increase call diversion for non-emergency calls.

[39] Mobile subscriber penetration rates, as a per cent of total population. The penetration rate represents the number of subscribers as a percentage of the population.

Recommendation:

22. Toronto Police Services Board, in consultation with the Chief, Toronto Police Service and its Corporate Services Command – Legal Services, to engage with the City and City Council for the collection of the 9-1-1 levy or request a change in legislation with the provincial government, so that a 9-1-1 levy can be collected by the telecommunication service providers and remitted to the Public Safety Answering Point, particularly given the fiscal sustainability issues with the implementation of mandated Next Generation 9-1-1 requirements, and given this is the current practice in most other provinces in Canada.

D.3. PSAP Models

Toronto PSAP model is commonly used elsewhere

There are different operational models that can be used as the Public Safety Answering Point (PSAP) model, for call answering to provide emergency services. From our research using publicly available information, we found that the PSAP model used in Toronto with the primary 9-1-1 PSAP residing with police service and transfers to Fire or Ambulance when needed, is a model commonly used in other jurisdictions.

Some good practices in emergency call centre operations noted in a recent study include *"local and regional partnerships with other [Emergency Communications Centres], along with the sharing of standard operating procedures, training resources, technologies, and even staff and facilities."*[40]

There are different types of PSAP models used in some jurisdictions, however there is no one best PSAP model

There are different types of PSAP configurations in some other jurisdictions. However, our research and consultation with our expert advisor indicated that there is no one best PSAP model for emergency Communications Centres structure and operations, including transferring and in-house dispatching. Different models are sometimes used to best meet the unique needs of a given jurisdiction and local context. The staffing, call volume, and timeliness of call answering information is generally not publicly available for all PSAPs, so our audit did not include evaluating the effectiveness and efficiency of the other types of PSAP models.

The different PSAP models used in some jurisdictions include:

[40] Transforming 911 Assessing the Landscape and Identifying New Areas of Action and Inquiry, P. 12

Consolidated Model

Chicago operates a consolidated model for police, fire and ambulance

- The City of Chicago has a consolidated emergency Communications Centre for call taking and dispatching of police, fire and ambulance services.

Washington DC has three services in one facility

- Washington DC has a consolidated centre with call takers and police, fire, and ambulance dispatchers. It also answers 3-1-1 calls.

Calgary, Alberta has an integrated dispatch facility

- In Calgary, Alberta, 9-1-1 operations are operated by the City which has an integrated dispatch team for Police and Fire. These are all located inside a single facility. In 2021, the dispatching service for Emergency Medical Services was moved from the City's 911 centre to Alberta Health Services centre as part of a province-wide consolidation.

Edmonton, Alberta is moving towards a joint dispatch centre

- In June 2021, Edmonton Police and the City presented a business case to its Council about integrating Police, Fire, and community service partners into a joint-dispatch centre.

PSAP with Third Party Provider

Telecom provider owns and operates six call centres across United Kingdom

- In the United Kingdom, the telecom provider owns and operates six call centres across the UK. Call takers answer the call and then transfer calls to the local emergency control room based on the nearest event location for police officer dispatch.

E-Comm call answering service in British Columbia

- E-Comm is a non-profit organization of various municipalities in British Columbia (BC). Regional Districts contract their 9-1-1 service to E-Comm. E-Comm is responsible for answering 99 per cent of 9-1-1 calls made throughout the province of BC and provides this call answer service within various regional districts. It connects the caller to the appropriate agency for dispatch services, but it also provides dispatch services for 33 police agencies and 40 fire departments throughout southwestern BC. It does not dispatch for ambulance service, which is done by BC Emergency Health Services.

City Manager's Feasibility Review of PSAP Model

Report requested by City Council on feasibility of moving PSAP 9-1-1 operations to a non-police City service

The City Manager has been directed by City Council to report on the feasibility of moving 9-1-1 operations from TPS to a non-police City service. The City Manager will need to consider many factors in the feasibility review.

Legislation requirements need to be considered

It will be important for the City Manager's review to consider legislative requirements, including upcoming changes to the provincial regulations. The draft regulation for section 14 Alternative Provision of Policing Functions of the *Community Safety And Policing Act, 2019*, indicates that the "*dispatching members of a police service*" is a prescribed policing function where the police service board may enter "into an agreement with another police service board or Commissioner to provide the policing function in the area…". There is no relevant prescribed entity listed under the draft regulation for the provision of communications centre services. Accordingly, under the draft regulation, if the PSAP model were to be moved, the dispatching of police services seems to be a function that only a police service will be allowed to perform. It is unclear if the call taking function is included as part of the policing function at this time. When the regulations are finalized, TPSB/TPS should obtain a legal opinion.

Several things to consider if moving the PSAP model including response times, cost benefit analysis, legal risks, governance model, and collective agreement

The feasibility review should consider any potential impact on call answer and response times of police, fire, and ambulance, recognizing that our reports have identified improvements are currently needed to address timeliness for both the 9-1-1 call answer wait times (particularly during peak periods) and TPS's response times (particularly for emergency high priority calls).

A cost benefit analysis needs to be completed as part of the feasibility review, including any emerging requirements such as NG9-1-1.

Consideration should be made for other risks outlined in this report, including staffing challenges (e.g. up to 1.5 years for recruitment/ hiring and training process before operators are qualified, and difficulty in hiring and retaining staff in the industry). Any review would also need to consider the cost and other impacts of outsourcing/ transferring a civilian workforce that is covered under a collective bargaining agreement, and the added stress on a function that is already operating at very high stress levels.

Additionally, the review should consider other responsibilities of the 9-1-1 PSAP operations such as responding to requests for audio and data records for court and on-going investigations, maintaining radio communications with police units, and training for staff. These could be considered as part of the fulsome cost benefit analysis.

The review should also specifically examine legal implications of any changes, including the risk when a 9-1-1 call for service involving public safety comes into 9-1-1 and if police are not sent. Legal requirements (e.g. providing requested 9-1-1 audio and data records as evidence in court, and the compliance with criminal disclosure obligations for court proceedings) and privacy considerations regarding information sharing[41] should also be considered. The review should include consideration of the governance model for the PSAP operations with the view to enhance interoperability and coordination of emergency response services delivered.

Other strategies such as additional training may be more effective to achieve intended goals and outcomes

The City should also consider whether moving the PSAP would achieve the goals and outcomes they are intending, or if by working together with TPS, there are other strategies that would be more effective, such as updating the 9-1-1 communications operator manual, additional training and data and technological supports for communications operators and police officers, and increased public education and awareness.

Alternate non-police response should be provided as a choice to situations where police not required

There have been studies done that indicated some people and communities have less trust in police[42]. In addition, the public should be provided with a choice to have an alternate response to situations that do not require immediate attendance of a priority response unit police officer[43], such as a mental health related call with no violence or weapons involved or mediation of disputes that are not heated/violent.

A different phone number (e.g. 2-1-1) could be used, putting control in the hands of the caller, and addresses the challenge of legal risk for TPS

In these types of situations, all parties may benefit by having a different phone number for a non-police response, such as 2-1-1. It puts the control in the hands of the caller by calling 2-1-1 or the alternate non-police response, and if it later turns out police or other emergency services are needed, they could still be called through 9-1-1 or be transferred to 9-1-1 accordingly. This may also address TPS's challenge of legal risk, which is increased if 9-1-1 Operations receives a 9-1-1 call that is not dispatched for police service, and someone's life or safety was negatively impacted as a result of not dispatching police. As the City explores opportunities for alternative non-police response, it will need to consider the related risks, including the risk of employee safety and legal risk.

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[41] There needs to be consideration of the privacy and confidentiality of information obtained and recorded currently by call takers in the I/CAD system, and compliance with applicable laws and regulations regarding privacy and disclosure. It may be possible to share some information at an aggregate level with anonymity, but this should be part of the consideration.

