Social Services

District of Sault Ste. Marie Social Services
Administration Board
Conseil d'Administration des Services du District Sault Ste. Marie
Zhawenimi-Anokiitaagewin

AGENDA

DSSMSSAB REGULAR BOARD MEETING
Thursday, March 18, 2021 at 4:30 PM
Zoom Video Conference

1. CALL TO ORDER

2. APPROVAL OF AGENDA

Resolution #21-019
Moved By: J. Gawne
Seconded By: D. Hilsinger

2.1 **"BE IT RESOLVED THAT** the **Agenda for March 18, 2021** District of Sault Ste. Marie Social Services Administration Board meeting be approved as presented."

3. DECLARATIONS OF PECUNIARY INTEREST

4. APPROVAL OF PREVIOUS MINUTES

Resolution #21-020
Moved By: D. Edgar
Seconded By: K. Lamming

4.1 "**BE IT RESOLVED THAT** the Minutes from the District of Sault Ste. Marie Social Services Administration Board meeting dated **February 18, 2021** be adopted as recorded."

5. MANAGER REPORTS

HOUSING

Resolution #21-021
Moved By: M. Bruni
Seconded By: C. Gardi

5.1 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the March 18, 2021 Community Homelessness Prevention Initiative Investment Plan report of the Director of Housing Services and approve the investment plan for the period of April 1, 2021 to March 31, 2022 as outlined in the report."

Resolution #21-022
Moved By: J. Gawne
Seconded By: D. Edgar

5.2 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the March 18, 2021 Additional Funding for Transition Beds at Steelton Centre Report of the Director of Housing Services and;

BE IT FURTHER RESOLVED THAT the DSSMSSAB approve funds totaling $23,479 be allocated to the Sault Ste. Marie Housing Corporation (SSMHC) for use towards the construction of the transition beds within the Steelton Centre."

ONTARIO WORKS

Resolution #21-023
Moved By: D. Hilsinger
Seconded By: M. Scott

5.3 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the March 18, 2021 Ontario Works program transformational changes report of the Director of Income and Employment Supports as information."

PARAMEDIC SERVICES

Resolution #21-024
Moved By: M. Bruni
Seconded By: K. Lamming

5.4 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the Additional Ambulance Deployment Resources Report of the Chief of Paramedic Services as information."

Resolution #21-025
Moved By: M. Scott
Seconded By: D. Edgar

5.5 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the March 18, 2021 Paramedics and Community Vaccinations update report of the Chief of Paramedic Services as information."

6. CORRESPONDENCE

6.1 Correspondence received from the Minister of Municipal Affairs and Housing Steve Clark, dated March 10, 2021 outlining Phase 3 of the Social Services Relief Fund (SSRF)

7. OTHER BUSINESS / NEW BUSINESS

8. ADJOURNMENT

Resolution #21-026
Moved By: D. Edgar
Seconded By: K. Lamming

8.1 "**BE IT RESOLVED THAT** we do now adjourn."

NEXT REGULAR BOARD MEETING
Thursday, April 15, 2021 4:30 PM

Social Services

District of Sault Ste. Marie Social Services
Administration Board
Conseil d'Administration des Services du District Sault Ste. Marie
Zhawenimi-Anokiitaagewin

MINUTES

DSSMSSAB REGULAR BOARD MEETING
Thursday, February 18, 2021 at 4:30 PM
Zoom Video Conference

PRESENT:	L. Dufour	J. Gawne	K. Lamming
	D. Hilsinger (arrived at 4:43)	C. Gardi	M. Bruni
	D. Edgar		
STAFF:	M. Nadeau	D. Petersson	C. Fairbrother
	J. Barban	R. Rushworth	S. Ford
	A. Kohler		
REGRETS:	M. Scott		

1. CALL TO ORDER by L. Dufour, Board Chair at 4:31 PM

2. APPROVAL OF AGENDA

Resolution #21-009
Moved By: K. Lamming
Seconded By: M. Bruni

2.1 **"BE IT RESOLVED THAT** the **Agenda for February 18, 2021** District of Sault Ste. Marie Social Services Administration Board meeting be approved as presented."
CARRIED

3. DECLARATIONS OF PECUNIARY INTEREST

4. APPROVAL OF PREVIOUS MINUTES

Resolution #21-010
Moved By: J. Gawne
Seconded By: C. Gardi

4.1 "**BE IT RESOLVED THAT** the Minutes from the District of Sault Ste. Marie Social Services Administration Board meeting dated **January 28, 2021** be adopted as recorded."
CARRIED

5. MANAGER REPORTS

CORPORATE SERVICES

Resolution #21-011
Moved By: M. Bruni
Seconded By: C. Gardi

5.1 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the February 18, 2021 Corporate Services Update Report of the Director of Corporate Services as information."
CARRIED

HOUSING

Resolution #21-012
Moved By: K. Lamming
Seconded By: C. Gardi

5.2 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the February 18, 2021 Additional Front Line Supports and Services Report of the Director of Housing Services, outlining new positions being introduced as a result of recently allocated Federal and Provincial funding for the current fiscal year, as information."
CARRIED

ONTARIO WORKS

Resolution #21-013
Moved By: D. Edgar
Seconded By: J. Gawne

5.3 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the Service Delivery Update report of the Director of Income and Employment Supports as information."
CARRIED

EARLY YEARS

Resolution #21-014
Moved By: D. Hilsinger
Seconded By: K. Lamming

5.4 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the Early Years Funding Reinvestment report of the Director of Early Years as information."
CARRIED

PARAMEDIC SERVICES

Resolution #21-015
Moved By: M. Bruni
Seconded By: K. Lamming

5.5 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the February 18, 2021 Response Time Results Report of the Chief of Paramedic Services and approve the Response Time Performance results for submission to the Ministry of Health as detailed in the report."
CARRIED

Resolution #21-016
Moved By: D. Hilsinger
Seconded By: D. Edgar

5.6 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the February 18, 2021 Paramedic Overview Report of the Chief of Paramedic Services as information."
CARRIED

6. CEO

Resolution #21-017
Moved By: J. Gawne
Seconded By: C. Gardi

6.1 **"BE IT RESOLVED THAT** the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept the February 18, 2021 Homemakers and Home Supports Report of the CEO;

AND BE IT FURTHER RESOLVED THAT the DSSMSSAB enter into agreements for the 2021-2022 fiscal year with the following agencies in order to provide Homemakers and Nursing Service programs to the community:

1. March of Dimes (Algoma) – up to $100,000
2. Community Living Algoma – up to $100,000
3. VON Algoma – minimum of $50,000"

CARRIED

7. CORRESPONDENCE

8. OTHER BUSINESS / NEW BUSINESS

9. ADJOURNMENT

Resolution #21-018
Moved By: D. Edgar
Seconded By: K. Lamming

9.1 "**BE IT RESOLVED THAT** we do now adjourn."
CARRIED
Meeting adjourned at 5:13 PM

NEXT REGULAR BOARD MEETING
Thursday, March 18, 2021 4:30 PM

Social Services

District of Sault Ste. Marie Social Services
Administration Board
Conseil d'Administration des Services du District Sault Ste. Marie
Zhawenimi-Anokiitaagewin

BOARD REPORT

AUTHOR: Jeff Barban

DATE: March 18, 2021

RE: 2021-2022 Community Homelessness Prevention Initiative Investment Plan

RECOMMENDATION

It is recommended the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) approve the Community Homelessness Prevention Initiative (CHPI) Investment Plan for the period of April 1, 2021 to March 31, 2022 as recommended by the Director of Housing Services.

BACKGROUND INFORMATION

CHPI was introduced by the Ontario government to prevent, address and reduce homelessness by improving access to adequate, suitable and affordable housing linked to flexible support services based on people's needs. On April 17, 2019 the DSSMSSAB Board Chair was advised by letter from the Minister of Municipal Affairs and Housing the allocated CHPI funding for 2021-2022 for our service management area totals $1,495,440.00, subject to provincial budget approval.

SUMMARY/OVERVIEW

Recommended CHPI funding allocations for 2021/22:

Service Category	Agency	2020/21	2021/22
Emergency Shelter Solutions	Men's Shelter (St. Vincent & CMHA)	$ 199,532	$418,487
	Woman, Family and Youth Shelter (Pauline's Place)	$ 294,880	$500,000
Homelessness Prevention Services	Accessible Shelter Costs – Housing Programs	$6,000	$ 4,000
	Community – Housing Stability Bank	$160,000	$112,500
	Ontario Works – Housing Stability Bank	$115,000	$0
	Housing Programs - Rent Bank (emergency)	$35,000	$0

	John Howard Society (JHS) Housing Stability Bank Workers (2)	$163,650	$0
	Urgent Homeless Moving Costs	$2,728	$1,264
Services and Supports	Housing Programs Tenant Support Workers	$94,900	$169,900
	John Howard Society (1.5 positions)	$142,200	$ 50,326
	Canadian Mental Health Association (position)	$199,500	$210,000
Program Administration	DSSMSSAB	$83,049	$ 31,962.92
Program Allocation		**$1,436,957**	**1,495,440**

The 2021/22 proposed budget has be realigned to better support the shelter operators to ensure they can retain and hire qualified staff to stabilize the shelter system. This has been a long outstanding hurtle for the shelter system and as clients acuity levels are on the rise this much needed support will ensure the neediest homeless individuals will remain housed in times of need.

John Howard Society SSM funding for 2021/22 is lower but remaining funds from 2020/21 have been utilized to ensure they received the appropriate funds to provide the same level of service.

The remaining administrative funds are recommended to be utilized towards the construction of transition beds in the Steelton Centre.

STRATEGIC PLAN IMPACT

The proposed CHPI investment plan aligns with the pillar of **Service Delivery**. CHPI funds are used by the DSSMSSAB to address the local homelessness prevention system and allow for our organization in addition to community partners to provide service excellence and continue community awareness.

FINANCIAL IMPLICATIONS

There are no net financial implications to the DSSMSSAB as CHPI is 100% provincially funded.

CONCLUSION

The allocation amount for 2021-2022 was developed in accordance program guidelines published by the Ministry of Municipal Affairs & Housing. Funding through this program will continue to support Social Services' 10 Year Housing and Homelessness Plan.

The Homelessness Shelters and the Homelessness Prevention Team which is comprised of CHPI funded organizations, will continue to be the backbone of the housing and homelessness system by providing those in need with emergency shelter, supports and

services as well as those housed under Housing Services' Urgent Homeless waitlist category.

The achievement of a quality "By Name List" by Housing Services in 2020 will further enhance our ability to match individuals to appropriate housing and services in a more streamlined and coordinated way.

Respectfully submitted,

Jeff Barban
Director Housing Services

Approved by:

Mike Nadeau
Chief Executive Officer

Social Services

District of Sault Ste. Marie Social Services
Administration Board
Conseil d'Administration des Services du District Sault Ste. Marie
Zhawenimi-Anokiitaagewin

BOARD REPORT

AUTHOR: Jeff Barban

DATE: March 18, 2021

RE: Additional Funding for Transition Beds for Steelton Centre

RECOMMENDATION

Housing Services is requesting the following administration funds from Social Services Relief Fund II of $10,308 and Mental Health and Addiction of $13,171, totaling $23,479 be forwarded to the Sault Ste. Marie Housing Corporation (SSMHC) to be used for the construction of the transition beds within the Steelton Centre.

BACKGROUND INFORMATION

When upper levels of government provide funding to the DSSAB, we can often allocate a certain percentage towards internal administration (3-10%) in accordance with the funding agreement. Once the administration fees are allocated internally, the DSSAB can use the funds as determined by the board. The administrative funds outlined in the recommendation will be bundled with the additional Government of Canada funding provided through the Reaching Home program to support individuals experiencing homelessness awaiting for permanent housing.

SUMMARY/OVERVIEW

The community has experienced several former rooming housing closures creating a shortage of affordable housing options for many low-income individuals within the community. The Housing and homelessness system relies on short-term transitional housing for individuals waiting for permanent homes. This additional funding ($23,479) will assist to meet the increased construction costs of the eight (8) transitional units in the Steelton center due to having to meet the fire separation requirements within the building code for this type of unit.

STRATEGIC PLAN IMPACT

The additional funds will align with the pillar of **Service Delivery**. The funds will be used by the SSMHC to offset local COVID-19 related expenses and allow Social Services and its community partners to provide service excellence and continue community awareness.

FINANCIAL IMPLICATIONS

There will be no increase to the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) levy as all funds requested are administration dollars received from 100% provincial program funding.

CONCLUSION

The construction of safe affordable transition beds are vital to the housing and homelessness plan for the DSSMSSAB to provide the necessary short term housing required for women who are homelessness awaiting a permanent home.

Respectfully submitted,

Jeff Barban
Director Housing Services

Approved by:

Mike Nadeau
Chief Executive Officer

Social Services

District of Sault Ste. Marie Social Services
Administration Board
Conseil d'Administration des Services du District Sault Ste. Marie
Zhawenimi-Anokiitaagewin

BOARD REPORT

AUTHOR: Alison Kohler

DATE: March 18, 2021

RE: Renewal and Recovery: Social Assistance Vision

RECOMMENDATION

To provide a report for informational purposes on the Province's announcement regarding transformational changes to the Ontario Works program.

BACKGROUND INFORMATION

On February 11, the Province of Ontario announced the Vision for Social Assistance Transformation as part of their Recovery and Renewal Plan. The vision outlines plans for a new social assistance delivery model. The intent of the new model is to remove the administrative paperwork thereby providing case managers more time to have impactful conversations with individuals and service providers to create pathways to success. The Ontario Works program has been essentially the entry for individuals who are experiencing financial crisis because of numerous situations. The program has been modified periodically and has had positive effects on those individuals with short term and straightforward barriers to employment. Individuals with chronic social, educational and health barriers have fallen through the cracks due to inefficient and antiquated processes. The historic reality of the program is that it is reactive not proactive. The longer term solutions for hard to service clients have been more difficult to achieve due to an extremely cumbersome legislated and regulatory environment. The Social Assistance vision document provides a high-level description of the modernization/transformation efforts the province has undertaken to date, and details future plans for the program.

SUMMARY/OVERVIEW

Ontario Works was created as a financial/employment program. The local delivery agents created an all-encompassing social service program as a result of necessity and the complexity of the barriers presented by the individuals served. The participation in training programs and the retention of employment by individuals were often less successful due to underlying chronic issues related to personal health and social barriers. The province has acknowledged that social assistance cannot be the entire solution. A whole of government approach, focused on the individual, is required. Through research, data

review and consultations, the Province has presented a transformation plan on the following principles:

- The province will focus on overseeing the financial side of social assistance, and back office administration functions, through a technology based delivery system. Clients will be supported by more digital and self-serve options. Traditional service channels will continue where available.
- Initial eligibility will be conducted electronically, therefore, alleviating documents for the client to gather and the staff to process.
- Local offices will concentrate on delivering person centered case management with the knowledge of local community supports for referral and provide activities that support stabilization.
  Current exploration is being conducted on the best way to do this within each municipality.
- Determining a ranking level of intervention based on an assessment of client need.
- The funding model for Ontario Works will be adjusted and evolve as the shift in roles change between the province and the local office.
- The steps to transform the program are incremental and may take several years.
- Goal for the province is to make significant progress by 2024.
- Using data, evidence and the voice of the client to inform design.
- Lessening the administrative burden on staff and clients by providing information via third party resources.
- Employment transformation from Ontario Works to integrate into Employment Ontario with Ministry of Labour, Training and Skills Development.
- Provide resources/support for individuals not on social assistance, and for those who exit social assistance to reduce the need to return.

The social assistance vision provides a framework for the transformation from a financial/employment focus to one that is more person centered and focuses on barriers. Focus will intensify in the following areas:

Social service system navigation	Primary health care
Childcare	Housing
Literacy	Financial Literacy
Tax filing	Parenting and family supports
Mental Health and addiction	Youth Programming
Digital access	

Within a local context, Ontario Works service delivery is aligned to efficiently address the administrative workload through the creation of an intake team, a case management team and other supportive teams. The province is currently piloting a centralized province wide

intake system and enhancing online and other digital self-serve platforms. The automation of the intake function will lessen the workload.
The new vision of social assistance will require local agencies to collaborate to create a seamless “life stabilization” framework. Predominant barriers that are identified through the person centered case management approach will require readily accessible local programs. Capacity and funding issues need to be addressed and in place for this model to be successful.

STRATEGIC PLAN IMPACT
The social system navigation approach has already been underway within the DSSMSSAB. Integration efforts amongst housing, childcare, paramedicine and social assistance has been expanding incrementally. The person centered approach has been the main principle underlying this collaboration. It is the foundation of the arrangement between the DSSMSSAB and our community partners. As the transformation takes place, the DSSMSSAB will be expanding partnerships beyond the traditional network. Various reporting tools, differing performance measurements amongst agencies and lack of funding resources often create a silo effect on social service mandates and limit the ability to collaborate. The province has acknowledged these concerns within the framework however, there is not yet formal discussion as to how to correct or enhance these community based services.

The vision of the transformation of social assistance aligns with the service delivery and values of the DSSMSSAB strategic plan. A person centered, inclusive and diverse range of services to provide the community with service excellence will be achieved exponentially as administrative requirements are lessened and partnerships are expanded. This transformation hopes to pave a way to a barrier free, local social service system with the participation of all levels of government.

FINANCIAL IMPLICATIONS
During the transformation, and as roles are re-imagined, it is anticipated that there may be an effect on the financial planning allocation in the near future. A formal announcement has yet to be made.

CONCLUSION
Modernizing and digitizing the system should provide staff the opportunity to individualize plans to assist persons in stabilizing their circumstances more effectively than has previously been the case. The caveat to the success of this plan will be an assurance that local service agencies have the capacity and resources available to meet the diverse needs of individuals. There must be adequate social, health and educational service system in place prior to transformation. A referral from the Ontario Works program to a

wait list or a service out of the catchment area cannot be regarded as an improvement over the present circumstances.
For more specific information: https://news.ontario.ca/en/release/60316/ontario-working-with-municipal-partners-to-improve-social-assistance

Respectfully submitted,

Alison Kohler
Director Income and Employment Supports

Approved by:

Mike Nadeau
Chief Executive Officer

Social Services

District of Sault Ste. Marie Social Services
Administration Board
Conseil d'Administration des Services du District Sault Ste. Marie
Zhawenimi-Anokiitaagewin

BOARD REPORT

AUTHOR: Robert Rushworth

DATE: March 18, 2021

RE: Additional Ambulance Deployment Resources For 2022

RECOMMENDATION

It is recommended that the District of Sault Ste. Marie Social Services Administration Board accept this report as information on the expansion of ambulance resources to meet current and future service demands.

BACKGROUND INFORMATION

In 2017 the Board received the Summary Report from APEXPRO Consulting Inc. and subsequently accepted the report's findings by resolution #17-097. Included in the report were several breakdowns of the current and projected workload statistics and the recommended responses.

In the years following the report some leeway was taken with the recommendations i.e., delay of the Sault North PRU until 2020 when forecast provincial budget shortfalls were corrected and again in 2021 when an additional 12-hour daytime ambulance was recommended but delayed due to Covid-19. Given the effects the pandemic had on most normal predictions, and the lack of room at the main paramedics base for expansion, senior management supported this delay. The remainder of this report will demonstrate that the service expansion is now required and will be included in the 2022 budget planning for board consideration.

SUMMARY/OVERVIEW

2020 experienced a sudden drop in call responses for a brief period at the beginning of the initial pandemic lockdown; however call volumes met projected growth by the end of the year. Along with more complex safety measures and personal safety concerns, paramedics also have experienced unprecedented mental health and/or addictions clientele combined with the tragic increase in the opioid overdose crisis. Excessive off-

load delay times at the Sault Area Hospital have also added to the amount of time paramedics were committed to patient care. All of these factors increase the measurement known as Unit Hour Utilization (UHU), which is defined as the number of hours that a paramedic crew spends on task relative to the number of hours on shift.

This time-on-task measurement starts with the assignment of the time a call is dispatched and ends once patient care and responsibility is transferred. It does not include cleaning, restocking, documentation, driving and meal breaks, etc. As explained in detail starting on page 61 of the APEXPRO report the recommended goal is to be at a UHU of 35% or less. This means 65% of the time, or better, an ambulance is available to respond and serve the next patient. This measure is more accurate at determining the workload and targeting times for expansion than using call volume alone. Our current UHU for 2021 has hourly peaks as high as 46% and will be closely analyzed through the year to determine the placement of the additional resources to best serve the community and support our staff.

As mentioned, statistics are not the only factor to consider when planning resource deployment, but they are an important part of the process. Based on the earliest portion of 2021 call volumes, a minimum 2.5% increase in call volume is projected at this time. As call volume continues to rise, the response times and incidents of no ambulance available to respond will increase; there was an approximate 75% increase in 2020 vs 2019 (640 vs 501).

Although the APEXPRO predicted call volume (pg. 68) is not precisely what we experienced, mainly due to Covid-19, the recommended addition of one “day car” (pg. 72 Exhibit 12.3) is still on target for what the service requires in 2022 to ensure that we have the resources to adequately respond to emergency calls.

Call Volume by Priority and Year					
dispatched priority	**2020**	**2019**	**2018**	**2017**	**2016**
Transfer 1	1109	1531	1637	1610	1498
Scheduled transfer 2	662	613	678	651	669
Urgent 3	4292	4279	4232	3636	3253
Emergent 4	8883	8831	8590	8751	8319
Stand By 8	1241	816	1066	1053	818
TOTAL	16187	16070	16203	15701	14557

STRATEGIC PLAN IMPACT

One of the key strategic plan elements is **service delivery**, with the goal of exceeding expectations, which is becoming increasingly more difficult. As reported in February’s Board report, several initiatives are being worked on that will help the service serve the community better, however none of them will take the place of the additional resource.

The paramedic management team will be working through the data, calculating solid projections and working with staff and community partners to ensure the resources are adequate and rolled into the deployment plan to have the most positive impact possible on our clients and staff.

FINANCIAL IMPLICATIONS

The cost for a fully staffed ambulance has risen from $185 per hour in 2017 when APEXPRO's report was completed to an estimated $205 per hour using 2020 confirmed budget expenditures. The annual cost to bring on the recommended 12 hour a day staffed

ambulance is estimated to be $898,000, which includes all associated costs. The actual budget numbers will be calculated at time of submission.

CONCLUSION

This report is provided as information and to ensure the Board is aware that APEXPRO's recommendations remain extremely valid and ensure the continued operational stability and quality of the paramedic services' standards of response and patient care across the District.

Respectfully submitted,

Robert Rushworth
Chief Paramedic Services

Approved by:

Mike Nadeau
Chief Administrative Officer

Social Services | Services Sociaux
Zhawenimi-Anokiitaagewin
Sault Ste. Marie District

Here to help.
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SUMMARY REPORT

OVERSIGHT MANAGEMENT MODEL FOR THE DSSMSSAB'S CONTRACTED LAND AMBULANCE SERVICE

APEXPRO CONSULTING INC.

DECEMBER 18, 2017

APEXPRO CONSULTING INC.

EXCELLENCE COMMITMENT PARTNERSHIP – EVERY CLIENT! EVERY TIME!

30 KARL CRT., THORNHILL ON L4J 8H7 CANADA

December 18, 2017

Mr. Mike Nadeau
Chief Administrative Officer
District of Sault Ste. Marie Social Services Administration Board
390 Bay Street, P.O. Box 277
Sault Ste. Marie, ON P6A 5L8

Dear Mr. Nadeau:

OVERSIGHT MANAGEMENT MODEL FOR THE DSSMSSAB'S CONTRACTED LAND AMBULANCE SERVICE

It is with great pleasure that we submit this report containing the results of our assessment of the DSSMSSAB's contracted land ambulance service. The main findings and recommendations arising from the assessment are as follows.

The governance arrangement with the DSSMSSAB as provincially designated delivery agent and City of Sault Ste. Marie as contracted land ambulance operator, is still evolving, and while it is working reasonably well in our opinion, there is room for improvement. Our report includes recommendations which, if implemented, should help to facilitate a successful transition.

Operationally, the DSSMSSAB's land ambulance service is well-managed, in full compliance to provincial regulations, with management making effective use of available resources to ensure service efficiency. This notwithstanding, it is our opinion that service resourcing at the front-line is lean, compared to peers, and we recommend that it be increased in the near-term, by:

- Adding an additional day shift ambulance at RESC; also, posting one of the RESC ambulances to a location at the City's west end, potentially at SSM Fire West.
- Stationing a day shift Paramedic Response Unit (PRU) at Goulais River; this to improve coverage and response time in the DSSMSSAB's largely rural northern area.

We have also recommended a preferred service level target going forward, and have provided a corresponding long-term (15-year) forecast of future resourcing requirements.

Thank you for giving us the opportunity to work on this most interesting assignment.

APEXPRO CONSULTING INC.

Marvin Rubinstein
President

Enc.

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EXECUTIVE SUMMARY

E.1 Project Objectives & Approach

The District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) retained APEXPRO Consulting Inc. to:

- Provide the DSSMSSAB with expert subject matter advice on EMS delivery and accountability, for a period of 12 months to December 31, 2017.
- Review and assess the DSSMSSAB's oversight management model for contracted land ambulance services; and to recommend changes as necessary, to ensure legislative compliance, appropriate oversight management, reporting and accountability.
- Review and assess the effectiveness and efficiency of the contracted land ambulance service operation; and to recommend appropriate goals and future resourcing needs.

Our approach was informed by previous experience with industry leading (best) practices, and provincial legislation and standards, as the foundation for our work.

Analysis was based on evidentiary information, including financial and operational performance metrics; also, on frequent consultations with both the DSSMSSAB and their contractor, the Emergency Medical Services (EMS) Division of the City's Fire Department.

E.2 Governance Structure

The Province of Ontario contracts the DSSMSSAB for the provision of land ambulance services to a geographic area consisting of the following jurisdictions:

- City of Sault Ste. Marie
- Prince Township
- Sault North Planning Board Area
- Batchewana First Nation of Ojibways community
- Garden River First Nation.

The DSSMSSAB contracts the City of Sault Ste. Marie to serve as its land ambulance Operator. The EMS Division of the City's Fire Department delivers the services.

The DSSMSSAB is responsible to:

- Establish land ambulance service levels that are appropriate to the service area
- Establish budgets for the provision of the services
- Ensure that the services comply fully with Provincial legislation and standards.

The City, by way of the Fire Department's EMS Division, is responsible to organize and effectively deliver the services, fully adhering to:

- Terms of the land ambulance service agreement between the DSSMSSAB and City
- Service levels and budgets authorized by the DSSMSSAB
- Provincial legislation and standards.

E.3 State of the Governance Arrangement

The governance arrangement, with the DSSMSSAB as provincially designated delivery agent and City of Sault Ste. Marie as contracted land ambulance operator, is working reasonably well in our opinion, with each party fulfilling their respective roles.

- The operator service agreement is reasonably comprehensive.
- The contractor, as represented by the EMS Division of the City's Fire Department, has many years of successful experience managing quality land ambulance services.
- The land ambulance service is well-managed, in full compliance to provincial regulations, with management making effective use of available resources to ensure service efficiency.
- Both the DSSMSSAB and City are working hard to forge a successful contractual relationship; this at all levels – operating, executive, and elected.
- The City provides the DSSMSSAB with a host of reports on land ambulance performance and financial reporting – this, to support the DSSMSSAB's accountabilities to the Province.

The above notwithstanding, the governance arrangement is still evolving, and there is room for improvement. [1] Our recommendations (presented below), if implemented, should help to facilitate a successful transition.

E.4 Governance Recommendations

- The DSSMSSAB should establish a communications framework that clearly affixes accountability for communications, including what needs to be communicated and when. The framework should be incorporated as an appendix to the operator service agreement.
- The DSSMSSAB should establish a structured performance appraisal framework by which to formally assess the operator's performance relative to the terms of the service agreement. A draft framework is included in the body of this report. It, or one similar, should be incorporated as an appendix to the operator service agreement.
- The DSSMSSAB requires the contractor to submit Quality Assurance (QA) reports that will support the DSSMSSAB's quality oversight obligations as ambulance delivery agent. Several QA reports are suggested in the body of this report. We recommend that they be submitted on a going forward basis.
- We recommend that a management resource be recruited to manage the ambulance portfolio; this, to safeguard and ensure the DSSMSSAB's accountabilities to the Province. A draft job description for the position is also included in the body of this report.

[1] Historically, the DSSMSSAB was administrated by City staff. In the fall of 2016 (i.e., about a year ago) the DSSMSSAB took the form of a fully independent entity staffed with its own employees. Both parties are still getting used to this relationship.

E.5 Operational Snapshot

The service operates with a total of 10 ambulances. Eight (8) are based at the City's Regional Emergency Services Centre (RESC). Two (2) are based at a station situated in Garden River First Nation (GRFN). RESC staffs 4 ambulances on days and 3 at night. GRFN staffs 1 ambulance round the clock.

The service is supported by 5 volunteer First Response Teams (FRT) situated in rural/remote settlements across the DSSMSSAB service area. These are non-ambulance emergency responders, trained to a basic level of first aid, who respond to urgent medical calls within their respective communities, when deployed by the Central Ambulance Communications Centre (CACC). Provincial legislation does not authorize volunteer emergency responders to provide patient transport. They will respond to the medical emergency, provide the patient with medical assistance to the extent permitted by their training, and await arrival of an ambulance.

In 2016, the DSSMSSAB's ambulance service responded to over 17,000 calls: 81% were dispatched as high priority; 14% as low priority; and 5% as standby. District-wide, the service's response time to high priority medical emergencies, was 9:26 at the 90th percentile.

Almost 95% of all calls are generated in the City. Ninety percent (90%) of response times to high priority medical emergencies in the City are under 9 minutes. In contrast, response times in the DSSMSSAB's largely rural area, are relatively long with many calls exceeding 20 minutes.

Call volumes have historically increased by about 4% to 5% year-over-year. The rate of increase more than doubled over the two years 2014-16, driving up the call volume, and adversely impacting response time and staff workload.

The increasing service demand is also contributing to a re-escalation in Code Reds (0 ambulances available), and is making it increasingly difficult for volunteer (non-ambulance) emergency first responders to serve the rural settlements.

It is our opinion that service resourcing at the front-line is lean; this, compared to peers, and as demonstrated by service workload levels which exceed industry leading (best) practices, and relatively long response times in the DSSMSSAB's largely rural area. As service demand continues to rise over time, the situation is expected to worsen.

E.6 Near-Term Resourcing Recommendations

To address the current and going forward situation, we recommend that the DSSMSSAB should adopt an annual Unit Hour Utilization (UHU) of 35% as its preferred land ambulance service level target. At this level the likelihood of an ambulance to be available, to respond to the next call would be 65% or better, and the service should be able to sustain its current district-wide 90th percentile response time to high priority medical emergencies, of 09:26 or better.

Presented below are our near-term service resourcing recommendations, and cost estimates, based on a preferred UHU of 35%. The near-term recommendations are spread over two years, 2018 and 2019; this, to soften the near-term financial impact. Costs are presented in 2017 dollars. They are the gross costs, which are potentially eligible for MOHLTC subsidy.

NEAR-TERM RESOURCING RECOMMENDATIONS	EST'D OPERATING COST IMPACT	EST'D CAPITAL COST IMPACT	TARGET
1. The DSSMSSAB should recruit a contract oversight manager to manage the land ambulance portfolio.	$120,000 / year	--	2018
2. The service's front-line resourcing should be increased by 1 additional day time ambulance (12/7) at RESC; this, to improve service workload.	$657,000 / year	$200,000 (for a fully-equipped ambulance)	2018
3. One of the ambulances at RESC should be posted at the City's west end, potentially at SSM Fire West; this, to improve coverage and response time.	--	-- (assumes space is available at no charge in an existing facility)	2018
4. The service's front-line resourcing should be increased by 1 Paramedic Response Unit (PRU). The PRU should be stationed at Goulais River on days, potentially 12/7 - this, to improve coverage and response time in the District's rural northern area.	$328,500 / year	$100,000 (for a fully-equipped PRU / assumes space is available at no charge at Goulais River)	2019

E.7 Projected Fleet Requirements (Long-Term)

The long-term (15-year) fleet requirement forecast is set out below. The forecast is based on a low growth, 3% year-over-year increase in EMS demand, and a preferred UHU of 35%.

If EMS demand increases at a faster pace, then the fleet requirements will increase more rapidly. Conversely, if EMS demand increases at a slower pace, then so also will the requirement for additional fleet resources slow down.

The long-term requirement is forecast at 16 ambulances and 1 PRU (up from the current fleet of 10 ambulances), as follows:

- GRFN: Deployment to stay at 1 ambulance staffed round the clock.
- RESC: Deployment to be increased by 1 additional day car in each of 2018, 2021, 2024 and 2028; and by 1 additional night car in 2025. All cars to operate on 12-hour shifts.
- Ambulance fleet to be augmented with one (1) PRU, in 2019.
- Number of spare ambulances at RESC to be increased to 2 spares, in 2021.

E.8 2018 Operating Budget

The cost to operate the DSSMSSAB land ambulance service in 2018, is estimated at $8.68 million. This figure represents an increase of about $1.37 million over the approved 2017 operating budget. A breakdown of the cost increase is provided below.

ESTIMATED OPERATING COST FOR 2018		
Land ambulance service operating budget for 2017		$7.31 million
Cost increases for 2018		
· 2017 budget adjustment [2]	$0.30 million	
· Contract oversight manager	$0.12 million	
· One add'l daytime ambulance shift at RESC	$0.66 million	
· Fleet & equipment replacement allowance	$0.30 million	
· Total increase for 2018		$1.38 million
Estimated operating cost for 2018		$8.68 million

The DSSMSSAB's spending on land ambulance services is presently about $85 per capita. Spending on EMS by northern-based peers is higher, with most expending between $100 and $200 per capita. [3]

If the Board approves our recommended resource increases for 2018, and associated costs, then the DSSMSSAB's spending on land ambulance services will increase to approximately $110 per capita.

[2] While the budget is well-managed by both DSSMSSAB and City management, expenditures for 2017 are projected to be about $300,000 higher than budgeted. The overrun is mainly attributed to a 2015/16 Business Case that under-estimated the cost of adding an additional day car at RESC.

[3] Spending is compared for the budget year 2016. Peer data is derived primarily from year end financial statements that peers posted on line, and Census 2016 populations. The Census data is based on permanent residents, i.e., it excludes temporary/seasonal residents. Spending is based on gross costs prior to the application of any provincial funding.

1 INTRODUCTION

1.1 Context

The District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) was created by the District Social Services Administration Board Act in 1998.