[42] Public perceptions of the police in Canada's provinces, 2019 (statcan.gc.ca)

[43] Priority Response Unit officers are officers who mainly respond to emergencies and other calls-for-service

Recent Toronto Community Crisis Service pilots launched by the City

The City has begun Toronto Community Crisis Service pilots (previously known as Community Crisis Support Service pilot), starting in March and April 2022 for two areas in the City, and the second phase will be launched in two other City areas by July 2022.

These pilots cover four areas of Toronto (i.e. Downtown East, North East, Downtown West – Kamaamwizme wii Naagidiwendiiying, and North West) and are partnered with the community agencies to provide a community-based response six days a week to non-emergency crisis calls and wellness checks relating to individuals 16 years of age and older. These service pilots aim to divert certain non-emergency mental health crisis calls to trained mental health crisis workers as part of a new community-based response model.

Calls to 9-1-1 that meet certain criteria will be transferred to 2-1-1 upon the caller consent for the dispatch of a mobile crisis team. The 2-1-1 line for these pilots is responsible for triaging and dispatching calls to the mobile teams. It also connects the callers to supportive services for follow-up supports when appropriate. As part of the pilot, individuals experiencing or witnessing a mental health crisis can also call 2-1-1 directly for this service.

Recent call diversion pilot project launched by TPS

In addition, TPS launched a one-year Call Diversion Pilot project in November 2021 with the Gerstein Crisis Centre. Crisis workers from the crisis centre are located within the call centre for 20 hours a day, seven days a week, to handle non-emergency mental health calls that come to the call centre from certain areas of the City once the call takers evaluate that the calls have no imminent risk and are suitable for diversion.

It is important that the City and TPS continue to explore strategies to have alternative non-police responses, so the needs of all community members are met through the services provided of emergency and non-emergency responders, and that they are culturally appropriate. It is also important that all important factors outlined are considered and assessed in making the decision of potentially moving the 9-1-1 PSAP for the City, and whether other strategies may be more effective in meeting the intended goals and outcomes desired.

Recommendation:

23. The City Manager, in consultation with Toronto Police Services Board, Toronto Police Service (TPS), and City's Legal Services, to include the following to inform its feasibility review of whether to move the 9-1-1 operations to a non-police City Service:

    a. Fulsome cost/benefit analysis that includes the potential impact to call answer and call response time of police, fire, and ambulance, and the other related functions of the call centre such as audio and data requests including for court proceedings, and maintenance of radio communications.

    b. Cost impact and feasibility with regards to staffing, given the current collective agreement of communications operators.

    c. Legislative feasibility given the current draft and forthcoming legislative requirements related to the delivery of policing and related services, in particular, the involvement of the police service in the Public Safety Answering Point (PSAP) dispatching function.

    d. Legal risk and who would be responsible for those 9-1-1 calls and/or alternate non-police response where police are not dispatched, and it results in a negative outcome.

    e. Governance model for PSAP with the view to enhance interoperability and coordination of emergency response services delivered.

    f. The goals and outcomes that are intended through a potential move of the 9-1-1 operations, and whether other strategies may be more effective, efficient, and economical to achieve those, such as offering another phone number for non-police response such as 2-1-1, and/or working together with TPS on other strategies, including but not limited to, updating the 9-1-1 communications operators manual, additional training, data and technological supports for communications operators and police officers, and increased public education and awareness.

E. Community Education and Awareness

E.1. Improving Public Awareness

Public education and awareness can help to reduce the large number of non-emergency related calls to the 9-1-1 line

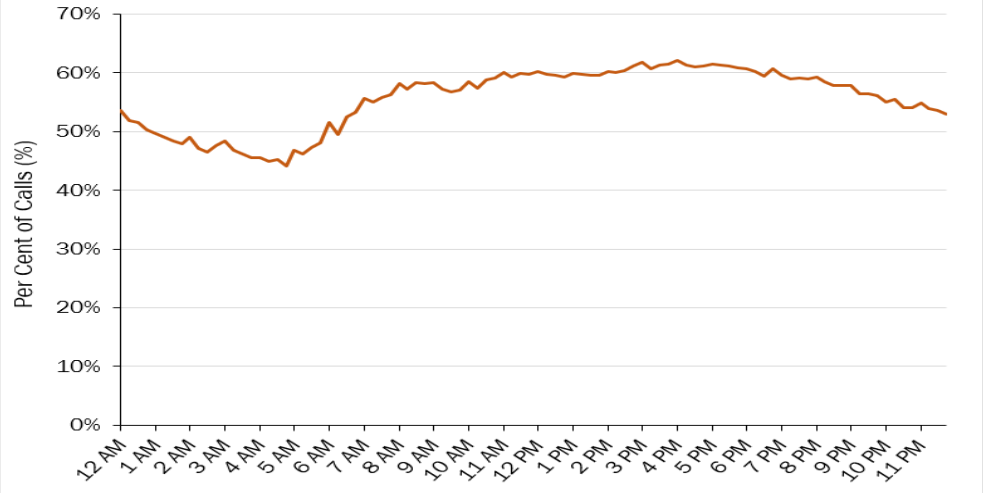
There was a substantial number of non-emergency related calls to the 9-1-1 line as discussed in Section A.7. This indicates the need for better clarity and communication to the public on when to use the 9-1-1 emergency line, and the options of TPS's non-emergency line (416-808-2222) or alternative non-police resources like 2-1-1 and 3-1-1.

Non-emergency related calls accounted for more than half of the 9-1-1 call volume

From our review of the I/CAD data of when an event was created for a call for service[44], we noted that calls that were not considered emergency calls (priority 1 to 3) on average accounted for more than half of the number of calls that dialed 9-1-1 throughout a day over the period January 2018 to July 2021.

As shown in Figure 15 below, these non-emergency related calls to 9-1-1 (i.e. abandoned calls[45]/ hang-up/ pocket dials, calls for information/advice, lower priority non-emergency calls for service, and non-police matters) accounted for about half of the total 9-1-1 call volume from midnight to 6 am, then they accounted for about 60 per cent of the 9-1-1 dialed calls for the remainder of the day. Hence these types of calls play a key part in driving up the average total 9-1-1 call volume and thereby the 9-1-1 call answering wait time.

Figure 15: The Proportion of Non-Emergency Related Calls that Dialed 9-1-1 on the 24-hour Basis for the Period January 2018 to July 2021



[44] The phone system is not interconnected with the I/CAD system which records the priority rating of the call (i.e. there is no information on the priority by only looking at the call data). Given there was no call that waited beyond 15 minutes over this period, the event creation time in I/CAD would not be more than the 15-minute interval of the call report, we estimated the call arrival time using the event creation time in I/CAD for this analysis.

[45] Over 98 per cent of abandoned calls received were not for emergency events.

We recognized that at times, a caller could dial 9-1-1 for a non-emergency situation because he/she was not sure whether a situation is an emergency. For this type of situation, we recognized it is better to be safe and let the 9-1-1 call taker determine if immediate emergency assistance is required or not.

Non-emergency calls to 9-1-1 may be due to lack of understanding of the use of 9-1-1 or being unaware of alternatives

However, some callers may have dialed 9-1-1 for a non-emergency situation due to a misunderstanding of the use of 9-1-1, and/or the lack of awareness of other available alternatives, including the police non-emergency phone number (8-2222), and alternative TPS online reporting, or other non-police alternatives (e.g. 3-1-1, 2-1-1).

Reducing non-emergency related calls to 9-1-1 will improve answering capacity

Given the high proportion of non-emergency related calls that dialed 9-1-1, it is important to reduce this type of call to the 9-1-1 line in order to reduce the unnecessary and avoidable call volume to 9-1-1 which impacts the call takers' workload. This will improve the overall capacity to answer higher priority emergency 9-1-1 calls in a more timely manner.