The Board consists of nine (9) locally elected political representatives: 6 from the City of Sault Ste. Marie; 1 from Prince Township; and 2 from the Sault North Planning Board Area. These areas represent the geographic jurisdiction of the Board.

EXHIBIT 1.1: GEOGRAPHIC JURISDICTION

The DSSMSSAB, through Social Services, is responsible for the provision of Ontario Works, Early Years Services and Housing Services. It also is responsible for the provision of land ambulance services, serving as a designated delivery agent (DDA) on behalf of the Province of Ontario.

The DSSMSSAB contracts the City of Sault Ste. Marie to serve as its land ambulance Operator. The City delivers the service by way of the Emergency Medical Services (EMS) Division of the City's Fire Department. [4]

[4] In this document, the following terms are used interchangeably: Land Ambulance Services, Paramedic Services, and Emergency Medical Services (EMS).

1.2 Project Objectives

On November 28, 2016, the DSSMSSAB issued a Request-for-Proposals (RFP) to secure the services of a professional consultant to undertake the following assignment …

…. to assess and recommend an oversight management model for the DSSMSSAB's contracted land ambulance service.

The oversight management model is intended to ensure effective, efficient and accountable delivery of local land ambulance services that comply with provincial legislation and standards. Also, to ensure appropriate goals, and future resourcing of staff and equipment …

APEXPRO Consulting Inc.'s involvement in this project is the direct result of the competitive tendering process. Our proposal was submitted on December 22, 2016. The project was awarded on January 5, 2017 and it officially commenced on January 10, 2017.

The scope of our consulting engagement was based on the requirements set out in the DSSMSSAB's RFP document, to fulfill the following objectives:

- To provide the DSSMSSAB with expert subject matter advice on EMS delivery and accountability, for a period of 12 months to December 31, 2017.
- To review and assess the DSSMSSAB's oversight management model for contracted land ambulance services; and to recommend changes as necessary, to ensure legislative compliance, appropriate oversight management, reporting and accountability.
- To review and assess the effectiveness and efficiency of the contracted land ambulance service operation; and to recommend appropriate goals and future resourcing of staff and equipment.

1.3 Approach

Our approach to this engagement was informed by previous experience with industry leading (best) practices, and provincial legislation and standards, as the foundation for our work.

Analysis was based on evidentiary information, including governance structure and service agreements; incident data records; and financial and operational performance metrics. It also was based on frequent and constructive consultations with both the DSSMSSAB and their contractor, the EMS Division of the City's Fire Department.

Project direction was provided by the Chief Administrative Officer (CAO) of the DSSMSSAB.

Authorized by the CAO we attended meetings with the following stakeholders: DSSMSSAB Board of Directors; City Council of the City of Sault Ste. Marie; Fire Chief, Goulais River Fire and Rescue; and the Chiefs of Batchewana and Garden River First Nations.

1.4 Acknowledgement

APEXPRO acknowledges and thanks all stakeholders who contributed to this investigation. While our report is based in part on stakeholder consultations, APEXPRO in its role as consultant takes responsibility for the report contents.

2 PROVINCIAL LEGISLATION & STANDARDS

2.1 Ambulance Act, 1990

The *Ontario Ambulance Act* provides the overall legislative framework for ambulance services in the province of Ontario. The Ambulance Act grants the Minister of the MOHLTC authority to:

- Establish a balanced and integrated system of ambulance services and communication services used in dispatching ambulances.
- Establish, maintain and operate communication services, alone or in co-operation with others, and to fund such services.
- Establish standards for the management, operation and use of ambulance services and to ensure compliance with those standards.
- Monitor, inspect and evaluate ambulance services and investigate complaints respecting ambulance services.
- Fund and ensure the provision of air ambulance services.

The Ambulance Act also empowers the Minister to:

- Establish and operate, alone or in co-operation with one or more organizations, institutes and centres for the training of ambulance services and communication services personnel.
- Establish regions and districts for the purposes of ambulance and communication services.
- Designate hospitals as base hospitals that shall monitor the quality of the care provided by ambulance services in the regions and districts established by the Minister.

Section 3 of the Act assigns upper-tier municipalities (UTM) accountability for:

- All costs associated with the provision of land ambulance services in the municipality, notwithstanding any grant that they may receive; and
- Ensuring the proper provision of land ambulance services in the municipality in accordance with local needs. [5]

Section 3 of the Act notwithstanding, Section 4 of the Act grants the Minister authority to designate a delivery agent (DDA) for the provision of land ambulance services in any geographic area of the Province, and to hold the DDA accountable for:

- All costs associated with the provision of land ambulance services in the DDA's service area, notwithstanding any grant that they may receive; and
- Ensuring the proper provision of land ambulance services in the service area in accordance with local needs.

[5] A land ambulance service is intended to mean all services provided by an ambulance service, in connection with the transportation of persons by land.

Various other provincial legislations govern specific aspects of ambulance services delivery e.g.:

- *Ambulance Services Bargaining Act*, which ensures the continuation of essential ambulance services in the event of a strike by ambulance workers; and
- *Health Insurance Act*, which defines the insurable costs of ambulance services.

2.2 Regulations & Legislated Standards

Regulation 257/00 gives substance to the legislative requirements set out in the Ontario Ambulance Act, specifying:

- Certification requirements and standards for operators of ambulance services
- Qualifications for employment as a paramedic
- Requalifying examinations for employment as a paramedic
- Patient care and documentation standards
- Obligations of communications services, base hospital programs, and land ambulance services that are funded by the province
- Response time performance plan requirements for ambulance service providers
- List of controlled acts that may be performed by paramedics trained to the primary, advanced and critical care levels.

Legislated standards for the management, operation and use of ambulance services, include:

- Certification Standards for Operators of Land and Air Ambulance Services
- Ambulance Service Communicable Disease Standards
- Basic & Advanced Life Support Patient Care Standards
- Ontario Ambulance Documentation Standards
- Vehicle Design Standards for Ambulances and Emergency Response Vehicles
- Ambulance Equipment Standards.

Regulation 129/99 of the Ontario Ambulance Act provides the legislative framework by which a UTM/DDA can recover/apportion land ambulance service costs among two or more service areas.

2.3 Provincial Principles

MOHLTC requires Ontario land ambulance services to abide by the following provincial principles.

- To be **accessible** to all residents of the Province, regardless of socio-economic or demographic status. Central Ambulance Communications Centers (CACCs) are responsible to deploy rapid and borderless ambulance services. DDA are responsible to provide reasonable levels of ambulance resourcing and access.
- To serve as an **integrated** component of the province's health-care system. Patient transport by ambulance between health care facilities for medically essential services is a

part of this system. When called upon by CACC, the DDA are responsible to provide patient transport by ambulance between health care facilities for medically essential services.

- To be **seamless** across jurisdictional borders, regardless of political, administrative or other artificially imposed boundaries. The CACC is responsible to deploy a medical response to each incident using the closest available, and most appropriate ambulance to meet the needs of the patient.
- To be medically, operationally and financially **accountable** for the quality of the service. To ensure patient care quality, each ambulance operator is required to establish and maintain an in-service program for quality assurance oversight.
- To ensure that ambulance services remain **responsive** to changes in the health care, demographic, socio-economic and medical environments.

2.4 Central Ambulance Communications Centre (CACC)

MOHLTC provides land ambulance communication (dispatch) services, using a network of Central Ambulance Communications Centers (CACCs) for such purposes. The local CACC, situated in Sault Ste. Marie, is managed and staffed by the Sault Area Hospital, operating under contract to MOHLTC.

CACC personnel serve as the critical link between callers and the medical assistance they require. Providing continuous coverage by way of telephone, radio and computer aided dispatch (CAD) systems, CACC personnel:

- Quickly and efficiently evaluate incoming calls to determine the nature and urgency of the medical emergency
- Assign each call a dispatch priority ranging from Priority 1 (deferrable) to Priority 4 (urgent, requiring an ambulance to be deployed with flashing lights and siren); and
- Rapidly deploy the closest available, and most appropriate ambulance to meet the needs of the patient.

By maintaining up-to-the-moment information on the location and availability of each ambulance in their dispatch jurisdiction, and in neighboring dispatch jurisdictions, CACCs can effectively:

- Deploy rapid and borderless ambulance services,
- Direct a medical response to each incident using the closest available, and most appropriate ambulance to meet the needs of the patient,
- Arrange standby coverage while an ambulance is occupied on another call i.e., temporary posting of an ambulance from one station to another, or to an alternate geographic location, to re-establish or maintain emergency coverage,
- Coordinate a response involving multiple ambulances,

- Coordinate a medical tiered response involving a non-ambulance emergency responder (i.e., Fire, Police or EFRT).

The CACC's responsibilities also include:

- Provide callers with pre-arrival first aid instruction
- Coordinate communications during patient transport with the destination hospital, or with the Base Hospital
- Document all aspects of each call in a provincial database known as the Ambulance Dispatch Reporting System (ADRS). The ADRS database is a primary source of information for assessing land ambulance service performance, and funding requirements.

2.5 Dispatch Priorities

Most Ontario CACCs, including the Sault Ste. Marie CACC, use a medical triage software system known as "Dispatch Priority Card Index (DPCI)" to rapidly assess and assign a dispatch priority to each incoming request.

Dispatch priority ranges from Priority 1 (deferrable) to Priority 4 (urgent requiring an ambulance to be deployed with flashing lights and siren), as below.

- **Priority 1 'Deferrable'**: This refers to a NON-URGENT call that does not have an associated time element (e.g., a patient being transferred from hospital to a long-term care facility). Such calls may be temporarily delayed without being physically detrimental to the patient.
- **Priority 2 'Scheduled'**: This refers to a NON-URGENT call that does have an associated time element (e.g., a patient transport from one hospital to another for a scheduled diagnostic, treatment or other form of medical appointment). The time element is not set by patient convenience, but rather by the availability of the resources at the receiving facility.
- **Priority 3 'Prompt'**: This refers to an URGENT but NON LIFE-THREATING call, where a moderate delay will not adversely affect the outcome (e.g., a patient under professional care who is stable and not in immediate danger, who requires transport to hospital for additional treatment). For such calls, ambulances are dispatched without lights and siren.
- **Priority 4 'Urgent'**: This refers to a call where the patient has a LIFE-THREATENING or potential life-threatening condition, where a delay in medical intervention and transport can have an adverse effect on outcome (e.g., a patient with acute chest pain or serious trauma). **For such calls, a rapid response is crucial, and ambulances are dispatched with flashing lights and siren**.

CACC may also deploy an ambulance as a **Priority 8 'Standby'**. This refers to a TEMPORARY POSTING of an ambulance from one location to another, to maintain balanced emergency coverage, e.g., posting an ambulance midway between its service area and the service area of an adjacent municipality that is temporarily without ambulance coverage. From this position, the ambulance will temporarily provide coverage to both service areas, until the latter's own coverage is restored.

Within the DSSMSSAB service area this may include: posting the GRFN ambulance closer to the City boundary, or alternatively, posting an ambulance based at RESC closer to GRFN.

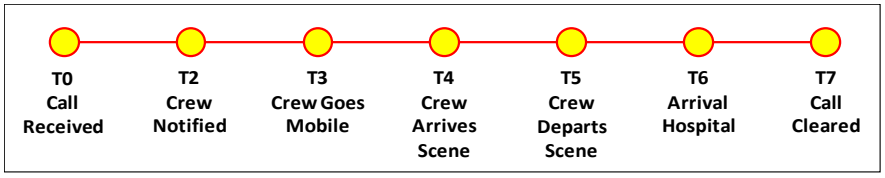
Standbys do not typically involve patient contact. While on standby an ambulance may be dispatched to a call involving a patient. When this occurs, the standby designation is replaced by one of the above four dispatch priorities.

2.6 Ambulance Response Time

Ambulance response time is defined as the interval T2-T4, where T2 is the time that an ambulance crew is notified of the call, and T4 is the time of their arrival on scene; this as depicted by Exhibit 2.1.

Ambulance response time consists of two components: chute time (T2-T3), which is typically 60 seconds; and drive time (T3-T4), which is influenced by multiple factors, including traffic volume, roadway conditions, weather, and distance travel.

EXHIBIT 2.1: AMBULANCE CALL CONTINUUM



Prior to an amendment introduced in July 2008, Regulation 257/00 under the Ambulance Act, required land ambulance delivery agents to report the 90th percentile response time T2-T4, for all Pr. 4 calls to which they were deployed, e.g., in 2016, the DSSMSSAB land ambulance service operated at a 90th percentile response time of 09:26. [6]

2.7 Response Time Performance Plan (RTPP)

Regulation 257/00 currently requires delivery agents to submit a Response Time Performance Plan (RTPP) setting out their ambulance response time targets by Canadian Triage Acuity Scale (CTAS) for each funding year. The Plan, which is based largely on prior year statistics, is submitted in October (i.e., two months prior to the start of the funding year). [7]

The Regulation also requires land ambulance delivery agents to submit a report on the service's performance relative to the funding year's response time targets. The Response Time Performance Report is submitted in February-March (following the funding year).

The DSSMSSAB's Response Time Performance Plan is discussed in Section 8 of this report.

[6] A 90th percentile of 09:26 means that 90 percent of all Pr. 4 calls were responded to in 9 minutes and 26 seconds, or less.

[7] Notwithstanding the current Regulation, tracking Pr. 4 call response times at the 90th percentile, and at other fractile percentages (i.e., 80th and 50th percentiles), is still a useful parameter for operational planning.

2.8 Base Hospital

Base Hospitals are responsible to certify paramedics; delegate medical acts; and monitor and evaluate the services that they provide. In chief, paramedics operate under the license of a Base Hospital Medical Director (a physician).

The Base Hospital for the DSSMSSAB service area, is the Northeastern Ontario Prehospital Care Program (NEOPCP) based in Sudbury. The Base Hospital program operates a district office in Sault Ste. Marie.

2.9 Primary and Advanced Care Paramedics

A Primary Care Paramedic (PCP) is a graduate of a two-year community college paramedic program who, on completion of the course, has successfully passed the provincial exam for designation as an Advanced Emergency Medical Care Assistant (A-EMCA). Once they are hired, they must also successfully certify with the Regional Base Hospital Medical Director, to participate in controlled acts at the PCP level.

An Advanced Care Paramedic (ACP) is a graduate of the two-year community college PCP program, who takes an additional year of schooling to progress to the advanced care level. Upon completing the 3 years, they must successfully pass a provincial exam administered by MOHLTC, and be successfully certified by the Regional Base Hospital Medical Director, to participate in controlled acts at the ACP level.

Regulation 257/00 sets out the controlled acts that may be performed at the PCP and ACP levels.

Both PCPs and ACPs must also successfully complete mandatory continuing medical education (CME) courses on an annual basis, to maintain their qualifications and certifications under the regional base hospital program. For additional detail, refer to Appendix B.

The DSSMSSAB ambulance service operates at the Primary Care Paramedic level (PCP). The City's paramedics are PCPs who also are certified by the Base Hospital to perform IV starts. This standard is consistent with that of multiple EMS peers, particularly those serving largely rural areas.

2.10 Ambulance Service Review (ASR)

Every ambulance service in Ontario must have a provincial operating certificate that is current. To receive and maintain provincial certification, each land ambulance service operator must undergo an Ambulance Service Review (ASR) every three years.

ASR's are organized and managed by the MOHLTC Emergency Health Services Branch. The ASR assesses the service provider relative to the legislation, regulations and standards; focusing predominately on compliance and performance in the following three areas:

- Patient care: to ensure that patient care is provided in accordance with the legislated standards for Basic Life Support Patient Care and where applicable, the Advanced Life Support Patient Care Standards.

- Quality Assurance (QA): to ensure that the service provider has a QA program in place, to ensure optimal provision of services, including: ACR and field performance audits; incident report audits; in-service CME; and Base Hospital certification. Also, that the QA program include investigations of patient care and service delivery complaints, and recommendations to mitigate reoccurrence.
- Administration: to ensure that the service provider has implemented plans, policy, procedures, and insurance in conformance with the regulations and standards, including: Response Time Performance Plan, Deployment Plan, Ambulance Service Identification Cards, vehicle and equipment preventative maintenance, and Base Hospital Agreement.

Methods used to assess a service provider include: interviews with staff; ride-outs; review of pertinent files; and inspections of service vehicles, equipment, and supplies.

The MOHLTC Emergency Health Services Branch recently completed an ASR of the DSSMSSAB land ambulance service (i.e., of the service delivered on behalf of the DSSMSSAB by the EMS Division of the City's Fire Department). The Ministry's findings, issued in an ASR Report dated August 3, 2017, affirms that the service successfully meets all legislated requirements for certification in the Province of Ontario.

2.11 Provincial Funding

While each UTM / DDA is fully responsible for all costs associated with the provision of land ambulance services in their service area, it is the MOHLTC's practice to provide each UTM / DDA with an annual grant equal to 50% of the approved cost of the land ambulance services that they deliver. Each year's grant is based on the previous year's land ambulance services costs.

MOHLTC pays 100% of the approved cost for ambulance services to First Nations. This payment also is based on the previous year's land ambulance services costs. In addition, MOHLTC covers 100% of the approved costs for CACC and Base Hospitals services.

In accordance with the above practices:

- MOHLTC provides the DSSMSSAB with an annual grant equal to 50% of the approved cost of the land ambulance services that they deliver in the geographic jurisdiction of the DSSAB, i.e.: the area consisting of the City of Sault Ste. Marie, Prince Township, Sault North Planning Board Area, and Batchewana First Nation.
- MOHLTC pays the DSSMSSAB 100% of the approved cost for land ambulance services that they deliver to Garden River First Nation.