No public education campaign since 2017 or recent targeted awareness program

TPS has not had a general public education campaign since 2017 and has not had any recent targeted awareness programs. In 2017, TPS and City 3-1-1 staff held a 9-1-1 awareness campaign together at the Canadian National Exhibition. The awareness campaign aimed to increase public awareness on the use of 9-1-1 and the City 3-1-1 number, and TPS non-emergency police number 8-2222. In 2018, the City and TPS launched a "Make the Right Call" advertising campaign and used the similar awareness messages on the City's social media accounts and 3-1-1 website.

TPS initiatives may not be reaching target audience

TPS mainly utilizes its website (e.g. posting news releases) and social media accounts (launched in April 2021) (e.g. twitter) in attempts to educate the public and raise awareness on the proper use of 9-1-1 and the different alternatives (TPS non-emergency line 8-2222, TPS online reporting, City 3-1-1) when help is needed.

However, this method of communication may not reach certain target audiences including those who do not follow TPS on social media/twitter or visit their website, as well as vulnerable individuals who might not have access to or knowledge in using online platforms. TPS's annual telephone survey found a decreasing trend in public understanding of when to call 9-1-1 and the non-emergency line from 2017 to 2019. Also, in order to use the alternative methods, the public needs to first know about them. For example, a research study has cited the E-Comm's public non-emergency education campaign appeared to have a degree of positive impact on the decrease in non-emergency calls to 9-1-1.

Opportunities to improve TPS website

We reviewed TPS's website and those of other jurisdictions and noted some opportunities to make TPS's website easier to navigate and more user-friendly related to information on 9-1-1. At the end of the audit, we noted TPS started to modernize its website by addressing some of the concerns we identified with TPS management during the audit, for example, the modernized website now:

- has information on 9-1-1, police non-emergency numbers (8-2222), online reporting, and other alternate numbers (e.g. 3-1-1, Toronto Hydro)
- is displaying more information through graphics, using examples rather than plain text.

TPS has recently modernized its website

While we recognize the modernized website has addressed some of the concerns we raised with TPS management during the audit, TPS should continue to further improve and periodically update its website to make it easier to navigate and more user-friendly to find information (e.g. videos and key information that provide education on use of 9-1-1 with multi-languages, easily finding information on the non-emergency line (8-2222)).

Public needs to better understand who to call and information to convey

There are opportunities for TPS, in collaboration with the City, to further improve public awareness and understanding, including when to call 9-1-1 and the information to provide upon calling the police non-emergency line (8-2222), Online reporting, and other non-police alternative resources (e.g. City's 3-1-1 for non-emergency City services, programs and information; 2-1-1 for information on and referral to community and social services).

Opportunity to remind or educate the public on what information to provide to call taker when the call is first answered

We also noted some example areas where TPS can enhance public understanding and awareness:

- during our call sample review, we noticed an opportunity to remind or educate the public on primary information to provide to call takers when the call is first answered (e.g. first indicate which emergency service is required – police, fire, ambulance, then, address location of the event, phone number, and answering the call takers' questions). This may help improve the call process time.

Opportunity to educate or raise awareness about what to do when 9-1-1 dialed by mistake

- with the many abandoned/hang-up calls, TPS can also further educate or raise public awareness about what to do when an individual has dialed 9-1-1 by mistake, to help lessen the subsequent work involved in calling back each of the abandoned and hang-up calls received.

While we recognize that there have been some educational materials posted by TPS in the past, such as in the video link below, the educational materials should be refreshed, refocused, and ongoing based on results of data analysis with the aim to reduce unnecessary or avoidable calls to 9-1-1.

  - Just Like They Say In The News - Toronto Police Pocket Dial PSA - YouTube

TPS survey shows the need for greater understanding and awareness for alternative numbers

TPS's 2018 community Feedback Survey also shows greater understanding and awareness for the 3-1-1 and the non-emergency numbers was needed. Chicago, IL, has raised public awareness of its 3-1-1 line through communications campaigns, which may have helped Chicago with higher annual rates of calls to 3-1-1. TPS, in collaboration with the City, may also want to consider a shorter and easier to remember number (if possible, three digits) for its dedicated non-emergency line.

Recommendations:

24. Toronto Police Services Board direct the Chief, Toronto Police Service, in collaboration with the City, to undertake public education campaigns (including targeted awareness programs) and ongoing public education initiatives to improve public awareness and understanding on distinguishing between the various lines and the proper use of 9-1-1, the non-emergency line (416-808-2222), online police reporting, and other non-police alternative resources, including promotion of 2-1-1 (assistance in connecting people with community and social service resources) and 3-1-1. Assessment should be made to evaluate the effectiveness of these campaigns and initiatives on call behaviours. The campaign and/or initiatives should:

    a. Include strategies to increase public awareness on what to do when the caller dials 9-1-1, including the specific information that needs to be provided to the call taker in order to shorten police response time, how to prevent pocket dials, and what to do when an individual dials 9-1-1 by mistake.

    b. Be multi-lingual.

    c. Be refreshed and refocused periodically to address the 9-1-1 call analysis results to reduce unnecessary or avoidable non-emergency related calls to 9-1-1.

25. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS), in collaboration with the City, to consider a shorter and easier to remember number (if possible three digits) for TPS's dedicated non-emergency line.

26. Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to further improve TPS's website so that it is easy for the public to navigate and to find information on the 9-1-1, non-emergency line (8-2222), and online reporting.

Conclusion

The 9-1-1 PSAP has a crucial role

As the 9-1-1 Public Safety Answering Point (PSAP) for the City of Toronto, TPS call centre has a crucial role in ensuring the safety and security of the people of Toronto and their properties. It is the first point of contact for those who call for emergency assistance during times of distress. The timeliness of call answering is critical so that people receive the appropriate emergency response needed as soon as possible, as a person's life or safety can often be at risk. The assessment made by communications operators determines the priority level, which impacts the timeliness of emergency response. Also, the decision on whether a call is dispatched or not for police services has a direct impact on the first level of front-line police resourcing required.

Both internal and external factors affect the success of the 9-1-1 PSAP operations.

Key success factors of the 9-1-1 PSAP operations

Internally, TPS needs to support the 9-1-1 PSAP operations by ensuring it has the resources and capacity to answer calls in a timely manner, and the proper information systems with the data, information, and analysis available for regular monitoring and informed decision-making for the 9-1-1 PSAP operations. It is also important that TPS's information systems are supporting other analytical needs such as identifying opportunities for alternate response strategies and informing and developing strategies for public education campaigns.

The public also plays a key role in the success of the 9-1-1 PSAP by calling the 9-1-1 line for emergency situations that require immediate police, fire, and/or ambulance assistance, and using the non-emergency line or other non-police alternatives for other situations.

Key issues found

We found the following key issues:

- 9-1-1 PSAP did not generally meet the industry standard for timeliness of answering 9-1-1 calls throughout 2018 to 2021 and its 9-1-1 answering wait time varies significantly throughout the day. It needs to improve call answering wait times, particularly during peak periods

- Call volume and staffing challenges are the main drivers that affect the ability to answer calls on a timely basis

- Abandoned calls, non-emergency calls, calls for non-police matters, pocket dials, and repeat callers stretch valuable resources

- Proper data, information systems, and analysis is key to improving workforce management, so that both peak and non-peak periods are staffed to achieve service levels, and take into account staff absences

- Communications operators can be better supported through technological solutions, improving the manual, and additional training

- Most other provinces in Canada have legislated 9-1-1 levies remitted to the PSAP, to provide funding which is particularly needed with the mandated NG9-1-1 requirements and the needed data and information system identified in this report

- There are opportunities for 9-1-1 PSAP operations at TPS, in collaboration with the City, to improve public awareness and understanding, including when to call 9-1-1 and the information to provide upon calling, police non-emergency line (8-2222), TPS online reporting, and other helpful numbers such as 3-1-1 and 2-1-1.

26 recommendations

Our 26 recommendations respecting these key issues are designed to assist all stakeholders to have a 9-1-1 PSAP operations that provides callers with timely call answering and appropriate emergency responses, and a system that supports the public in obtaining their emergency, non-emergency, or alternative response in the future.

Audit Objectives, Scope and Methodology

Our objective for this audit

To assess whether the Toronto Police Service's 9-1-1 Communications Centre provides access to emergency services in an effective and timely manner, as well as identifying potential areas of improvement to the efficiency and economy of operations.

Our scope

The scope for this audit covered the period from 2018 to 2021. Our audit scope did not include:

- Examining whether dispatch of the call and resulting emergency response (including type of emergency responder or police resources used) was appropriate
- Timeliness or appropriateness of the on-scene emergency response of fire and ambulance.

Our methodology

Effectiveness – Are 9-1-1 services provided in a timely manner, leading to a timely emergency response?

- time to answer 9-1-1 calls
- following up on abandoned emergency calls for service
- time to transfer calls to other emergency response services (fire, ambulance) or other community partners
- appropriate event types and priority ratings for 9-1-1 calls
- time to activate emergency response during call handling
- time to dispatch
- review of police emergency response time (from perspective of call answering and dispatching).

Efficiency & Economy - Is there optimal use of resources at the 9-1-1 Communications Centre?
Identify potential opportunities for improvement in efficiency and/or economy through:

- Examining systems, processes, and procedures for:
  - 9-1-1 emergency calls
  - 9-1-1 calls that are not actually an emergency
  - Police non-emergency calls (dedicated 808-2222 line)
- Researching other PSAP service delivery models for good practices
- Benchmarking to other jurisdictions
- Examining opportunities to leverage resources or potential partnerships.

Audit approach

Our audit approach included:

- reviewing documentation, systems and process descriptions, staff manuals and procedures
- reviewing relevant legislation and upcoming changes
- reviewing TPS budget information, strategic plans, and internal and external reviews on TPS's Communications Centre
- analyzing data from telecommunication provider (Bell), the 9-1-1 call (Avaya) system and I/CAD system
- listening to a sample of 9-1-1 calls and reviewing the related documents
- reviewing the Automatic Vehicle Location (AVL) data for a sample of events attended by police officer units and the related document of the events
- interviews with staff from TPS, TPSB, Toronto Police Association, Toronto Paramedic Services, Toronto Fire Services, and City Manager's Office
- interviews with telecommunication service provider
- physical observation of the 9-1-1 communications centre
- reviewing reports, including TPS reports to TPSB on performance targets, training and accreditation, complaints/claims, etc.
- reviewing literature and studies
- reviewing agreements (where available) between TPS and fire, ambulance, and other partners
- benchmarking to other jurisdictions and researching other PSAP models and good practices
- consulting with subject expert advisors.

In selecting and interpreting the sample described in Section B.1, we used statistically valid, randomly selected, sampling techniques valid within a 95 per cent confidence level and five per cent margin of error.

Experts were used to validate results

For the sample calls where we questioned the appropriateness of event type and/or priority rating assigned by the call takers, our conclusions were informed by consultation with our subject expert advisors that included an academic expert with extensive research experience focused on 9-1-1 dispatch centres and former call taker experience, and former law enforcement officers with many years of policing experience.

Scope limitation

Our findings, conclusions and recommendations are based on our analysis of the available information and data provided by TPS at the time of the audit. System limitations and the internal controls and the information systems controls weaknesses relating to the call-for-service data limited certain aspects of this engagement.

In particular, we were limited to only certain call-for-service data and the time period that was available. During the audit, we identified issues with the reporting of abandoned calls and the associated impacts on the reported service level standard, for which the telecommunication service provider was unable to provide an explanation. We did not have the information and data to quantify the impact on the system calculated service levels.

In addition, we also identified system integrity issues with the I/CAD system that records all the events associated with each of the call for services. We communicated the issues to TPS management and the service provider. The I/CAD system provider was not able to provide an explanation for the issues we identified.

Exhibit 1 contains further descriptions of the data and information challenges and limitations during this audit.

Compliance with generally accepted government auditing standards

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Exhibit 1: Data Challenges

As discussed in Section A.5. in the report, the call-for-service and operational performance data that we requested to assess the effectiveness and efficiency of the Communications Centre (call centre) were not readily available. These are also the key data and information that management would need to perform effective resource management, and to monitor staff and service performance of the call centre as discussed in the report.

The following are some of the key challenges we experienced during the audit when we requested the call-for-service data and related information (e.g. call taker who answered the call, the number of call takers staffed at different time periods, the time spent on call and 'not ready' time).

a. Telecommunication Service Provider Reports

- We started by requesting raw data from TPS and its telecommunication service provider. However, given TPS does not have a data warehouse for the calls-for-service handled through its phone application system (which would allow access to all potential data fields required with no time limitation), it would have been cost prohibitive to obtain the raw data or the requested report based on the cost quoted by the provider. For some raw data, the system does not retain it anymore as it had passed the retention period.
- We were then made aware of these readily available reports that TPS received but had not been using. The reports included the phone number and the different timestamps during the call flow of each call that comes to the call centre (i.e. the time when a call is received, answered, transferred and answered by the secondary agency, and disconnected).
- We planned to use these readily available reports from the telecommunication provider for our audit testing and in calculating whether the service standard was being achieved.
- However, we were unable to easily use these reports in the format received (see right-hand column below), not all months were saved and available, and we were not able to use them for the purpose of assessing whether the service standard was being achieved and how long each call needed to wait before being answered due to the limitations described below.

Data limitations/ weaknesses	What we needed to do
• The 'Answered' timestamp on the report is the earlier of the time the pre-recorded announcement is played when a call is waiting to be answered in the queue, or the time the call is answered by a call taker. Therefore, the actual call waiting time (and achievement of the service level standard) cannot be measured using this report. • The report does not show the call taker who answered the call or the unique event number to trace to the event created in the	• The report is available in spreadsheet format, however, it is saved on a monthly basis. We had to combine each separate spreadsheet that TPS saved (some were missing) over the period to analyze the information that was available through these reports. • As mentioned above, we could not use these reports to calculate whether the service level standards were achieved due to the limitations noted.

I/CAD system. Hence, the information cannot be used to measure the call duration by the different types of event and priority. • TPS does not use the reports, but only saves them on a monthly basis. The reports are only available in the system on a rolling 12-month period. Some of the months that we required were not available in the audit since the 12-month period had already passed and staff did not save them.	

b. Subcontractor of Telecommunication Service Provider Reports for TPS's Phone Application System

- Given that we could not use the telecommunication provider reports described above to assess whether the service standard was being achieved and to perform other audit tests, we examined whether there were reports from the subcontractor of the provider for the phone application system.
- As mentioned above, TPS does not have a data warehouse to extract specific data from the phone application system, nor do TPS staff have the knowledge of how to do so if the provider gave access (training would need to be provided). Instead, TPS uses information in the standard reports from the subcontractor of the telecommunication services provider for monitoring the call centre operation performance. Every day, TPS staff download and save the PDF reports from the phone application system and manually enter some of the information into a spreadsheet that they then use to monitor and manage their operations and workforce.
- There is one standard report from the subcontractor for the phone application system that included details of a call flow of every call received, such as receiving time, the time when the pre-recorded announcement is played and how many times it is played before the call is answered, the answering time, the call taker who answered the call, and disconnection time. Each call has a unique call ID on the report.
- Other standard reports contain different pieces of call data and staffing information on an aggregate level (e.g. each 15-mintue interval, daily, weekly).