2.12 Paramedic Response Unit

A Paramedic Response Unit (PRU) is a vehicle operated by a paramedic, which is intended to supplement - not replace - the services of a patient transport capable ambulance fleet. [8]

For paramedic services that utilize PRU, the principal features of the arrangement include:

- Operated by one fully-certified paramedic in lieu of a crew of two
- Operating with one paramedic in lieu of a crew of two, the operating cost is about one-half that of an ambulance.
- Under management control of the paramedic service
- Vehicle is part of the service fleet. Its role is defined in the service's Deployment Plan.
- Vehicle is dispatched by CACC
- Has no patient transport capability. Patient transport to hospital is by ambulance.
- Conforms to same policies and protocols as a fully-outfitted ambulance
- Delivers same level of paramedical skills/services, and is subject to the same rigorous QA
- No different than other service add-on's, e.g.: bike-medic / marine-medic

PRU use varies depending on the service's objectives. Below is a range of roles / uses:

- Serves as EMS first responder
- Enhances response time performance (stops the clock)
- Calls off ambulances when patient transport is not required
- Specialty team operations (Tactical Paramedics, Incident Response/Haz-Mat).

PRU operations require mature self-starters who are capable to work alone. This may include working a medical emergency on their own, awaiting arrival of ambulance transport.

The DSSMSSAB land ambulance service does not presently operate with PRU. The following are examples of Ontario land ambulance services that have experience operating PRU: Brant County, Cornwall (Stormont, Dundas, Glengarry), Durham Region, Halton Region, City of Hamilton, Peterborough County, Simcoe County, Greater Sudbury, and Waterloo Region.

2.13 Provincial Plans for Ambulance Service Enhancement

Ontario's health care system is progressively shifting care delivery from hospitals and long-term care facilities, to people's homes and the community. Also changing is the role of the Ontario paramedic, which is evolving and improving, in step with the provincial health care system shift, to better meet outpatient care needs and improve patient outcomes.

On June 5th, 2017 MOHLTC announced that Ontario would be enhancing and modernizing its emergency health services system to provide people with increased flexibility and more options for medical transportation and paramedic services, to ensure they receive the right care when they need it.

[8] A Paramedic Response Unit (PRU) is oftentimes also referred to as an Emergency Response Unit (ERU). The two terms typically have the same meaning.

The proposed enhancements include investing in a new medical dispatch system that will improve CACC's triaging and prioritization of 911 calls for ambulance service. The new system, which will replace the current "Dispatch Priority Card Index (DPCI)":

- Will better prioritize calls based on patient medical need.
- Will continue to provide an immediate ambulance response to medical emergencies.
- May redirect low acuity patients (i.e., those with non-urgent need), in a timely and convenient manner, to locations other than emergency departments, in instances where it would be safe and appropriate to do so.

The new system is expected to be in place in the first site by March 2018. Full roll out to all provincial CACCs will take approximately 24 months to complete.

The province also plans to change/update the Ambulance Act (1990) through a transparent and inclusive consultation process, to ensure patients continue to receive the right care at the right time.

The legislative change, if passed, will provide paramedics with increased flexibility to deliver alternative care options on-scene, by referring/transporting patients to non-hospital options, such as a primary or community-based care facility, or a mental health facility.

Currently, paramedics are bound by law to transport patients to hospital facilities only. The proposed change would allow patients to receive care appropriate to their needs, closer to home and in the community, while improving ambulance service coverage and reducing unnecessary trips/overcrowding in emergency departments.

The proposed legislative change, will also enable the government to provide funding for two pilots in interested municipalities that will enable firefighters certified as paramedics to respond to low acuity calls to treat and release or treat and refer a patient, and provide symptom relief to high acuity calls.

The proposed legislative changes are set out in Bill 160, the "Strengthening Quality and Accountability for Patients Act, 2017". The Bill has passed second reading, and is presently undergoing additional public and stakeholder consultations.

3 GOVERNANCE

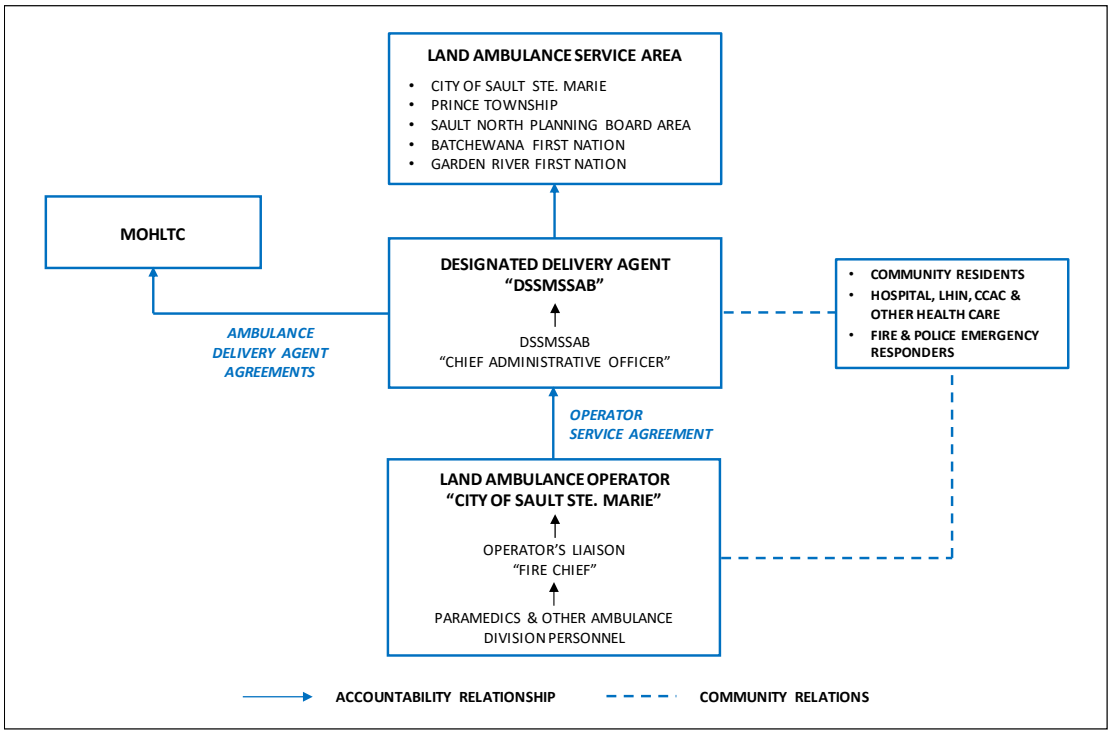
3.1 Governance Structure

In 1998, the Province of Ontario commenced the transference of responsibility for land ambulance services to upper-tier municipalities (UTM) and designated delivery agents (DDA), represented primarily by District Social Services Administration Boards (DSSAB).

The transference to UTM and DDA, including the District of Sault Ste. Marie Social Services Administration Board, was completed by January 1, 2001.

The governance structure pertaining to the DSSMSSAB's provision of land ambulance services are shown in Exhibit 3.1.

EXHIBIT 3.1: LAND AMBULANCE GOVERNANCE STRUCTURE



The Province, by way of Ministry of Health and Long-Term Care (MOHLTC), contracts the DSSMSSAB as designated delivery agent (DDA) for the provision of land ambulance services to the DSSMSSAB geographic jurisdiction, including the areas listed below. The DDA contract / service agreement was last updated in 2013:

- City of Sault Ste. Marie
- Prince Township
- Sault North Planning Board Area
- Batchewana First Nation of Ojibways community.

The Province, by way of MOHLTC, also contracts the DSSMSSAB for the provision of land ambulance services to Garden River First Nation (GRFN), a settlement to the east of the City of Sault Ste. Marie, which is not part of the DDA service area. The service to GRFN is authorized by way of a separate service agreement issued by MOHLTC in November 2009.

Provincial legislation, and the above noted service agreements, permit the DSSMSSAB to engage a 3rd party land ambulance Operator for delivery of the services, provided that the 3rd party Operator commits to operating in full compliance with provincial legislation, regulations and standards.

The DSSMSSAB contracts the City of Sault Ste. Marie to serve as its land ambulance Operator. The City delivers the service by way of the EMS Division of the City's Fire Department. The Fire Department's EMS Division has many years of experience managing quality land ambulance services.

The service agreement between the DSSMSSAB and City of Sault Ste. Marie, was last updated in September 2016, and is recorded as City By-Law 2016-145.

The City's Fire Chief serves as the Operator's liaison, and is empowered to speak on behalf of the City on all corporate and contractual matters relative to the agreement.

3.2 Governance Responsibilities

DSSMSSAB

As stipulated by the Ontario Ambulance Act, and the above noted MOHLTC contracts, the DSSMSSAB is fully accountable for:

- All operational policy decisions pertaining to land ambulance services in the service area. [9]
- All costs associated with the provision of land ambulance services in the service area, notwithstanding any grant that they may receive.

More specifically, the DSSMSSAB is responsible to:

- Establish land ambulance service levels that are appropriate to the service area.
- Establish budgets for the provision of the services.
- Ensure that the services comply fully with Provincial legislation and standards.

A change in established land ambulance service levels may occasionally be warranted. The responsibility for such decisions, and any additional costs that may be incurred from such decisions, reside with the DSSMSSAB. The DSSMSSAB is responsible to pay the City for the additional costs related to changes in land ambulance service levels that are approved by the DSSMSSAB Board of Directors.

[9] Throughout the rest of this document, reference to 'service area' is intended to mean the combined service area as defined by the two MOHLTC contracts. The service area includes the following geographic jurisdictions: City of Sault Ste. Marie, Prince Township, Sault North Planning Board Area, Batchewana First Nation, and Garden River First Nation.

These accountabilities / responsibilities are embedded within the service agreement between the DSSMSSAB (as DDA) and City of Sault Ste. Marie (as contracted land ambulance operator).

They are safeguarded by the DSSMSSAB in its role as “contract oversight management”.

City of Sault Ste. Marie

As contracted operator the City of Sault Ste. Marie is accountable to the DSSMSSAB for the management and administration of the day-to-day land ambulance service delivery operation in the DSSMSSAB service area.

The City is the employer of all paramedics, and other personnel, engaged in the provision of the land ambulance services in the DSSMSSAB service area. They are not employees of the DSSMSSAB.

The City, by way of the Fire Department’s EMS Division, is responsible to:

- Organize and effectively deliver the services, fully adhering to:
  - Terms of the land ambulance service agreement between the DSSMSSAB and City
  - Service levels and budgets authorized by the DSSMSSAB
  - Provincial legislation and standards.
- Establish and maintain land ambulance Quality Assurance programs and practices approved by the DSSMSSAB.
- Provide all staff, supplies, office equipment, facilities and accommodations which are necessary to provide the services, provided such staff, supplies, equipment, facilities and accommodations are accounted for in the annual operating budget.
- Supply uniforms, flashing and identification devices approved by DSSMSSAB.
- Ensure that all equipment, materials, supplies and vehicles provided by or paid for by the DSSMSSAB for use in the provision of land ambulance service is marked/identified to show ownership in a manner approved by the DSSMSSAB.
- Provide the DSSMSSAB with service performance and financial reports, and any other requested information, in a timely fashion – this, to facilitate the DSSMSSAB’s role as “contract oversight management”.

The City / Fire Department is also responsible to maintain the confidentiality of information pertaining to the service, particularly patient information such as that contained in the ADRS and IMedic databases, and in incident reports. This information is the property of the DSSMSSAB, and may not be disclosed, without the prior written consent of the DSSMSSAB first being obtained.

Also belonging to the DSSMSSAB, are all items that the City purchases with DSSMSSAB funding, including but not limited to: fleet, medical equipment, medical supplies, communications equipment, computers, and computer software systems.

3.3 State of the Governance Arrangement

APEXPRO's assessment of the current "contracted" land ambulance service governance arrangement is summarized in Exhibit 3.2. Findings and recommendations by individual criterion, are discussed below.

EXHIBIT 3.2: REPORT CARD ON THE STATE OF THE GOVERNANCE ARRANGEMENT

CRITERIA	RELEVANCE	APEXPRO RATING
Service Agreement	Defines service expectations, roles and responsibilities	√ √ √ -
Operator's Experience	Extent of experience managing quality land ambulance services	√ √ √ √
Legislative Compliance	Maintain certification as a land ambulance service	√ √ √ √
Commitment of the Participants	Forge a successful contractual relationship	√ √ √ √
Performance & Financial Reporting	Support DSSMSSAB's provincial accountabilities / service planning and finances	√ √ - -
Timely Communications	Support DSSMSSAB's provincial accountabilities / service planning and finances	√ √ - -
Contract Oversight Management	Safeguard DSSMSSAB's provincial accountabilities / service needs & budget	√ √ - -
Performance Appraisal & Feedback	Ensure Operator's fulfillment of all obligations	- - - -

It's our opinion, based on this assessment, that the governance arrangement with the DSSMSSAB as DDA and City of Sault Ste. Marie as contracted land ambulance operator, is working with each party fulfilling their respective roles.

- The operator service agreement is reasonably comprehensive.
- The EMS Division of the City's Fire Department has many years of successful experience managing quality land ambulance services.
- The service successfully meets all legislated requirements for certification in the Province of Ontario; this, as recently affirmed by a MOHLTC-organized Ambulance Service Review.
- Both the DSSMSSAB and City are working hard to forge a successful contractual relationship; this at all levels – operating, executive, and elected.
- The City provides the DSSMSSAB with a host of reports on land ambulance performance and financial reporting – this, to support the DSSMSSAB's accountabilities to the Province.

The above notwithstanding, the governance relationship is not without challenges, as described below. The reader should bear in mind that the contracted service arrangement, in its current form, is relatively new and it is still evolving. [10]

Our recommendations (also below), if implemented, should help to facilitate a successful transition. We have incorporated these recommendations into a revised Operator service agreement. The revised agreement was submitted separately.

3.4 Challenges & Recommendations

3.4.1 Essential Communications

Challenge: Occasional lapse in essential communications.

This is attributed, in large part, to the absence of a communications framework that clearly affixes accountability for communications, including what needs to be communicated and when.

Recommendations: The parties should establish a communications framework. The framework should be incorporated as an appendix to the operator service agreement. A brief description of each party's responsibilities under the contracted ambulance services arrangement should also be included as an appendix in the operator service agreement.

In support of the above, we offer the following illustrations where a lapse in communications has adversely affected what otherwise would be described as a good working relationship.

- City administration's report to Council April 10, 2017, which recommended that the City undertake a Comprehensive Risk Assessment of the Fire Department, including EMS service levels and resourcing appropriate to the area. Also, that a pause be applied to Fire Services resourcing, including EMS, until the study is completed and approved by Council. The report and recommendations as written, inappropriately imply that the City has authority for the provision of EMS - which is not the case under the contracted land ambulance service arrangement. Had the DSSMSSAB been consulted, the report/study terms-of-reference could have been tailored to convey the City's intent yet respect the DSSMSSAB's authority as the provincially designated delivery agent for land ambulance services.

- Under the terms of the operator service agreement, the Fire Chief serves as the City's liaison for all matters pertaining to the contract. In October 2017, City staff other than the Fire Chief, provided the DSSMSSAB with draft budget estimates for 2018, showing a projected increase in costs of 12 percent over 2017. Addressing the situation was of urgency, since the information was scheduled to go to City Council within weeks. Following hastily arranged discussions with City Finance, it was concluded that the estimates were incorrect and that the 2018 cost increase would be substantially lower than

[10] Historically, the DSSMSSAB was administrated by City staff. In the fall of 2016 (i.e., about a year ago) the DSSMSSAB took the form of a fully independent entity staffed with its own employees. Both parties are still getting used to this relationship.

initially estimated (and sent to the DSSMSSAB). This incident reinforced the importance of quality control over finances, and maintaining 'designated' liaisons for matters pertaining to the contract, including essential communications and budget adherence.

- DSSMSSAB finding out by way of the media (SooToday) that, on October 25, 2017 paramedics working in the EMS Division of Sault Ste. Marie Fire Services, voted 93 per cent in favour of supporting strike action if a fair and respectful deal with the city wasn't reached. This occurrence, again reinforced the City-DSSMSSAB's need for a clearly defined communications framework – particularly so, if the City is to negotiate a financial settlement that properly reflects the DSSMSSAB's financial wherewithal.

3.4.2 Performance Appraisal Framework

Challenge: There is no structured framework by which to manage / oversee the operator's performance relative to the terms of the service agreement.

We have drafted such a framework for the client's consideration. The draft framework, shown below, is based on information taken from similar practices by EMS peers.

Recommendation: We recommend that the draft framework (or one similar) should be: adopted by the parties; incorporated as an appendix to the operator service agreement; and in future, used by DSSMSSAB management to annually assess the Operator's performance.