Data limitations/ weaknesses	What we needed to do
• Each day staff manually enter some information from the different reports into a management spreadsheet report. This manual process is prone to input and calculation errors as discussed in Section A.5. in the report. • The report that contains details of each call is only generated as needed by TPS and has	• Since the report that contains details of each call is not in a format that can be used for analysis and due to its limited time availability, we used various standard reports at the 15-mintue interval to piece together the information needed to do our analysis. For example:

a limited retention period (174 days) in the system. The format it is provided in cannot be used for analytical review or trend analysis. • The other standard reports only contain information calculated by the system on a summary level; 15-minute interval is the most granular that can be provided and has a limited retention period (400 days) in the system. • None of the reports contain the phone number nor event number to allow the call to be traced to the event created in the I/CAD system. Hence, there is no information to measure the call duration and the wait time incurred for the different event types. The latter information is needed if TPS wants to include the answering wait time as part of its response time measurement against its response time targets for the different priority ratings.	○ a report for call volume, service level, average answering wait time, and longest wait time ○ another report for information on staffing (e.g. the number of call takers staffed at different time periods) ○ another report for information on each call taker's 'not ready' time, idle time, and talk time ○ another report for information on 'not ready' time by platoon and the staff in the platoon. • We found human errors in TPS's spreadsheet management reports and spent time to correct the errors and ensure it was accurate for our analysis. • Extensive effort was spent to verify, convert, combine, and clean the reports into spreadsheet format that allows for analytical review and trend analysis. • **In total, we converted, combined, and cleaned over 1,000 reports** to perform the service level, wait time, and capacity analysis discussed **in Section A** of the audit.

Additional Challenges with Data Integrity:

In addition to the above data challenges, as discussed in our Audit Objective, Scope, and Methodology section, we identified **various data integrity issues** that resulted in a scope limitation in the audit. For both of the two areas below, the service provider for that system was unable to provide an explanation for the issues we identified.

Abandoned Call Data Issues

During the audit, we identified issues with the reporting of abandoned calls and the associated impacts on the reported service level standard. We raised our concerns with the telecommunication service provider and **after about three months of our inquiry**, the service provider informed us that they were not able to provide an explanation. We did not have the information and data to quantify the impact on the system calculated service levels.

I/CAD System Data Issues

In addition, we also identified system integrity issues with the I/CAD system that records all the events associated with each of the call for services. We noted sequential gaps in the unique event identifier created by the system for each event. Also, we noted discrepancies of the unique event identifiers between the primary tables in the system. We communicated the issues to TPS management and the service provider. It took the service provider **more than three months** to reply

to our inquiry that no explanation could be provided for our concerns noted. Again, we are unable to quantify the impact.

TPS Communication Services Needs to be Better Supported with Improved Data and Information Management

The challenges we faced during the audit indicated the lack of readily available data and information and the weaknesses in TPS's information management system. It is critical that TPS be able to regularly analyze and have the type of information and results we presented in this report on an ongoing and easily accessible basis. TPS needs to better support its Communications Services Unit with improved data and information management, so that management can have the critical information needed in managing its workforce, and monitoring and managing the performance of the 9-1-1 call centre operations.

Appendix 1: TPS Management's Response to the Auditor General's Report Entitled: "Toronto Police Service – Audit of 9-1-1 Public Safety Answering Point Operations: Better Support for Staff, Improved Information Management and Outcomes"

Recommendation 1: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to re-evaluate and establish new minimum staffing requirements for Communications Services, ensuring staffing levels are sufficient to achieve TPS's 9-1-1 service level standard, and using improved data and information to include:

a. Consideration of staff absenteeism rates and other detractors/ factors, the underlying causes of not adhering to the current minimum staffing requirements, and aiming to minimize overtime where possible, for the different timeslots (considering peak and non-peak periods).

b. Re-balancing the workload amongst staff and staffing resources as needed throughout the day to meet operational needs while also enhancing staff's mental health and well-being.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. The TPS has already begun to take a demand-driven approach to staffing requirements, but is limited by total resources available. The work in Communications Services is unique with a limited number of total resources to fulfill obligations. Communications Services are working with the Command, the Board and the members' Association and have been granted the opportunity to strive for greater hiring, to leverage a greater period of probation and to explore other shift rotation models to achieve a greater balance of supply for demand. Further, the Management Team in Communications Services is actively working with Wellness to determine how members off on long-term Occupational Stress Injuries can be re-integrated into the work environment at a pace that will assist in demand but also support the wellness of the individual member. A working group will be established by Q4 2022.

Recommendation 2: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to review the current staffing levels, shift deployment and start hours, and scheduling system for communications operators to ensure the assignment of the actual number of operators at work aligns with its planned minimum staffing requirements (that TPS re-evaluates as part of Recommendation 1) as required to achieve its service levels and handle its call volume. Depending on the results of TPS's evaluation of minimum staffing requirements, TPS should consider:

a. Requesting an overall staffing increase of communications operators for TPS Communication Services.

b. Hiring part-time call takers, particularly to help address peak periods and spike incidents.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. Communications is working with the Strategy Management Unit on reviewing new shift pilot schedules that would address staffing requirement and at the same time address the wellness of the members. We will do all that we reasonably can with current resources and make a reasonable and informed request for further resources, should they be required, in the next budget cycle.

Recommendation 3: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to improve TPS's data to understand the time required for communications operators to meet operational needs, by establishing separate time codes to track the time a communications operator:

a. Spends on processing a previously answered call.

b. Needs after handling a traumatic call (either at their desk or away from their desk).

c. Needs to recuperate before being available for the next call.

This will allow TPS to have more information on how certain calls affect the mental health and well-being of its communications operators, and the actual occupancy time needed to handle and complete a call, as well as the processing time.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. Work on this recommendation will start in Q3 2022. The TPS will work with Information Management (ITS) to determine the best path forward to better measure activities for communications operators such that management decisions related to implementing this recommendation can be achieved. Communications Services is transitioning to NG9-1-1 (by Q1 2023), and the new system allows for activity codes that will provide the ability to track the information included in this recommendation. In partnership with the service provider, the TPS will work towards meeting these data needs related to the NG9-1-1 system. If the current IT infrastructure cannot expand for this use, and if the desired enhancements through NG9-1-1 technology do not ultimately manifest, there may be future resource implications.

Recommendation 4: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to analyze TPS's data (using new time tracking codes from Recommendation 3) on the time needed by communications operators to handle traumatic calls, in combination with additional feedback received from staff, and use these insights in developing additional strategies to assist the

communications operators in their mental health and well-being. In doing so, TPS should leverage strategies used by other agencies.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. Work on this recommendation will start immediately following the implementation of Recommendation 3, which will begin in Q3 2022. This additional data will also provide a more accurate picture of the total time spent 'taking a call' which will provide a more accurate assessment of number of call takers required to meet call volume. Communications Services currently has a strategy related to mental health and well-being, one component of which is that communications operators visit with a Service psychologist at least once a year. Further, if a CO or their supervisor recognizes a high stress call/event, the Critical Incident Response Team can be called to meet with members. The TPS People Strategy and Performance Unit are about to conduct a survey of members of Communications Services with a view to understanding the challenges related to wellness and morale of members specific to the nature of their work. The results of this survey are intended to inform a strategy to help Communications members engage in activities to help with stress. This may include but not be limited to a periodic health fair conducted in Communications Services, by TPS Wellness and their partnering practitioners designed to give members awareness of the services available and supported by their benefits package to manage stress. Other opportunities that may arise might be optional and more frequent consultations with TPS Psychologists at Communications or additional peer support on the floor. Some additional funds may be required for this. The Communications management team will work with ITS to understand the data points that will create an additional layer of awareness for supervisors that team members may need engagement with any of these services/initiatives, or others that are developed, for their health and well-being. Furthermore, the Service is currently undergoing a project to upgrade the Professional Standards Information Systems (PSIS) application, to a more fulsome version of the software (EI Pro) that includes critical incidents in the measurement of members' wellness and performance. This upgraded PSIS application may further support implementation of this recommendation.

Recommendation 5: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS), in consultation with TPS's Corporate Services Command, to determine the feasibility of filling vacancies sooner than the required two-year time lapse for communications operators who are on Injured on Duty assignment (but not replacing the position), to address its operational requirements.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. The work on this recommendation is underway and will be ongoing. TPS now has a contracted partner to assist with return to work and accommodation management, including but not limited to inviting and supporting members in return to work programs. Communications Services recognize that a tenured member can provide immediate service, if well enough to come back to their team in Communications at a faster cycle time than hiring and training a net new member.

Recommendation 6: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS), in consultation with TPS's Corporate Services Command – Legal Services, and the Toronto Police Association, to evaluate the 'return to work' criteria for those communications operators Injured on Duty, so that either they are only fit to return if that means fit to return to their previous job site, working at the 9-1-1 Communications Centre, or if TPS needs to employ them elsewhere, that TPS is able to hire additional surge positions in the 9-1-1 Communications Centre to address its operational requirements.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. The work on this recommendation is underway and will be ongoing. For 2022, Communications Services is looking to hire 3 new classes of communications operators between Q2-Q4. The funds for these new hires are part of the Service's approved 2022 Operating Budget. TPS now has a contracted partner to assist with return to work and accommodation management, including but not limited to inviting and supporting members in return to work programs. Communications Services recognize that a tenured member can provide immediate service, if well enough to come back to their team in Communications at a faster cycle time than hiring and training a net new member.

Recommendation 7: Toronto Police Services Board direct the Chief, Toronto Police Service, in consultation with the Toronto Police Association, to explore and develop recruitment strategies to address the shortage in communications operators and challenges in retaining trainees and full-time permanent staff, including:

a. The feasibility of hiring dedicated call taker/ dispatcher positions, and potential to retain qualified individuals who did not pass dispatcher training as call taker only beyond one year permanently, depending on the results of the pilot program.

b. Increasing the probation period for communications operators beyond one year permanently, depending on the results of the pilot program that recently began.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. The work on this recommendation is underway and will be ongoing. Communications Services are deploying models as described and defined above. TPS has approved and implemented a 1 year contract for call-taker only. This initiative could provide further data on the feasibility of this recommendation. For 7b, based on consultations between the Board, Service and the Toronto Police Association, an 18 month probationary pilot is currently underway and will apply to all future hires. The increase in probationary time gives a newly on-boarded member more time at building their call taking skill set before transitioning to the training for dispatchers and before decisions have to be made at or near the horizon of the probationary period.

Recommendation 8: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS), in consultation with TPS's Corporate Services Command, to identify and provide the necessary human resources and hiring supports to Communications Services, so the communications operators can maximize their time in performing call answering and dispatching services.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. The work on this recommendation is underway and will be ongoing. Communications Services is committed to working with Talent Acquisition to implement this recommendation and will also explore if this is a role for a Return To Work (RTW) step for accommodated members on a path to fully re-joining their teammates at Communications Services. This recommendation is therefore dependent on the business model of Talent Acquisition and the strategy execution with the partnered contractor at Wellness for RTW.

Recommendation 9: Toronto Police Services Board direct the Chief, Toronto Police Service, to review and determine the management information needs of Communications Services and improve the data available, ensuring the data is accurate, collected efficiently, and readily available in a timely manner.

The results of data analysis should be used to inform strategies and action plans to address operational improvements, including but not limited to:

a. Enabling accurate and robust data analysis of its calls for service, workload, deployment of staffing resources, and communications operators' activities.

b. Developing strategies for how to improve timeliness of answering 9-1-1 dialed calls.

c. Identifying further areas of training opportunities for communications operators.

d. Identifying areas where further call diversion can be made.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. Data provision and analysis comes from several sources: CAD, phones, maps etc. Each system can provide data and analysis within their own realm. The Analysis & Innovation Unit will be required to coordinate analysis across all sources. Implementing this recommendation (specifically 9a) requires dedicated data quality support and implementation of data management resources, including a dedicated Communications Services analyst. Based on the type of analysis and work required, the Service anticipates that funding and additional resources will need to be allocated for implementation, and the resources required to perform this project work will likely be allocated to the configuration of IT for the NG9-1-1 systems executing later in 2022. TPS will aim to develop a plan by Q2 2023.

Recommendation 10: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to ensure the data and information management needs of Communication Services are included and addressed in TPS's data strategy, Next Generation 9-1-1 implementation related to data analysis, and any future upgrade of TPS's Intergraph Computer Aided Dispatch system, including the need for interconnection between the information systems.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. The I/CAD and NG9-1-1 projects are a high priority for the Information Management and Data Strategy. Work scope and priorities are underway. Dedicated resources will be required.

This recommendation is dependent on the capacity of ITS to develop solutions and the Analysis and Innovation Unit to analyse data. Based on the type of analysis and work required, the Service anticipates that funding and additional resources will need to be allocated for implementation and may be influenced by the configuration of IT for the NG9-1-1 systems executing later in 2022.

Implementation will require dedicated project staff and project plan and at least 1-2 years for foundation. A working group will be struck to begin this work in Q4 2022.

Recommendation 11: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to regularly provide the information on timeliness of transferred 9-1-1 calls to Toronto Paramedic Services, Toronto Fire Services, and other agencies where appropriate, with the view to working together to meet the 9-1-1 emergency call service level standards. TPS and the other agency(ies) should meet, when needed, to determine if any changes are needed to established protocols to ensure the safety of citizens.

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

TPS agrees with this recommendation. In partnership with Toronto Paramedics Services and Toronto Fire Services, an action plan will be put in place by Q3 2022 to support implementation of this recommendation.

The 911 Committee has been resurrected and will be the medium to do this work.

Meetings already occur between the three partners in public safety response. Once the data systems can be accurately and automatically visualized in a dashboard, the outputs would become a routine agenda item for these meetings.

Recommendation 12: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to analyze TPS's call-for-service data to identify callers and locations that repeatedly call 9-1-1 for non-emergency matters (priority 4 to 8), or those who repeatedly call the police non-emergency line for non-police matters.

The results of this analysis should be used to inform a targeted education/awareness program to raise awareness of the proper use of 9-1-1, the police non-emergency line, and the availability of other non-police City resources.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation and the Communications Services Emergency Voice Services Coordinator will begin this work in Q3 2022. The TPS will explore the possibility of a police resource to investigate these repeat call scenarios with an objective to problem solve and where applicable, get local policing to work with community partners where mental health or addiction issues are at the root of the repeat calling, or local policing divisions where other problems need solving.

Recommendation 13: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to accelerate the Digital Workflows project and use data analytics to identify other opportunities and technological tools to create efficiency in the call handling process for communications operators, and to further explore other areas for call diversion. In implementing this recommendation, TPS should consider any best practices and leverage any existing tools already used by other agencies.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. Diversion and referral data models are currently being developed to inform implementation of this recommendation. Work is ongoing, and dedicated resources are required. The response to explore other areas of diversion are dependent on capacity for City of Toronto services that fall under the control of 3-1-1.

Recommendation 14: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to use TPS's data to identify callers who are repeatedly making pocket dials, abandoned, and hang-up calls on the 9-1-1 line. TPS should consider a strategy to reduce these types of calls, in consultation with its Corporate Services Command -- Legal Services, and the Toronto Police Services Board, including the feasibility of introducing a fee for this unwanted behaviour that impacts TPS's resources.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. By end of Q4 2022, the TPS will explore the possibility of a police resource to investigate these repeat call scenarios with an objective to problem solve and where applicable, get local policing to work with community partners where mental health or addiction issues are at the root of the repeat calling, or local policing divisions where other problems need solving.