EXHIBIT 3.3: DRAFT PERFORMANCE APPRAISAL FRAMEWORK

CRITERIA	PERFORMANCE INDICATOR	MAX SCORE
Patient Care	Operator ensures that all paramedics are certified by the Base Hospital, and that their qualifications are current. Operator ensures that all paramedics participate in requisite CME, and have current training in all areas of patient care. Operator has implemented Quality Assurance programs and practices, and demonstrates evidence to this effect. No significant patient care issues identified. Operator appropriately addresses all issues related to patient care. Operator appropriately investigates complaints and patient care issues.	20
Operations	Operator adheres to service levels approved by the DSSMSSAB. Operator updates/makes changes to operations as requested by the DSSMSSAB. Operator addresses downstaffing in a timely manner. Operator provides appropriate level of supervision at all times. Vacancies are filled in a timely manner. Operator has fulfilled all labour relations, and OH&S, obligations.	20

CRITERIA	PERFORMANCE INDICATOR	MAX SCORE
	Vehicles and equipment are maintained in compliance with standards. Base stations are provided in accordance with contract and maintained appropriately. Operator adheres to reaction times specified in contract. Operator securely manages facilities, vehicles, equipment, medical supplies and medications. No significant issues identified in ASR review.	
Reporting	Communications between Operator and the DSSMSSAB is frequent and ongoing. Operator provides the DSSMSSAB with EMS data on request. Operator submits reports specified by the service agreement, within the prescribed timelines. Operator provides complete and accurate reports. Operator makes changes to reports when requested by the DSSMSSAB.	20
Financial Performance	Operator adheres to operating and capital budgets approved by the DSSMSSAB. Operator notifies the DSSMSSAB of all expenses exceeding budgeted amounts in a timely manner. Operator provides suggestions to improve financial performance, and works with the DSSMSSAB to this objective.	20
Confidentiality	Operator maintains the confidentiality of all information pertaining to the service, including patient information. No information pertaining to the service is disclosed without the prior written consent of the DSSMSSAB first being obtained.	15
Value added	Operator demonstrates initiative to enhance the proper provision of services, to address the needs of the service area. Operator is willing to implement service enhancements when requested by the DSSMSSAB.	5
	Total Score	100

3.4.3 Reporting Requirements (Revised)

Appendix B of the operator service agreement, requires the City to provide the DSSMSSAB with a host of service performance and financial reports, to support the DSSMSSAB's obligations as ambulance delivery agent. APEXPRO reviewed the reporting requirements in consultation with the Client and the Fire Department's EMS Division. Our findings are discussed in Appendix C of this report, and our recommendations are summarized in Exhibit 3.4 (next page).

EXHIBIT 3.4: RECOMMENDED REPORTING REQUIREMENTS

NAME OF REPORT	DESCRIPTION	REPORT DUE DATES		REPORTING PERIOD
		SSM	DSSMSSAB	
REPORTS THAT THE DSSMSSAB SUBMITS TO MOHLTC UNDER THE UTM/DDA SERVICE AGREEMENT **The City of SSM provides these reports to DSSMSSAB in accordance with their Operator agreement**				Aug - Dec / JAN 1 - DEC 31 / Jan - May
SERVICE PLAN	Details how DSSMSSAB will carry out the program in the current fiscal year	31-Aug	31-Mar	
DESIGNATED DELIVERY AGENT (DDA) REPORT	Details the approved in-year budget and cost apportionments where applicable	31-Aug (on request)	31-Mar (on request)	
IN-YEAR FINANCIAL PLANNING REPORT	Reports actual expenditures to date and the forecast expenditure to year end	31-Aug	31-Aug	
FINAL PROGRAM REPORT	Reports whether all of the requirements in the Service Plan have been met	28-Feb	31-Mar	
FINANCIAL INFORMATION RETURN (FIR) YEAR END REPORT	Detailed report of actual expenditures, attested to by the CAO of the DSSMSSAB	28-Feb	31-May	
AUDITED FINANCIAL STATEMENT	Audited report on actual expenditures, attested to by a licensed public accountant	28-Feb (on request)	31-May	
RESPONSE TIME PERFORMANCE PLAN	Plan setting out the DSSMSSAB's response time targets by CTAS level for the fiscal year	31-Oct	31-Oct	
RESPONSE TIME PERFORMANCE REPORT	Details response time performance relative to the established targets for the fiscal year	28-Feb	31-Mar	
REPORTS THAT THE DSSMSSAB SUBMITS TO MOHLTC UNDER THE GRFN SERVICE AGREEMENT **The City of SSM provides these reports to DSSMSSAB in accordance with their Operator agreement**				Aug - Mar / APR 1 - MAR 31 / Apr - Jun
ANNUAL OPERATING BUDGET	Details the approved operating budget for the fiscal year	31-Aug	31-Mar	
IN-YEAR EXPENDITURE REPORT	Reports actual expenditures to date and the forecast expenditure to year end	31-Oct	31-Oct	
ANNUAL YEAR-END FINANCIAL REPORT	Detailed report of actual expenditures, attested to by the CAO of the DSSMSSAB	30-Jun	30-Jun	

…. / cont'd

EXHIBIT 3.4: RECOMMENDED REPORTING REQUIREMENTS (cont'd)

NAME OF REPORT	DESCRIPTION	REPORT DUE DATES		REPORTING PERIOD
		SSM	DSSMSSAB	
REPORTS THAT DSSMSSAB REQUIRES FROM THE CITY FOR QUALITY MANAGEMENT OVERSIGHT **Includes recommendations arising from APEXPRO's review of current reporting requirements**				Aug - Dec / JAN 1 - DEC 31 / Jan - May
FINANCIAL INFORMATION RETURN (FIR) MONTHLY REPORT	Reports actual expenditures for the previous month and year to date	Monthly	--	
QUARTERLY SERVICE PERFORMANCE REPORT	Report previous quarter performance metrics: 1. Ambulance responses by dispatch priority 2. Response time performance by CTAS level 3. Long distance inter-facility transfers 4. Code Red's (0 ambulances available) 5. Incidents of ambulance downstaffing	Q1: 30-Apr Q2: 31-Jul Q3: 31-Oct Q4: 31-Jan	--	
ASSET MANAGEMENT PLAN REPORT	Annual inventory update for vehicles and other major capital	31-Aug	--	
QUALITY ASSURANCE (QA) PLAN	Plan outlining the proposed QA programs and practices for the coming year	31-Aug	--	
IN-YEAR QA REPORT	In-year report on the Service's QA programs and practices	30-Jun	--	
YEAR-END QA REPORT	Year-end report on the Service's QA programs and practices	28-Feb	--	
INCIDENT REPORTS	For major incidents, provide copy of the report sent to MOHLTC	Concurrent w' MOHLTC Report	--	

Additional reports may occasionally be required by the DSSMSSAB. The City is to provide these on request.

3.4.4 Quality Assurance

Challenge: No Quality Assurance (QA) reports.

Regulations under the Ambulance Act require each land ambulance service in Ontario to establish an in-service Quality Assurance (QA) program. The QA program will serve as an oversight mechanism by which to rigorously track, assess, document and demonstrate the proper provision of services and quality patient care, in accordance with the provincial requirements.

The Fire Department's EMS Division can readily provide documentation attesting to the QA activities that they carry out, e.g.: ACR and field performance audits; incident report audits; in-service CME; investigations, and Base Hospital certification.

In contrast, were it asked to provide similar documentation, the DSSMSSAB would be hard pressed to present any evidence in this regard, other than Section 2 paragraph 3(c) of the Operator service agreement, which states:

"The Operator will establish and maintain Quality Assurance programs and practices subject to the prior approval of the DSSMSSAB".

While the City submits a host of service performance and financial reports to the DSSMSSAB, it does not submit QA reports that would support the DSSMSSAB's quality management oversight obligations as ambulance delivery agent.

Notwithstanding that QA reporting is a requirement of the operator service agreement, the current agreement does not specify what QA reports the DSSMSSAB expects to receive.

In our opinion, QA reports such as those listed below, could readily serve as the requisite evidentiary documentation:

- Plan outlining the proposed QA programs and practices for the coming year.
- In-year report on the Service's QA programs and practices.
- Year-end report on the Service's QA programs and practices.

We have included these reports in our Recommended Reporting Requirements listed previously in Exhibit 3.4.

Recommendation: The City should submit these (or similar) reports on a going forward basis.

3.4.5 Contract Oversight Management

Challenge: Limited oversight management of the operator service contract.

The DSSMSSAB CAO, supported by the Finance Director, manage the ambulance service portfolio; this, in addition to their many other responsibilities. It is our opinion that despite current best efforts, the ambulance service portfolio requires additional management oversight, either on a full-time or part-time basis; this, to safeguard and ensure the DSSMSSAB's accountabilities to the Province.

Recommendation: An additional management resource should be recruited to manage the ambulance portfolio.

For the Client's consideration, we have developed a draft job description for such a position, drawing relevant information from industry leading practices. The draft job description, presented below, describes the primary responsibility and duties of a Contract Oversight Manager, not the full scope of work that may be inherent in the position, or any other duties that may be assigned.

Overall Responsibility of a Contract Oversight Manager

To manage the DSSMSSAB's land ambulance service mandate, in accordance with the terms established by MOHLTC, as set out in the UTM/DDA and GRFN service agreements.

To monitor and manage the Operator's performance relative to approved service levels and budget; their adherence to all terms of contract between the City and DSSMSSAB; and their compliance in full, with the provincial legislation and standards.

Primary Duties

1) Leadership

- Provide general direction to the delivery of land ambulance services in the DSSMSSAB service area, ensuring compliance to provincial legislation, regulations, standards and principles.
- Represent the DSSMSSAB in land ambulance services discussions with MOHLTC, health care institutions, and the Base Hospital.
- Represent the DSSMSSAB in community relations activities dealing with land ambulance services.
- Represent the DSSMSSAB at organized ambulance events.
- Participate with other DSSMSSAB management in strategic planning, budget preparations, and like activities, for the organization.
- Represent the land ambulance service portfolio at DSSMSSAB Board of Directors meetings.

2) Engagement

- Monitor and manage the Operator's performance relative to service levels and budget approved by the DSSMSSAB.
- Monitor and manage the Operator's adherence to all terms of contract between the City and DSSMSSAB, including Quality Assurance programs and practices
- Monitor and manage the Operator's submission of required reports within prescribed timeframes.
- Create reporting systems. Monitor and manage the Operator's reporting of key performance metrics. Measure program effectiveness and working with the Operator, establish process improvement initiatives.
- Develop departmental continuity plans, ensuring community needs are reflected in emergency response planning.
- Participate with the Operator, in EMS emergency response planning with police, fire, EFRT, Sault Area Hospital, LHIN, CCAC, and others.
- Manage the integration of emergency medical services within the community, and across jurisdictional boundaries.

3) Financial Management

- Develop and manage land ambulance operating budgets, consistent with finance department budget parameters and timelines.

- Develop and manage land ambulance capital budgets (for vehicles and equipment replacement), consistent with finance department budget parameters and timelines.
- Monitor and manage the Operator's financial performance.
- Periodically audit the Operator's management of fleet and equipment, to ensure compliance with provincial standards.

4) Legislative and Policy Adherence

- Ensure compliance with relevant legislation, contracts and internal policies, including access to information and protection/privacy of information.
- Ensure health and safety requirements in accordance with the Occupational Health and Safety Act.

4 CONTRACTED SERVICE

Exhibit 4.1 illustrates the extensive infrastructure required by the EMS Division of the Fire Department, to ensure a rapid ambulance response to an emergency incident, with paramedic services of a high calibre. The exhibit is configured in the form of a pyramid, using multiple layers to illustrate the main components.

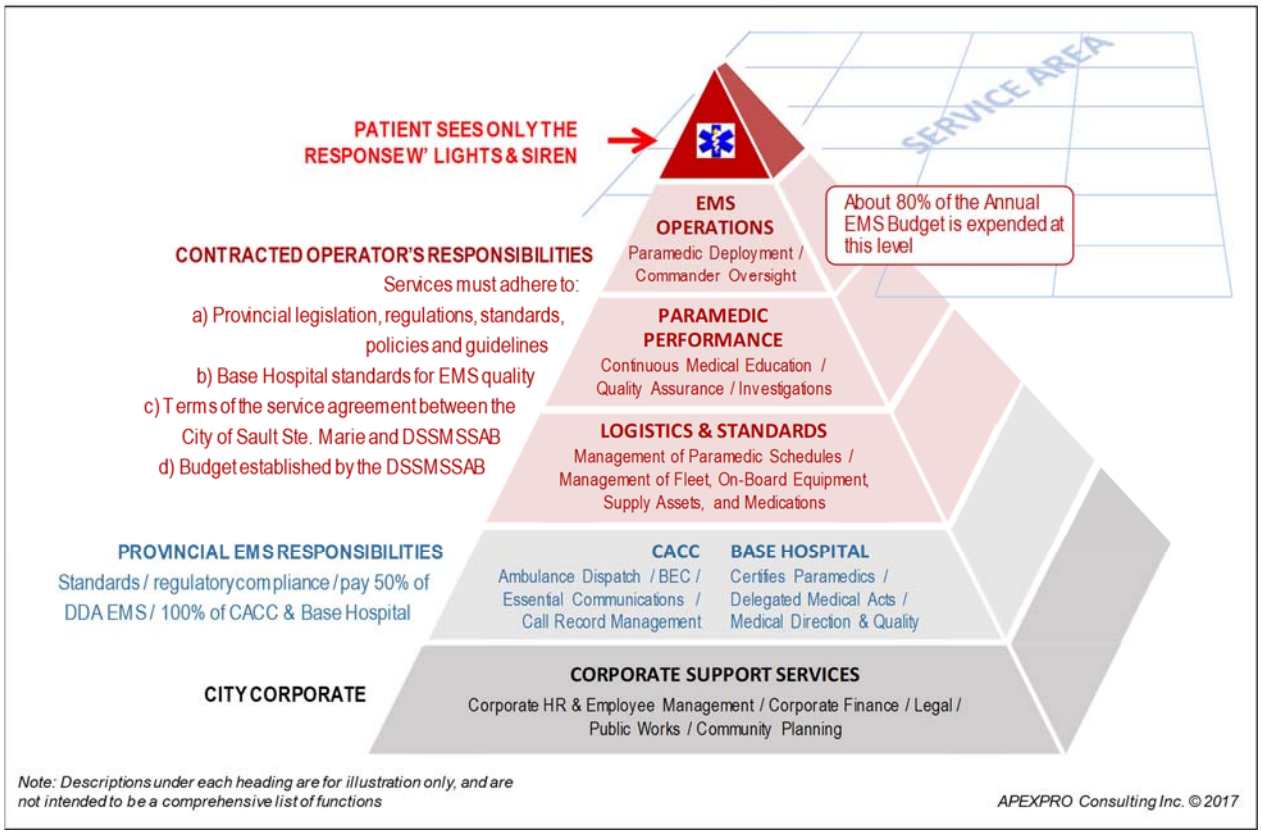
The patient, and public-at-large, see only the tip of the pyramid i.e., an ambulance responding swiftly, with flashing lights and siren.

They do not see the extensive underlying infrastructure needed to organize and effectively deliver the services, while fully adhering to: provincial legislation and standards; terms of the service agreement between the City and DSSMSSAB; and the operating and capital budgets authorized by the DSSMSSAB Board of Directors.

The patient, and public-at-large, also do not see the extensive infrastructures of the province and Base Hospital which monitor and assess the service to exacting standards; or the CACC, which is responsible to dispatch a medical response to each incident using the closest available, and most appropriate ambulance to meet the needs of the patient.

This section of our report reviews and assesses the infrastructure components of the DSSMSSAB's land ambulance service.

EXHIBIT 4.1: CONTRACTED LAND AMBULANCE SERVICES PYRAMID



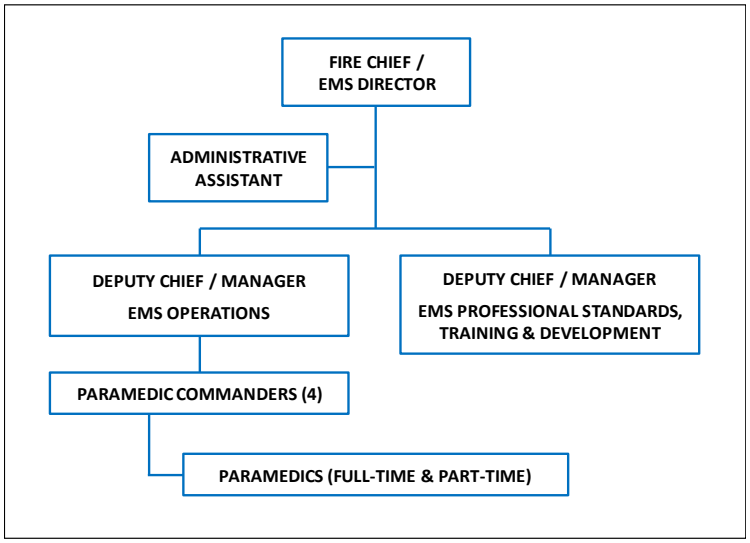
4.1 Organizational Structure

The organizational structure of the Fire Department's EMS Division is shown in Exhibit 4.2.

The Division consists of: City's Fire Chief serving as EMS Director; 2 Deputies; 4 Paramedic Commanders; an Administrative Assistant; 40 full-time paramedics; and up to 16 part-time paramedics.

The Fire Chief, Deputy Chiefs and Paramedic Commanders are management positions. Paramedics are represented by Unifor Local 1359. The Administrative Assistant is represented by the International Association of Fire Fighters (IAFF) Local 529, which also represents the City's professional fire fighters.

EXHIBIT 4.2: ORGANIZATIONAL STRUCTURE OF THE EMS DIVISION



The **Fire Chief/Director** serves as the City/Operator liaison, and is empowered to speak on behalf of the City on all corporate and contractual matters relative to the land ambulance services agreement. For such matters, the Fire Chief reports to and receives direction from the DSSMSSAB's Chief Administrative Officer.

The **Deputy Chief/Manager, EMS Operations** is responsible to organize and effectively deliver the services, ensuring performance and consistent service levels, in compliance with: provincial legislation, regulations and standards; the terms of the service agreement between the City and DSSMSSAB; and the operating and capital budgets authorized by the DSSMSSAB Board of Directors.

Provincial legislation, regulations and standards include those that pertain to equipment and vehicles; inventory and supply management; capital asset management; and MOHLTC ambulance service certification (including accurate and complete patient care documentation). In addition, this Deputy is responsible to fulfill the paramedic staffing requirements of the operational deployment plan, and to oversee the day-to-day management of related scheduling and payroll activities.

To such ends, they design, maintain, and evaluate operational plans; operating and capital budgets; and public and media relations. They design and manage paramedic staffing schedules in accordance with the collective agreement, and departmental policy; and supported by an Administrative Assistant, they audit attendance and process employee payroll.

The **Deputy Chief/Manager of EMS Professional Standards, Training & Development** is responsible to develop, coordinate and deliver paramedic training and educational programs, and internal investigative and quality management programs that comply with legislation and certification requirements; this, to ensure consistency of delivered services, individual paramedic staff performance, and accurate and complete patient care documentation, as required by provincial regulations and standards.

In-service training and education includes service specific Continuing Medical Education (CME), placement of paramedic students, return-to-practice training, remedial education, and field evaluations. This Deputy also is responsible to coordinate external training and performance audits by the Base Hospital; and for maintaining community relations to maximize pre-hospital patient care, with other health care providers (i.e., Sault Area Hospital, LHIN and CCAC), and with police and fire emergency responders.

Paramedic Commanders are responsible for ensuring the day-to-day quality and consistency of the field operations, in compliance with the legislation, regulations, standards, policies and guidelines. There are 4 Paramedic Commanders, and they rotate on 12-hour shifts (24/7) generally in tandem with paramedics.

The Commanders maintain shift schedules, taking necessary steps when needed, to fill short-notice vacancies. They ensure operational readiness of the fleet, and that paramedics assigned to a shift report on time, fit for duty, properly attired, and aware of the safe, normal or special requirements of each work assignment. They oversee operations during an assigned shift. They patrol the area, and they monitor and evaluate individual paramedic performance, providing guidance, assistance, and discipline as necessary.

Paramedics: The EMS division operates with paramedics trained to the Primary Care Paramedic level (PCP). They also are certified by the Base Hospital to perform IV starts. The standard is consistent with that of multiple EMS peers, particularly those serving largely rural areas.

The Service employs about 40 full-time paramedics for shift coverage 24/7; and up to 16 part-time paramedics who are scheduled as needed to backfill for vacation, sick leave, and other absences as may occasionally arise. Use of part-time employees for backfill is common practice within the industry.

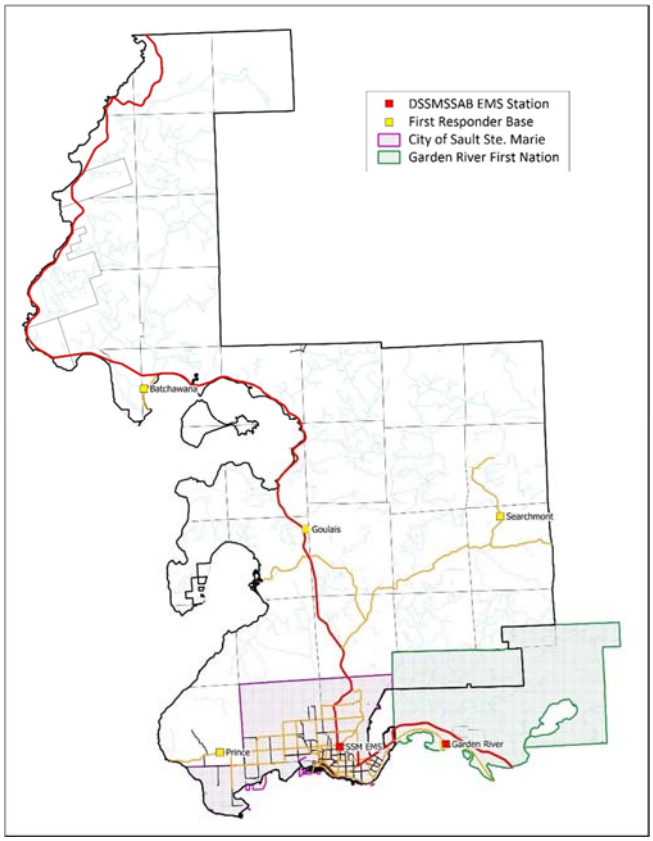
Paramedics are assigned to ambulances, in teams of two per vehicle, on shifts of 12-hour duration. This again is the industry norm.

Administrative & Professional Support: An Administrative Assistant provides administrative and clerical support, aiding with the scheduling and payroll functions, and providing front-line customer services. The EMS Division also receives professional support from other areas of the Corporation, as and when required. Support services include financial planning, facilities management, IT, legal, and human resources support.

4.2 EMS Facilities

The service operates from 2 stations, shown in Exhibit 4.3. The main station, commonly referred to as the RESC (Regional Emergency Services Centre) is situated at 65 Old Garden River Road in the City of Sault Ste. Marie. The second station is situated at 15 Shingwauk Street in Garden River First Nation (GRFN).

EXHIBIT 4.3: AMBULANCE STATION LOCATIONS



RESC Station

The City of Sault Ste. Marie constructed RESC in 2008 as a joint facility for EMS and Fire.

RESC serves as EMS headquarters, and as fleet centre for the central deployment of all ambulances and paramedics based in the City i.e., all paramedics based in the City, start and end their shifts at RESC.

RESC houses:

- Office space for EMS management and on-duty paramedic Commander
- Paramedic training facilities
- Crew quarters with separate his/hers change rooms and showers.
- Central warehouse for equipment, supply and medications inventory

- 2 garages; each with capacity for 4 ambulances and a Commander vehicle (i.e., a total of 8 ambulances and 2 Commander vehicles)
- Garage working space (4 mechanical bays) in which vehicle technicians, effect fleet and equipment maintenance and repairs.

Space within RESC is also leased to the Central Ambulance Communications Centre (CACC), and the Base Hospital district office.

The decision circa 2008, to implement a central deployment station/fleet centre in Sault Ste. Marie was relatively innovative at the time. Multiple other EMS services, including those in Waterloo, Peel, Ottawa, and Middlesex, have adopted a similar approach.

On balance, industry leading practices support central deployment as a preferred model for built up areas with 'urban' population densities (such as the City of Sault Ste., Marie), citing advantages that include: less downtime for crews; increased face time between paramedics and Commanders; more consistent management of fleet and equipment; and more consistent and secure inventory management of supplies and medications.

RESC is in good condition, is readily accessible to the major road network, and is considered most suitable for ongoing land ambulance operations.

GRFN Station

GRFN station was constructed in 2008 by MOHLTC, on behalf of Garden River First Nation.

It is a free standing, single storey facility, designed to serve as a self-sustaining ambulance base. The facility includes:

- 2-bay garage;
- Lounge, office and kitchenette;
- Separate his/hers change rooms and showers; and
- Small, on-site stores for immediate restocking of vehicles with medical equipment and supplies.

GRFN station is in good condition, is readily accessible to the major road network, and is considered suitable for ongoing land ambulance operations.

4.3 EMS Fleet

The service operates with 10 dual-stretcher ambulances. Eight (8) ambulances are based at the Regional Emergency Services Centre (RESC); two (2) are based at Garden River First Nation (GRFN).

All ambulances are owned and provided by the DSSMSSAB. The ambulances are manufactured by Crestline, and they operate on diesel fuel.

The Service also operates with 3 command vehicles that are used by Paramedic Commanders and Deputy Chiefs, for field supervision and administration. They consist of: 2 Chevy pick up trucks with modular cabs, and 1 Chevy Orlando SUV. The latter is fully funded through the MOHLTC GRFN service agreement.

Paramedics stationed at both RESC and GRFN, are responsible to ensure that ambulances are clean, fully stocked and ready for the start of each shift. Vehicle readiness inspections are performed at the start of each shift. Cleaning and restocking takes place at the end of each shift. Deep cleaning is performed on a rotating basis of one ambulance every second day. In concert with these activities, paramedics also check and log medication expiry dates.

To manage ambulance vehicle wear, vehicles are frequently rotated across shifts, and between RESC and GRFN. RESC and GRFN ambulances are also rotated for routine maintenance/repairs.

The fleet is decommissioned on an 8-year cycle. This is slightly longer than the industry norm, which ranges between 5 and 7 years.

Regularly scheduled preventative maintenance of fleet vehicles is set out in departmental policy. The policy is based on standards originally established by MOHLTC, and is consistent with industry leading practices, and those adopted by EMS peers. By policy, preventative maintenance of ambulances is performed at intervals of about 10,000, 20,000 and 40,000 km, which generally correspond to a 90-day, semi-annual, and annual timeframe. [11]

Paramedic Commanders manage the preventative maintenance schedule for fleet and equipment maintenance, reporting fleet and equipment needs as required.

Trained vehicle technicians, employed by the Support Services Division of the Fire Department, perform routine maintenance and most repairs to the ambulance fleet. There are 2-3 trained vehicle technicians and they are based at RESC. The vehicle technicians also perform routine maintenance and most repairs to on-board major equipment, including stretchers, stair chairs, defibrillators, oxygen and suction equipment. [12]

Major fleet repairs, beyond the capability of the in-service vehicle technicians, are contracted to external vendors, including a local body shop, a local transmission shop, and the Prouse Chevrolet Buick GMC Cadillac dealership. For major equipment repairs, beyond the capability

[11] The industry commonly refers to this preventative maintenance schedule as the A, B and C inspections.

[12] One Paramedic Commander and 3 paramedics, also are trained and certified, to perform routine maintenance and repairs to ambulance equipment.

of the vehicle technicians, the service relies on the equipment vendors. Tires, including an emergency tire repair service, are purchased from Fountain Tire, Sault Ste. Marie.

EMS management describe the services provided by the vehicle technicians (and external vendors) to be responsive and thorough.

It is becoming increasingly difficult to procure diesel ambulance chassis and therefore, many Ontario EMS services are transitioning their fleets from diesel to gas-powered ambulances. The Fire Department's EMS Division has proposed that the DSSMSSAB adopt a similar decision. If the DSSMSSAB concurs, and if ambulances continue to be decommissioned on an 8-year cycle, then the entire fleet will transition to gas within 8 years.

4.4 Deployment Plan

As previously discussed, the DSSMSSAB is responsible for proper provision of land ambulance services to the service area, and they contract the City of Sault Ste. Marie to serve as their land ambulance Operator. The EMS Division of the City's Fire Department delivers the service.

The above notwithstanding, Sault Ste. Marie CACC, administrated by the Sault Area Hospital under contract to MOHLTC, is responsible to dispatch the DSSMSSAB's ambulance resources.

The DSSMSSAB and EMS Division of the Sault Ste. Marie Fire Department have jointly developed a "Deployment Plan", in consultation with CACC, which is intended to provide the CACC's Ambulance Communications Officers (ACO) with relevant information and guidelines for deploying the DSSMSSAB's ambulance resources, in a manner that respects the following main objectives:

- To ensure optimum emergency coverage and response times to medical emergencies.
- To accommodate non-emergent inter-facility patient transfers, so long as the land ambulance service's emergency response capability is not compromised.

While the Deployment Plan is intended primarily to guide ACO activities, it also serves as a guide for paramedics, Duty Officers (DO), and other land ambulance services personnel.

Listed below is some of the relevant information/policies contained in the Deployment Plan.

- Ambulance staffing pattern
- Balanced emergency coverage (BEC) statement
- Standby policy
- Bypass protocols
- Emergency First Response Team (EFRT) deployment
- Policy for scheduled and non-urgent patient transfers
- Paramedic meal breaks
- Management notification and contact coordinates

The plan is a living document that is occasionally refined as appropriate. The most recent revision is dated November2017.

APEXPRO has reviewed the Deployment Plan. In our opinion, it serves the intended purpose.

4.5 Ambulance Deployment

The service commenced 'central deployment' of ambulances from RESC, in 2008. At that time, ambulances were deployed a total of 26,280 vehicle-hours a year (52,560 person-hours).

In 2009, the service was expanded to include 1 day-car at the newly constructed GRFN station. In June 2015, the service was expanded to include 1 additional day car at RESC (from 10:00 to 22:00 hours); this, as a pilot project which evolved to a continuing arrangement in January 2016. In November 2015, the service was again expanded to include a night car at GRFN.

EXHIBIT 4.4: HISTORICAL RESOURCING OF AMBULANCES

EFFECTIVE DATE	ANNUAL VEHICLE-HOURS			ANNUAL PARAMEDIC-HOURS			NOTES
	DAYS	NIGHTS	TOTAL	DAYS	NIGHTS	TOTAL	
NOV 2015	21,900	17,520	39,420	43,800	35,040	78,840	Additional night car added at GRFN 12/7
JUN 2015	21,900	13,140	35,040	43,800	26,280	70,080	Additional day car added at RESC 12/7
2009	17,520	13,140	30,660	35,040	26,280	61,320	GRFN station opens w' 1 day car 12/7
2008	13,140	13,140	26,280	26,280	26,280	52,560	RESC station opens / central deployment begins

RESC, which is equipped with 8 ambulances, staffs 4 ambulances on days and 3 at night. One ambulance serves as a spare. GRFN, which is equipped with 2 ambulances, staffs 1 ambulance round the clock. Ambulances are currently deployed a total of 39,420 vehicle-hours a year (78,840 person-hours).

EXHIBIT 4.5: CURRENT RESOURCING OF AMBULANCES

DAY / NT	STATION	# OF STAFFED AMB'S	SHIFT START & END	SHIFT LENGTH (HRS)	# OF DAYS PER WEEK	ANNUAL VEH-HRS	PARAMEDICS	ANNUAL PAR-HRS
DAY	RESC	1	06:00 - 18:00	12	7	4,380	2	8,760
		1	07:00 - 19:00	12	7	4,380	2	8,760
		1	08:00 - 20:00	12	7	4,380	2	8,760
		1	10:00 - 22:00	12	7	4,380	2	8,760
DAY	GRFN	1	07:00 - 19:00	12	7	4,380	2	8,760
TOTAL - DAYS		**5**				**21,900**		**43,800**
NT	RESC	1	18:00 - 06:00	12	7	4,380	2	8,760
		1	19:00 - 07:00	12	7	4,380	2	8,760
		1	20:00 - 08:00	12	7	4,380	2	8,760
NT	GRFN	1	19:00 - 07:00	12	7	4,380	2	8,760
TOTAL - NIGHTS		**4**				**17,520**		**35,040**
TOTAL - DAYS & NIGHTS						**39,420**		**78,840**

4.6 Paramedic Training and Education

The MOHLTC *Land Ambulance Certification Standards* require that service providers take all reasonable measures to ensure that each paramedic in their employ, is competent in the use of the patient care, and communications equipment, required for the proper provision of service in accordance with the Basic Life Support and Advanced Life Support Patient Care Standards.

The service's Paramedic Training and Education program and activities were reviewed by the MOHLTC's recent ASR (2017). Below is what the ASR reports.

1) The service ensures that paramedics have access to:

   - Current user guides
   - Training bulletins
   - Videos and mandatory learning materials
   - A medium for the review of training materials
   - Base Hospital training
   - Base Hospital Policies and Protocols.

2) The service has processes in place to ensure that paramedic knowledge and skills are maintained. They include:

   - Annual aggregate evaluation of compliance with Patient Care Standards.
   - Evaluation results communicated to staff.
   - New staff members undergo an evaluation of their patient care skills.
   - A remedial training program for staff who demonstrated deficiencies in the use of patient care equipment.
   - Training for new, updated and additional equipment.
   - Training on changes/updates to standards and/or legislation.

3) The service works to ensure that each paramedic is competent in the use of patient care equipment.

4) The service works with the Base Hospital to:

   - Ensure staff regularly demonstrate proficiency in patient care skills.
   - Provide remedial training to employees whose patient care skills are considered deficient.
   - Ensure identified staff attended and successfully completed remedial training.
   - Ensure staff regularly demonstrate proficiency in performing Controlled Acts.
   - Provide remedial training for employees whose certification has been suspended or revoked.
   - Ensure Base Hospital certification is on file.

Presented below is a typical portfolio for the in-service 'Paramedic Training and Education' function. APEXPRO developed this portfolio, assembling relevant information from interviews with the DSSMSSAB's operator and various EMS peers. In our opinion, the duties of the portfolio are being performed largely as set out.

- Develop, coordinate, and deliver in-service training and educational programs, including: initial course of instruction, continuing medical education (CME), placement of paramedic students, return-to-practice training, remedial education, ride-outs and field evaluations. [13]
- Assess educational offerings for continuing medical education on medical best practices, and to ensure ongoing relevance to paramedic staff; this, for service wide, group and individual education.
- Facilitate external training by the Base Hospital.
- Track and maintain an up-to-date record of each paramedic's continuing medical education.
- Help to coordinate Base Hospital's initial certification of paramedics. Facilitate annual recertification.
- In concert with Commanders, evaluate delivery of clinical and operational skills in the field.
- Maintain community relations with Sault Area Hospital, LHIN, CCAC, other health service organizations, and with police, fire and volunteer emergency responders.
- Support / supervise staff participating in public relations activities.