If this opportunity can be realized, this resource could also undertake investigations such as this and model strategies to pursue a consequence not dissimilar to the False Alarm revenue recovery strategies already deployed. We note that the concept of a fee or levy for such behaviour, while not unprecedented, is uncommon and will require further consideration, including what legal authority may be required in order to implement it. Of course, consideration of this approach also requires an appropriate balance to be struck so as to ensure those who legitimately need to call 911 will not be deterred from doing so.

Recommendation 15: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to explore technological tools that can assist TPS's communications operators in assigning event types and in prioritizing the urgency of the call for service, to ensure the assessment is consistent with TPS policies and to help reduce stress levels for TPS's communications operators.

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

TPS agrees with this recommendation. During the procurement and development process for NG9-1-1 software, we will ensure this recommendation is considered as part of requirements planning.

TPS will work with the ITS pillar and with the procured software for NG9-1-1 to determine opportunities to leverage these outputs. Implementation of this recommendation may require resources to acquire new technology, if existing technology does not have the necessary capability. The Service will identify any additional resources required in the appropriate budget request.

Recommendation 16: Toronto Police Services Board direct the Chief, Toronto Police Service to identify where system upgrades can be made to automate manual processes that must be made by communications operators during the call. Such processes can include but are not limited to:

a. Adjusting the default priority rating for certain factors on calls.

b. Selection of call source for 9-1-1 dialed call.

c. Adjusting the event type and priority rating for certain types of calls based on the amount of time elapsed from when the event started.

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

TPS agrees with this recommendation.

Communications Services will work with Information Technology Services to investigate implementation opportunities. The Service will develop a more specific plan by Q2 2023.

A part of the Benefits Framework of ITS, to explore opportunities for automation and this 'problem to be solved', will be included in implementation strategy work. Implementation of this recommendation may require resources to acquire new technology, if existing technology does not have the necessary capabilities. The Service will identify any additional resources required in the appropriate budget request

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Recommendation 17: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to review and update TPS's Call Taker Manual to ensure:

a. Clarity of all event types and the related procedures.

b. That the event type's default priority rating is consistent with police response expectation and urgency of the type of event.

When reviewing and updating the manual, also consider the following potential changes to specific event types and priority ratings outlined in the report:

- Whether danger to life versus damage to property (in situations where it may be lower priority) could be better distinguished in priority ratings.
- Default priority ratings for events relating to civil matters.
- Further defining 'catch-all' event types (e.g. check address).

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

TPS agrees with this recommendation.

Call Taker and Dispatch Manuals are reviewed and updated after every training class. Any recommendations made by the Auditor General will be reviewed and assessed for application and updating of the Manual. This review process is iterative and the consideration of these specific recommendations will be completed by Q1 2023.

Recommendation 18: Toronto Police Services Board direct the Chief, Toronto Police Service to explore training opportunities for communications operators to further improve their skills, particularly regarding assignment of event type, adjustment of the default priority rating, updating an event based on information on related subsequent call(s), and inclusion of key notes in the event chronology.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. Cyclical quality assurance checks by supervisors are aimed at ensuring adherence to Service requirements and to identify any issues in performance. Follow up by supervisors provides opportunity for mentoring and training. Available to communications operators is a feature called "Notes" on the CAD system which will display the appropriate policy associated to the event type. This feature is aimed at assisting communications operators in choosing the correct event types and priorities. Any recommendations made by the Auditor General will be reviewed and assessed for application and updating of the Manual. This review process is iterative and the consideration of these specific recommendations will be completed by Q1 2023.

Recommendation 19: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to analyze TPS's call answering data to identify the call taker time that impacts the police response time, and evaluate the feasibility to further reduce this time interval in the view to understand and improve the overall response times for citizens, especially for high priority emergency (priority 1 to 3) calls.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. Communications Services reports on call answer and processing times, but does not currently report on officer response times. This will change. Response times will be reported from the time the call is answered to the time of the first officer's arrival at the scene. Other increments of this time continuum will also be tracked but the definition of response time will be changed as noted. TPS agrees to analyze call answering data to identify the call taker time, which impacts police response time, and evaluate the feasibility of further reducing and improving overall response times. Implementing this recommendation requires system integration and enhanced data modelling – a body of work that has commenced and will continue. Completion date is currently not known. Further, Communications Services will explore the opportunity to have an assigned Analyst from the Analysis & Innovation Unit, not unlike the model executed in all 16 police divisions, to help analyze the data and bring more integrity to the collection of data for decision making. This response is dependent on staffing priorities and deployments.

Recommendation 20: Toronto Police Services Board direct the Chief, Toronto Police Service to ensure the clearance of a call-for-service event is communicated in a timely manner by officers, so that the dispatcher is aware of the availability of the officer units to be assigned for other calls for service.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation and will consider methods to improve officer compliance in clearing an assigned event in a timely manner. The work on this recommendation is underway and will be ongoing. Messaging will be prepared in response to this recommendation and others reminding members that when assigned to an event they must acknowledge with their dispatcher when they are At Scene of the event. It is not within the understanding of every member of the value of this metric, and as members are more focussed on solving the problem the value of acknowledging At Scene is not always top of mind. The police sergeant on the road during these calls is constantly aware of where his/her team resources are and how long they are taking to process events. The constraint is when the platoon has only one supervisor and they are operationalized at a major event or an event that procedurally they are required to be present. Sergeants will be reminded again of the importance of what members are doing, and that members are acknowledging with the dispatcher when they are at scene, either by voice or by MWS, and then consecutively when they are clear from the event. Further, the on road supervisor works in partnership with their dispatcher to understand capacity, to approve lunch hours or remaining in service. The supervisor can also instigate dialogue with the dispatcher to clarify or communicate an At Scene acknowledgment. This response is dependent on the availability of supervisors which is a constant resourcing challenge for TPS.

Recommendation 21: Toronto Police Services Board direct the Chief, Toronto Police Service, in collaboration with Toronto Paramedic Services and Toronto Fire Services, to achieve live-time interconnectivity in communication on 9-1-1 calls and events amongst these entities, both currently, and in the implementation of the Next Generation 9-1-1 solution moving forward. This should include consideration of an interface of the Intergraph Computer Aided Dispatch system to allow for improved communication during 9-1-1 call transfers and events, and to specifically assist with communication where Toronto Police Service are no longer required by Toronto Paramedic Services and/or Toronto Fire Services as applicable, so as to avoid unnecessarily committing police resources.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation, and will collaborate with Toronto Paramedic Services and Toronto Fire Services during the implementation of NG9-1-1. This interconnectivity and information sharing is being discussed at the aforementioned 911 Committee. An action plan will be in place by Q3 2022 to support implementation. This response is constrained both by budgetary considerations and maturity of current systems – something that may be addressed by leveraging new NG9-1-1 technologies.

Recommendation 22: Toronto Police Services Board, in consultation with the Chief, Toronto Police Service and its Corporate Services Command -- Legal Services, to engage with the City and City Council for the collection of the 9-1-1 levy or request a change in legislation with the provincial government, so that a 9-1-1 levy can be collected by the telecommunication service providers and remitted to the Public Safety Answering Point, particularly given the fiscal sustainability issues with the implementation of mandated Next Generation 9-1-1 requirements, and given this is the current practice in most other provinces in Canada.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation. TPS and the Board sit on the Inter-Agency Panel (IAP), which liaises directly with the provincial Ministry of the Solicitor General regarding NG-911 matters, including governance and fiscal sustainability of the new demands NG-911 places on police services and other first responders. The IAP is lead by Deputy Odoardi of Peel Regional Police and includes operational and governance representatives from Police, Ambulance and Fire. Conversations with the province have been initiated by the IAP and this engagement, including on fiscal demands and needs, will continue.

Recommendation 23: The City Manager, in consultation with Toronto Police Services Board, Toronto Police Service (TPS), and City's Legal Services, to include the following to inform its feasibility review of whether to move the 9-1-1 operations to a non-police City Service:

a. Fulsome cost/benefit analysis that includes the potential impact to call answer and call response time of police, fire, and ambulance, and the other related functions of the call centre such as audio and data requests including for court proceedings, and maintenance of radio communications.

b. Cost impact and feasibility with regards to staffing, given the current collective agreement of communications operators.

c. Legislative feasibility given the current draft and forthcoming legislative requirements related to the delivery of policing and related services, in particular, the involvement of the police service in the Public Safety Answering Point (PSAP) dispatching function.

d. Legal risk and who would be responsible for those 9-1-1 calls and/or alternate non-police response where police are not dispatched, and it results in a negative outcome.

e. Governance model for PSAP with the view to enhance interoperability and coordination of emergency response services delivered.

f. The goals and outcomes that are intended through a potential move of the 9-1-1 operations, and whether other strategies may be more effective, efficient, and economical to achieve those, such as offering another phone number for non-police response such as 2-1-1, and/or working together with TPS on other strategies, including but not limited to, updating the 9-1-1 communications operators manual, additional training, data and technological supports for communications operators and police officers, and increased public education and awareness.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS supports this recommendation and will provide any information the City Manager requires to undertake the review. As the Auditor General notes, the analysis should be evidence-based and informed, and will require consideration of, among other things, legislative and regulatory requirements or restrictions; collective bargaining requirements; and, cost-benefit analysis.

Recommendation 24: Toronto Police Services Board direct the Chief, Toronto Police Service, in collaboration with the City, to undertake public education campaigns (including targeted awareness programs) and ongoing public education initiatives to improve public awareness and understanding on distinguishing between the various lines and the proper use of 9-1-1, the non-emergency line (416-808-2222), online police reporting, and other non-police alternative resources, including promotion of 2-1-1 (assistance in connecting people with community and social service resources) and 3-1-1. Assessment should be made to evaluate the effectiveness of these campaigns and initiatives on call behaviours. The campaign and/or initiatives should:

a. Include strategies to increase public awareness on what to do when the caller dials 9-1-1, including the specific information that needs to be provided to the call taker in order to shorten police response time, how to prevent pocket dials, and what to do when an individual dials 9-1-1 by mistake.

b. Be multi-lingual.

c. Be refreshed and refocused periodically to address the 9-1-1 call analysis results to reduce unnecessary or avoidable non-emergency related calls to 9-1-1.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation and will support the City to implement. Discussions on this will commence in Q3 2022. A joint working group and budget for advertising will need to be created with the City of Toronto and involve all first-responder partners and other stakeholders. The TPS is of the view that adopting a consistent larger picture and ensuring that the information is always present for public consumption could be more impactful than short or time limited campaigns.

Recommendation 25: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS), in collaboration with the City, to consider a shorter and easier to remember number (if possible three digits) for TPS's dedicated non-emergency line.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees with this recommendation and will collaborate with the City. Discussions on this will commence in Q3 2022.

Recommendation 26: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to further improve TPS's website so that it is easy for the public to navigate and to find information on the 9-1-1, non-emergency line (8-2222), and online reporting.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: TPS agrees and will review our newly refreshed website (https://www.tps.ca/) to determine what additional steps can be taken to implement this recommendation, beyond the updates already made.

Appendix 2: City Management's Response to Relevant Recommendations to the Auditor General's Report Entitled: "Toronto Police Service – Audit of 9-1-1 Public Safety Answering Point Operations: Better Support for Staff, Improved Information Management and Outcomes"

Recommendation 11: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS) to regularly provide the information on timeliness of transferred 9-1-1 calls to Toronto Paramedic Services, Toronto Fire Services, and other agencies where appropriate, with the view to working together to meet the 9-1-1 emergency call service level standards. TPS and the other agency(ies) should meet, when needed, to determine if any changes are needed to established protocols to ensure the safety of citizens.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: **Toronto Fire Services:** Toronto Fire Services supports this recommendation and will work in collaboration with the Toronto Police Service and Toronto Paramedic Services on implementation. **Toronto Paramedic Services:** Toronto Paramedics Services are happy to support the Toronto Police Service on this recommendation.

Recommendation 21: Toronto Police Services Board direct the Chief, Toronto Police Service, in collaboration with Toronto Paramedic Services and Toronto Fire Services, to achieve live-time interconnectivity in communication on 9-1-1 calls and events amongst these entities, both currently, and in the implementation of the Next Generation 9-1-1 solution moving forward. This should include consideration of an interface of the Intergraph Computer Aided Dispatch system to allow for improved communication during 9-1-1 call transfers and events, and to specifically assist with communication where Toronto Police Service are no longer required by Toronto Paramedic Services and/or Toronto Fire Services as applicable, so as to avoid unnecessarily committing police resources.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: **Toronto Fire Services:** Toronto Fire Services supports this recommendation and will work in collaboration with the Toronto Police Service and Toronto Paramedic Services on implementation. **Toronto Paramedic Services:** Toronto Paramedics Services have no concerns with this recommendation and will work with Toronto Police Service to establish an electronic interface.

Recommendation 23: The City Manager, in consultation with Toronto Police Services Board, Toronto Police Service (TPS), and City's Legal Services, to include the following to inform its feasibility review of whether to move the 9-1-1 operations to a non-police City Service:

a. Fulsome cost/benefit analysis that includes the potential impact to call answer and call response time of police, fire, and ambulance, and the other related functions of the call centre such as audio and data requests including for court proceedings, and maintenance of radio communications.

b. Cost impact and feasibility with regards to staffing, given the current collective agreement of communications operators.

c. Legislative feasibility given the current draft and forthcoming legislative requirements related to the delivery of policing and related services, in particular, the involvement of the police service in the Public Safety Answering Point (PSAP) dispatching function.

d. Legal risk and who would be responsible for those 9-1-1 calls and/or alternate non-police response where police are not dispatched, and it results in a negative outcome.

e. Governance model for PSAP with the view to enhance interoperability and coordination of emergency response services delivered.

f. The goals and outcomes that are intended through a potential move of the 9-1-1 operations, and whether other strategies may be more effective, efficient, and economical to achieve those, such as offering another phone number for non-police response such as 2-1-1, and/or working together with TPS on other strategies, including but not limited to, updating the 9-1-1 communications operators manual, additional training, data and technological supports for communications operators and police officers, and increased public education and awareness.

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

City Manager's Office:
The scope of the feasibility review undertaken by the City Manager is considering many of these recommendations. What may not have yet been considered but recommended here can and will be considered to inform the review by the City Manager.

Recommendation 24: Toronto Police Services Board direct the Chief, Toronto Police Service, in collaboration with the City, to undertake public education campaigns (including targeted awareness programs) and ongoing public education initiatives to improve public awareness and understanding on distinguishing between the various lines and the proper use of 9-1-1, the non-emergency line (416-808-2222), online police reporting, and other non-police alternative resources, including

promotion of 2-1-1 (assistance in connecting people with community and social service resources) and 3-1-1. Assessment should be made to evaluate the effectiveness of these campaigns and initiatives on call behaviours. The campaign and/or initiatives should:

a. Include strategies to increase public awareness on what to do when the caller dials 9-1-1, including the specific information that needs to be provided to the call taker in order to shorten police response time, how to prevent pocket dials, and what to do when an individual dials 9-1-1 by mistake.

b. Be multi-lingual.

c. Be refreshed and refocused periodically to address the 9-1-1 call analysis results to reduce unnecessary or avoidable non-emergency related calls to 9-1-1.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: **City Manager's Office:** The City Manager is supportive of this recommendation and will collaborate with the TPS.

Recommendation 25: Toronto Police Services Board direct the Chief, Toronto Police Service (TPS), in collaboration with the City, to consider a shorter and easier to remember number (if possible three digits) for TPS's dedicated non-emergency line.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: The City Manager will review and consider this in collaboration with TPS.

AUDITOR
GENERAL

TORONTO