4.7 Quality Assurance

The DSSMSSAB is responsible for the proper provision of land ambulance services, and quality patient care, in compliance with provincial legislation, regulations and standards. The contracted operator is committed to delivering the services, to service levels, and operating and capital budgets, established by the DSSMSSAB; in full compliance with the provincial requirements.

Both parties require an oversight mechanism by which to rigorously track, assess, document and demonstrate the proper provision of services and quality patient care, in accordance with the provincial requirements, for which they are jointly and individually accountable.

This is the purpose for establishing and maintaining a comprehensive Quality Assurance (QA) oversight program. In keeping with the statutes set out in the Ambulance Act, regulations under the Act, and standards established by MOHLTC, each land ambulance service in Ontario is required to establish an in-service QA program. [14]

The MOHLTC's recent ASR (2017) affirms that the service maintains a QA program to ensure optimal provision of the services. The QA program includes: ACR and field performance audits; incident report audits; in-service CME; and Base Hospital certification. It also includes

[13] In-service CME is comprised mainly of self-directed training modules, which are arranged by the Service. In addition, the Base Hospital organizes 8 hours of training that focuses predominately on new directives and PCP skill sets. Base Hospital training is delivered in two 4-hour sessions, typically in spring and fall.

[14] The Ambulance Act assigns responsibility for the proper provision of the services to the DDA. Regulation 257/00 under the Act requires land ambulance operators to meet the requirements of the provincial Land Ambulance Certification Standards; and the latter document requires land ambulance operators to meet the requirements set out in the Ontario Ambulance Documentation Standards. Documentation that is specifically referenced includes incident reports, ambulance call reports and collision reports.

investigations of patient care and service delivery complaints; and analysis and recommendations to mitigate reoccurrence.

Presented below is a portfolio for the in-service 'Quality Assurance' program. APEXPRO developed this portfolio, assembling relevant information from a variety of interviews. In our opinion, the duties of the portfolio are being performed largely as set out.

- Track operational performance using Key Performance Indicators (KPI). Assess KPI trends and major variances, including cause and means for their management (e.g., urgent and non-urgent call volume, response time, standby volume, hospital off load delay, hospital transfers, code red, staff O/T, and staff uploading). KPI information sources include: the ADRS records maintained by CACC, Ambulance Call Reports (ACR), and Imedic database.
- Assessment includes both individual performance and system-wide averages (e.g., chute time, number of cardiac arrest responses, number of times specific skills are performed, etc). The assessment results are communicated to staff.
- Ensure that every paramedic participates in the requisite in-service and Base Hospital Continuing Medical Education (CME).
- Assign or perform internal investigations, engaging management, staff, stakeholders and MOHLTC as appropriate. Analyze issues to identify cause and effect, and areas for improvement, including internal process adjustments. Prepare recommendations and reports. Communicate findings to appropriate parties.
- Ensure that paramedics prepare incident reports as required by MOHLTC Ambulance Documentation Standards.
- In concert with Paramedic Commanders, review and assess incident reports. Submit a copy of the incident report to MOHLTC, within the Ministry's prescribed timetable, and communicate findings to appropriate parties.
- Develop/refine Ambulance Call Report (ACR) audit and Field Audit programs to reflect the needs of the Service, and ensure compliance with provincial legislation, regulations, standards and certification requirements.
- In concert with Commanders, perform ACR audits. Ensure completion of an ACR for every medical call.
- Using sample sizes established by service policy, ensure that ACRs are fully completed in compliance with legislation, regulations, and standards, and evaluate paramedic staff performance. [15]
- Facilitate Base Hospital audit of ACRs involving high acuity calls.

[15] Sample sizes set by Service policy are: 50% of ACRs involving SCA and CTAS1 on contact; 50% involving CTAS 2 on contact; 10% involving CTAS 3 on contact; and 5% involving CTAS 4, CTAS 5, inter-facility transfers, and other (e.g., no patient found, obviously dead, etc).

- In concert with Commanders, perform Field Audits, and evaluate paramedic staff performance relative to provincial legislation, regulations, standards and certification requirements.
- Ensure internal processes for ACR and Field Audits including: review, evaluate, inform, follow up, and remediation where warranted.
- Prepare and share an ACR compliance report with each staff, annually.
- Perform an annual review / audit of each employee's files for certification relative to MOHLTC requirements.

4.8 Logistics & Standards

Logistics & Standards refers to the in-service management and maintenance of fleet, equipment, and medical supply assets, for the efficient and effective delivery of paramedic services; and to the design of a paramedic master schedule, to ensure that shifts are appropriately staffed by full-time and part-time paramedics in accordance with terms of the collective agreement, and staff availability.

It also refers to the day-to-day management of the schedule, to ensure that shift change and time off requests are addressed in a timely manner; and attendance records, to ensure accurate and timely processing of employee pay.

The Deputy Chief/Manager of EMS Operations is responsible to manage and maintain these functions. They are fully acquainted with the organization's reliance on the services. They perform the duties, assisted as appropriate by the Commanders.

Presented below is a list showing a more comprehensive breakdown of Logistics & Standards responsibilities. APEXPRO developed this list, drawing relevant information from various interviews. In our opinion, these essential support services are being carried out in a manner that conforms to rigid provincial regulations and standards, to ensure consistent delivery of paramedic services of a high calibre.

Fleet and Equipment Management

- Coordinate "in-service" management and maintenance of fleet, equipment, and supply assets, for the efficient and effective delivery of paramedic services. Administrate these essential support services in the manner prescribed by departmental policy, to ensure compliance with the provincial Ambulance Act, Regulations and Standards.
- Coordinate to ensure that vehicles are regularly cleaned, checked, and stocked for shift changes and that deep cleans are performed as scheduled, and as circumstances require, in accordance with MOHLTC requirements. Also, ensure that documentation for same is maintained in accordance with MOHLTC requirements.
- Coordinate regular scheduled preventive vehicle maintenance, service, and repairs, in accordance with MOHLTC requirements. Ensure related documentation and files are maintained in accordance with legislation.

- Coordinate regular cleaning and preventive maintenance of equipment (e.g., stretchers, stair chairs, defibrillators, oxygen and suction equipment, radios, chargers, battery recharge/replacement). Maintain documentation of same in accordance with legislative requirements.
- Perform quality inspections of the work of staff, audit documentation, and arrange training, as required. Provide quality assurance support to improve related processes and procedures, ensure legislative requirements, and maximize resource availability.
- Determine inspection schedule for stretchers, stair chairs, defibrillators, communications devices, and other major equipment based on use. Arrange servicing and repairs with contractors or MOHLTC, and order replacement parts as required.
- Coordinate replacement of end-of-life vehicles and equipment. Ensure related documentation and files are maintained in accordance with legislation.

Supply Asset Management

- Set, manage and maintain supply inventory at appropriate levels. Also manage procurement of uniforms. Coordinate purchasing and records management.
- Coordinate the acquisition of medications with the contracted pharmacy. Oversee medication / supply management system to maintain stock levels, manage inventory and distribution, and maintain documentation.
- Securely manage the supply of controlled medication/narcotics, to ensure secure storage, distribution, and documentation of usage, in accordance with legislative requirements.
- Ensure related documentation and files are maintained in accordance with legislation.

Management of the Paramedic Schedule

- Design and implement a paramedic master schedule that fulfills the requirements of the operational deployment plan.
- Ensure that shifts are appropriately staffed by full-time and part-time paramedics in accordance with terms of the collective agreement, staff availability, and departmental policy.
- Manage day-to-day scheduling, ensuring that shift change and time off requests, are addressed in a timely manner.
- Audit attendance, and ensure accurate and timely processing of employee pay.

OH&S

- Coordinate condition appraisals / repairs of EMS facilities with Corporate Public Works.
- Proactively participate, as management member, in Joint Occupational Health and Safety Committee.

4.9 Medical Tiered Response

Medical Tiered Response is the term used to describe a non-ambulance emergency responder's support of a paramedic service.

Non-ambulance emergency responders include allied emergency services (e.g., fire or police) and organized groups of volunteers, whose members are trained to a basic level of first aid.

Provisions governing a CACC's deployment of non-ambulance emergency responders are set out in the land ambulance service's Deployment Plan, e.g.:

- CACC will tier (deploy) only the non-ambulance emergency responders listed therein.
- CACC will deploy a non-ambulance emergency responder to a medical emergency if an ambulance is not readily available, and an emergency responder can respond more quickly.

Medical emergencies are generally defined as Priority 4 ambulance calls (i.e., an urgent call where time is of the essence, and an ambulance needs to be dispatched with lights and siren).

Most non-ambulance emergency responders do not respond to all Priority 4 calls, but rather, to a subset of Priority 4 calls that reflects the resource capacity of their organization, and the medical training that their members receive, e.g., where the medical emergency involves one or more of the following conditions:

- Unconscious / Unresponsive
- Difficulty / Absence of Breathing
- Severe Bleeding
- Chest Pain / Suspected Heart Attack / VSA
- Seizures
- Motor Vehicle Collisions (MVCs)
- Entrapment and Other Rescue Situations

As shown in Appendix D, non-ambulance emergency responders typically receive 8 to 40 hours of in-service training in basic first aid, CPR and in the use of an automated external defibrillator (AED). In comparison, the minimum requirements for paramedic licensure include a 2-year college program of paramedical training, annual recertification by a Base Hospital, and continuous performance oversight to ensure patient care services to provincial standards.

Non-ambulance emergency responders do not have authority for patient transport. They will respond to the medical emergency, provide the patient with medical assistance to the extent permitted by their training, and await arrival of an ambulance.

Medical treatments that a non-ambulance emergency responder may provide, generally include the provision of basic first aid treatment, CPR, automated defibrillation, dispensation of suction, oxygen, and basic airway management.

The DSSMSSAB's land ambulance service receives non-ambulance emergency responder support from the Fire Suppression Division of the Sault Ste. Marie Fire Department, and from volunteer Emergency First Response Teams (EFRT) situated in rural settlements of the DSSMSSAB service area, as discussed further in Sections 4.10 and 4.11 below.

4.10 Sault Ste. Marie Fire

The Fire Suppression Division of the Sault Ste. Marie Fire Department is staffed with career firefighters trained in basic first aid, who will respond at the request of the CACC when ….

…. an ambulance is dispatched as a Priority 4 emergency call (with flashing lights and siren) to an address in the City of Sault Ste. Marie or the Batchewana First Nation (aka Rankin Reserve), where a person is believed to be suffering from unconsciousness, cardiac/respiratory arrest, choking, or seizure….

The Fire Suppression Division will also respond at the request of the CACC if the ambulance service is overwhelmed due to high call volume, to the point that an ambulance cannot be deployed immediately to a medical emergency, and the Fire Suppression Division can respond more quickly.

The Fire Suppression Division will not respond to a medical call originating at a medically-staffed Nursing Home, or like facility, where adequate resources exist to maintain patient care. The Fire Service will also not respond to a medical call, if they are occupied with a fire emergency that has exhausted their firefighting resources, or jeopardizes fire protection services to the City.

4.11 Volunteer Emergency First Response Teams (EFRT)

Emergency First Response Teams (EFRT) are organized groups of volunteers, trained to a basic level of first aid, who are situated in rural settlements of the DSSMSSAB service area, and respond to urgent medical calls within their respective communities, when deployed by CACC.

The DSSMSSAB's land ambulance service is supported by 5 volunteer EFRT. They are:

- Garden River First Nation Fire and Rescue
- Prince Township Volunteer Fire Department
- Searchmont Volunteer Fire Department
- Goulais River Fire and Rescue
- Batchewana Fire and Rescue.

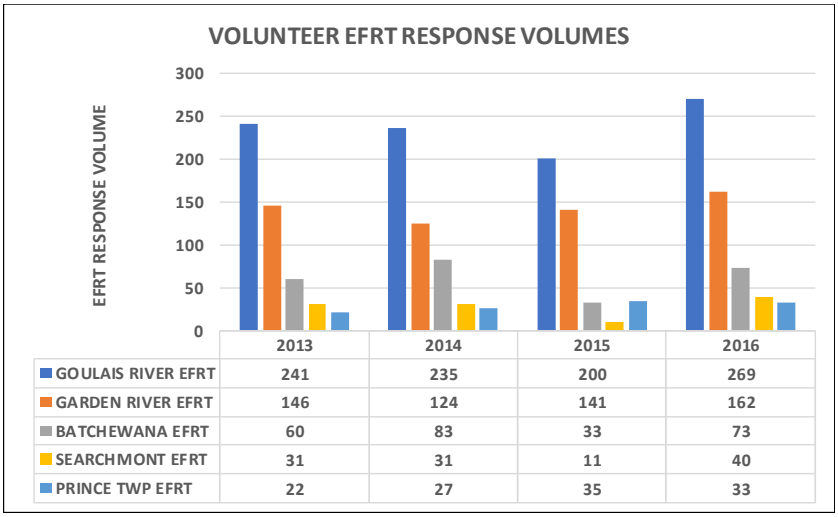
These non-ambulance volunteers do not have authority for patient transport. They will respond to a medical emergency, provide the patient with medical assistance to the extent permitted by their training, and await arrival of an ambulance.

They are particularly effective in serving their rural communities, where infrequent medical calls, and the high cost to operate an ambulance, preclude the establishment of local EMS coverage.

Rapidly Rising Call Volume

Over the period 2013-2015, the volunteer EFRT responded to a combined volume of 450 to 500 medical calls a year. In 2016, their call volume soared to 577 medical calls; this as shown in Exhibit 4.6 (next page).

EXHIBIT 4.6: EFRT RESPONSE VOLUMES, 2013-2016



	2013	2014	2015	2016
GOULAIS RIVER EFRT	241	235	200	269
GARDEN RIVER EFRT	146	124	141	162
BATCHEWANA EFRT	60	83	33	73
SEARCHMONT EFRT	31	31	11	40
PRINCE TWP EFRT	22	27	35	33

The rapidly rising call volume is making it increasingly difficult for volunteer emergency first responders to serve the rural settlements. The issue is of particular concern to Goulais River Fire and Rescue which, in 2016, performed 269 non-ambulance responses to medical calls (i.e., almost one-half the combined number of medical responses performed by the 5 EFRT).

Upon review, it was determined that CACC was deploying Goulais River Fire and Rescue to all Priority 4 calls, and some Priority 3 calls as well – this, by agreement with both the volunteer fire service and the DSSMSSAB's land ambulance service.

To better manage their increasing workload, Goulais River Fire and Rescue have recently opted to respond only to a subset of Priority 4 calls, like that shown in Section 4.10 above – this change will align their deployment to those of many other fire and volunteer FRT organizations, and should substantially ease their workload.

Equipment & Training

EFRT purchase their own vehicles and medical equipment. MOHLTC provides in-vehicle radios. The DSSMSSAB's ambulance service provides medical supplies. The DSSMSSAB also provides each EFRT with an annual stipend of up to $3,000, which is intended to cover a portion of their operating cost. The stipend is administrated by the EMS Division of the Fire Department, as part of their Operator contract.

Each EFRT arranges and pays for their members' first aid training. The DSSMSSAB is investigating alternative options.

WSIB

Prince Township's WSIB coverage includes their volunteer Fire Department. Garden River First Nation's coverage includes the Band's volunteer Fire and Rescue Service (provided Schedule 1 coverage has been obtained). The DSSMSSAB is responsible to arrange WSIB coverage for fire-based EFRT in the unorganized areas, i.e., Goulais River, Searchmont and Batchewana.

5 LAND AMBULANCE SERVICE COSTS

5.1 DDA Service Area Costs

Exhibit 5.1 shows the budgeted and actual expenditures for land ambulance services under the UTM/DDA service agreement, i.e., for the service area consisting of: City of Sault St. Marie, Prince Township, Sault North Planning Board area, and Batchewana First Nation. The information shown was assembled by the DSSMSSAB's Finance Department.

The budgeted expenditure for 2015 was $4.39 million. Actual expenditures totalled $4.51 million and the province provided an operating grant of $2.09 million.

In 2016, the budget was increased to $5.66 million; this to accommodate a cost of living increase per the collective agreement between the City of Sault Ste. Marie and its paramedics, plus an organizational expansion incorporating the following: (a) 4 Paramedic Commanders; and (b) 1 additional day car at RESC (12/7), which was introduced in mid-2016. [16]

EXHIBIT 5.1: DDA SERVICE AREA COSTS

	2015		2016		2017
	Budget	Actual	Budget	Actual	Budget
Programming & Administration	**$4,323,209**	**$4,444,149**	**$5,580,911**	**$5,678,377**	**$5,787,367**
Purchased Services - City of SSM	$3,924,860	$3,990,869	$5,196,630	$5,296,009	$5,250,324
DSSAB paid expenses: Training/Advertinsing	--	$23,403	--	$12,061	--
HST Non-Rebatable	$69,078	$69,051	$68,596	$68,421	$96,227
Sub-Total	$3,993,938	$4,083,323	$5,265,226	$5,376,492	$5,346,551
Ambulance Base Rent	$125,364	$127,872	$125,364	$129,662	$148,716
Capital Equipment	$203,907	$232,954	$190,321	$165,683	$217,100
Equipment not capitalized	--	--	--	$6,540	--
EMS Consultant	--	--	--	--	$75,000
DSSAB Administrative Overhead	**$73,485**	**$62,804**	**$77,945**	**$81,640**	**$201,601**
Total Expenditures	**$4,396,694**	**$4,506,953**	**$5,658,856**	**$5,760,017**	**$5,988,968**
Funding Sources	**$2,195,894**	**$2,279,313**	**$2,844,779**	**$2,781,330**	**$3,008,395**
Provincial Funding	$2,195,894	$2,086,118	$2,194,779	$2,131,330	$3,008,395
Reserves	--	$193,195	$650,000	$650,000	--
Net Costs Before Municipal Share	**$2,200,800**	**$2,227,640**	**$2,814,077**	**$2,978,687**	**$2,980,573**

The budgeted expenditure for 2017 is $5.99 million; the increase over the previous year being attributed mainly to a cost of living increase. The City recently advised the DSSMSSAB that by year end 2017, they anticipate an overrun in expenditures of up to $300,000.

[16] Note, the additional day car was originally introduced in June 2015, as a "DSSMSSAB-funded pilot project". The pilot project was terminated in 2016, whereupon the DSSMSSAB Board approved the additional day car as a more permanent service enhancement.

At the DSSMSSAB's request, APEXPRO investigated the reasons for the overruns in 2016 and 2017. We have come to the following conclusions.

1) Despite what the above exhibit may otherwise suggest, the operating budget is well-managed by both the DSSMSSAB and City management.

2) In our opinion, the overrun in 2016 of about $100,000, and the anticipated overrun in 2017 of up to $300,000, are attributed predominately to a 2015/16 Business Case that under-estimated the cost of adding an additional day car at RESC. The Business Case identified the cost to operate an additional day car as $437,000 per annum, whereas, a more accurate costing for a day car is $657,000 per annum (this as shown in Section 5.5 of this report).

3) A portion of the 2017 overrun is attributed to an imbalance in the way the City apportions its costs between the DDA and GRFN service areas - particularly its management, administration and oversight costs. We arrived at this conclusion from the data shown in Exhibits 5.1 and 5.2 (below).

   Exhibit 5.1 shows that for the DDA jurisdiction, City services exceeded budget by about $100,000, whereas for the GRFN jurisdiction, City services fell short of budget by about $260,000 (as per Exhibit 5.2). In our opinion, the Operator needs to re-adjust their apportionment of budgeted costs to each service area, so that the budgeted figures more appropriately reflect their actual costs.

5.2 Costs for Garden River First Nation

Exhibit 5.2 shows the budgeted and actual expenditures to provide the Garden River First Nation with land ambulance services. This information was also assembled by the DSSMSSAB's Finance Department.

EXHIBIT 5.2: COST FOR GRFN AMBULANCE SERVICES

	2015 - 16		2016 - 17		2017 - 18
	Budget	Actual	Budget	Actual	Budget
Programming & Administration	**$818,108**	**$856,388**	**$1,307,441**	**$1,063,124**	**$1,316,851**
Purchased Services - City of SSM	$770,220	$761,913	$1,287,107	$1,025,442	$1,287,000
DSSAB paid expenses: Training/Advertinsing	--	$8,723	--	--	--
HST Non-Rebatable	$13,554	$13,554	$16,989	$26,659	$22,651
Sub-Total	$783,774	$784,190	$1,304,096	$1,052,101	$1,309,651
Ambulance Base Rent	--	--	--	--	--
Capital Equipment	$34,334	$72,198	$3,345	$11,023	$7,200
EMS Consultant	--	--	--	--	--
DSSAB Administrative Overhead	**$13,224**	**$11,387**	**$14,738**	**$15,437**	**$0**
Total Expenditures	**$831,332**	**$867,775**	**$1,322,179**	**$1,078,561**	**$1,316,851**

The MOHLTC's budgeted expenditure for 2015-16 was $0.83 million. The DSSMSSAB expenditure exceeded the budgeted amount, by about $35,000, and the DSSMSSAB was obligated to cover the difference, drawing the requisite funds from its reserves.

For 2016-17, MOHLTC's budgeted expenditure was increased to $1.32 million; this, primarily to accommodate 1 additional night car at GRFN (12/7). [17] However, as shown by Exhibit 5.2, the DSSMSSAB underspent relative to budget, by about $244,000, and they were required to return this amount to MOHLTC.

APEXPRO was also asked to investigate this situation, and have come to the following conclusions/recommendations.

1) As discussed above in Section 5.1, the Operator needs to re-adjust their apportionment of budgeted costs to each service area (particularly management, administration and oversight costs), so that the budgeted figures more appropriately reflect their actual costs.

2) The DSSMSSAB needs to take similar action with respect to its internally budgeted Administrative Overhead for the two service agreements. As it currently stands, the DSSMSSAB has allocated the entire 2017 budget for Administrative Overhead ($201,601) to the UTM/DDA agreement. Not only does this apportionment of budgeted costs not reflect the actual costs to each service area, it also will contribute to overspending relative to the UTM/DDA service agreement budget and underspending relative to the GRFN service agreement budget.

Implementing the budget apportionments recommended above, will not only result in budgets that more appropriately reflect actual costs, they should also reduce, or eliminate, overspending under the UTM/DDA service agreement, and underspending (and provincial claw back of budgeted funding) under the GRFN service agreement.

We are advised that the DSSMSSAB is looking at incorporating changes per (1) and (2) above, in the 2018 budget setting process.

5.3 Gross Cost to Fully Staff a DSSMSSAB Ambulance

Cost estimates to fully staff a DSSMSSAB ambulance are shown in Exhibit 5.3 (next page). The figures are derived by dividing the annual budget (or actuals) by the annual number of ambulance deployment hours (set out previously in Section 4.6).

We estimate that in 2016, the cost to fully staff a DSSMSSAB ambulance was $173 an hour, or $1.52 million a year.

For 2017, the budgeted costs are estimated to be $185 an hour, or $1.62 million a year. However, actual costs for 2017 are likely to be slightly higher since, as discussed previously in Section 5.1, the City anticipates an overrun in expenditures of about $300,000.

The above figures are based on gross costs prior to the application of any provincial funding.

[17] The additional night car actually commenced operation in November 2015.

EXHIBIT 5.3: COST TO FULLY STAFF A DSSMSSAB AMBULANCE

	2015		2016		2017
	Budget	Actual	Budget	Actual	Budget
Land Ambulance Expenditures					
UTM/DDA Service	$4,396,694	$4,506,953	$5,658,856	$5,760,017	$5,988,968
GRFN Service	$831,332	$867,775	$1,322,179	$1,078,561	$1,316,851
Total	**$5,228,026**	**$5,374,728**	**$6,981,035**	**$6,838,578**	**$7,305,819**
Ambulance Deployment (Vehicle-Hours)					
UTM/DDA Service	26,280	28,470	30,660	30,660	30,660
GRFN Service	4,380	5,110	8,760	8,760	8,760
Total	**30,660**	**33,580**	**39,420**	**39,420**	**39,420**
Estimated Hourly Cost to Fully Staff an Ambulance					
UTM/DDA Service	$167	$158	$185	$188	$195
GRFN Service	$190	$170	$151	$123	$150
Total	**$171**	**$160**	**$177**	**$173**	**$185**
Estimated Annual Cost to Fully Staff an Ambulance (24/7)					
UTM/DDA Service	$1,465,565	$1,386,755	$1,616,816	$1,645,719	$1,711,134
GRFN Service	$1,662,664	$1,487,614	$1,322,179	$1,078,561	$1,316,851
Total	$1,493,722	$1,402,103	$1,551,341	$1,519,684	$1,623,515

As discussed above in Sections 5.1 and 5.2, there is presently an imbalance in the way the City apportions its costs to the two service areas, particularly its management, administration and oversight costs. There also is an imbalance in the way the DSSMSSAB apportions its Administrative Overhead for the two service agreements.

The imbalance is shown more clearly by the data in Exhibit 5.3, where the service's overall cost, based on the 2017 budget, is estimated at $1.62 million a year; yet, the cost by service area varies significantly, at $1.71 million a year for the UTM/DDA service area and $1.32 million a year for GRFN – this despite the fact, that the services are being provided by one operator, using common resourcing and fleet. For these reasons the cost for each service area should be similar, at about $1.62 million a year.

5.4 Comparative Spending on EMS Among Peers

APEXPRO compared the DSSMSSAB's land ambulance service costs to those of ten (10) peer services operating in northern Ontario.

The peers ranged in population from 20,110 to 161,531 residents.

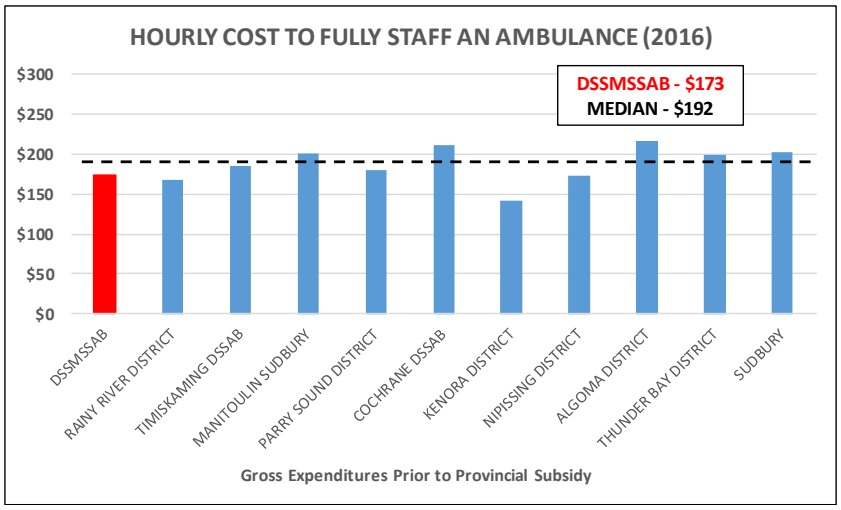
Costs are compared for the budget year 2016. For peers, the data is derived primarily from year end financial and operational statements that they posted on

DSSAB	CENSUS 2016	SQ. KM.	POP'N DENSITY
RAINY RIVER	20,110	15,487	1.3
TIMISKAMING	32,251	13,303	2.4
MANITOULIN-SUDBURY	34,801	43,312	0.8
PARRY SOUND	42,824	9,326	4.6
KENORA	65,533	407,269	0.2
COCHRANE	79,682	141,269	0.6
SAULT STE. MARIE	80,371	5,607	14.3
NIPISSING	83,150	17,104	4.9
ALGOMA	114,094	48,815	2.3
THUNDER BAY	146,048	103,723	1.4
GREATER SUDBURY	161,531	3,228	50.0

line. The figures shown are based on gross costs prior to the application of any provincial funding.

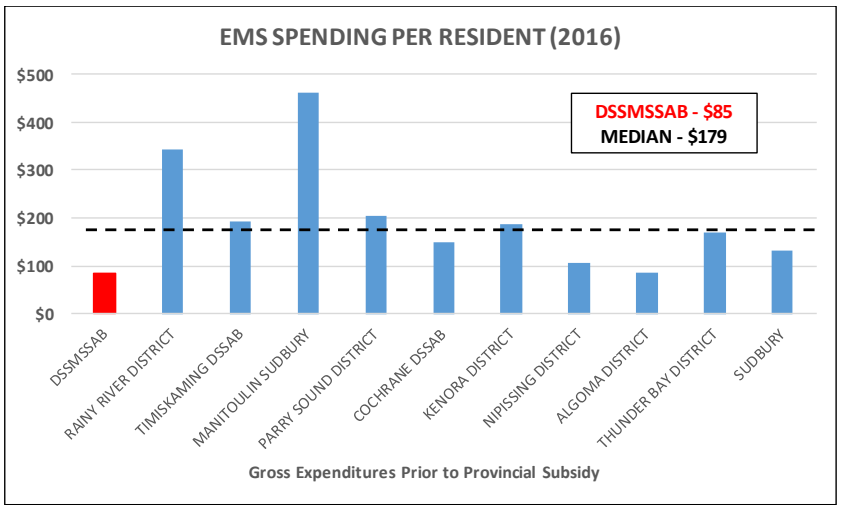
For 2016, the cost to fully staff a DSSMSSAB ambulance was $173 per vehicle-hour. The median value among the surveyed peers was $184 per vehicle-hour, as shown by Exhibit 5.4. On this basis, we conclude that the DSSMSSAB's cost to staff an ambulance is similar to that of peers.

EXHIBIT 5.4: PEER COMPARISON OF HOURLY COSTS



In 2016, the DSSMSSAB's annual spending on EMS was about $85 per resident; whereas for most peers, the annual spending ranged between $100 and $200 per resident, as shown in Exhibit 5.5. [18] We attribute the higher spending by peers to their provision of higher levels of coverage / their deployment of larger numbers of staffed ambulances.

EXHIBIT 5.5: PEER COMPARISON OF EMS SPENDING PER RESIDENT



[18] Annual spending per resident is calculated by dividing the annual reported spending, by the Census 2016 population. The Census population is based on permanent residents, i.e.,excludes temporary/seasonal residents.

5.5 Marginal Cost to Staff an Additional Ambulance

As shown previously in Section 5.3, for 2017 the budgeted cost to staff a DSSMSSAB ambulance is $185 an hour. This figure is based on the gross, or all-inclusive cost, divided by the annual number of ambulance deployment hours.

The marginal, or incremental cost to staff an additional ambulance is estimated to be lower, at $150 an hour, or $657,000 a year for a 12-hour shift.

The marginal cost calculations are shown below.

· Total budgeted expenditure for 2017	$7,305,819
· Less the following costs	
- Deputies, Commanders & Admin. Assistant	
- RESC ambulance base rental	
- Capital equipment	
- Admin. overhead (City & DSSMSSAB)	
- One-time expense (consultant)	
- Total	$1,413,584
· Net expenditure	$5,892,235
· Ambulance deployment (annual vehicle-hours)	39,420
· Marginal cost to staff an additional ambulance	
- Per hour (rounded)	$150
- Per year (24/7)	$1,314,000
- Per year (12/7)	$ 657,000

6 AMBULANCE RESPONSE TRENDS

The following statistics are derived from the Ambulance Dispatch Reporting System (ADRS), a database managed by MOHLTC. At time of study, data was available for the 4 four years 2013 to 2016. APEXPRO is confident in the reasonableness of the statistics, as we inspected the database for comprehensiveness and accuracy.

The statistics represent 'ambulance responses' performed by the DSSMSSAB's land ambulance service.

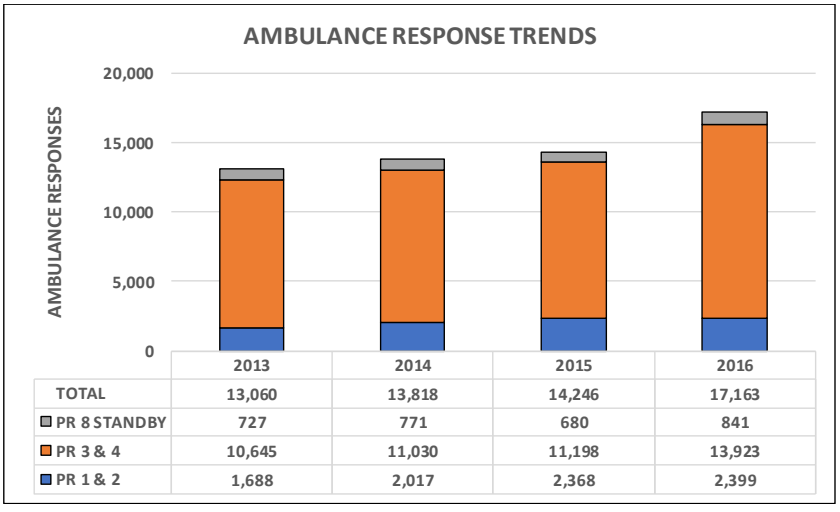
Ambulance response volumes are about 5% to 6% higher than the number of calls / requests for medical assistance received by the CACC.

The 5% to 6% difference is attributed to various reasons, including: (a) Call may be cancelled while a deployed ambulance is on route; (b) Some incoming requests require CACC to deploy multiple ambulances, e.g., multi-vehicle collisions and multi-casualty incidents; and (c) in some instances, a deployed ambulance may be redirected to a higher priority call, requiring CACC to deploy an alternate ambulance.

6.1 Ambulance Response Trends, 2013-2016

Exhibit 6.1 presents the response trends for the DSSMSSAB's ambulances, by dispatch priority, for the period 2013 to 2016.

EXHIBIT 6.1: AMBULANCE RESPONSE TRENDS, 2013-2016



	2013	2014	2015	2016
TOTAL	13,060	13,818	14,246	17,163
PR 8 STANDBY	727	771	680	841
PR 3 & 4	10,645	11,030	11,198	13,923
PR 1 & 2	1,688	2,017	2,368	2,399

As illustrated by the above exhibit, ambulance response volumes have historically increased by about 4% to 5% year-over-year.

That said, the rate of increase more than doubled over the two years, 2014-2016, driving up the total number of ambulance responses, and adversely impacting response time and staff workload (both of which will be discussed in subsequent sections of this report).

In 2016, the service responded to over 17,000 calls, up from 13,000 in 2013.

Rapid increases in land ambulance call volume are not unique to the DSSMSSAB jurisdiction. They are being reported by jurisdictions across Ontario, and beyond.

The rapid increase in call volume is attributed primarily to a relatively rapid growth in seniors' population, which in many areas is reported to be at least 3-4 times faster than that of the general population.

Population growth, and seniors' population growth, in the DSSMSSAB service area, are discussed in Section 11 of this report.

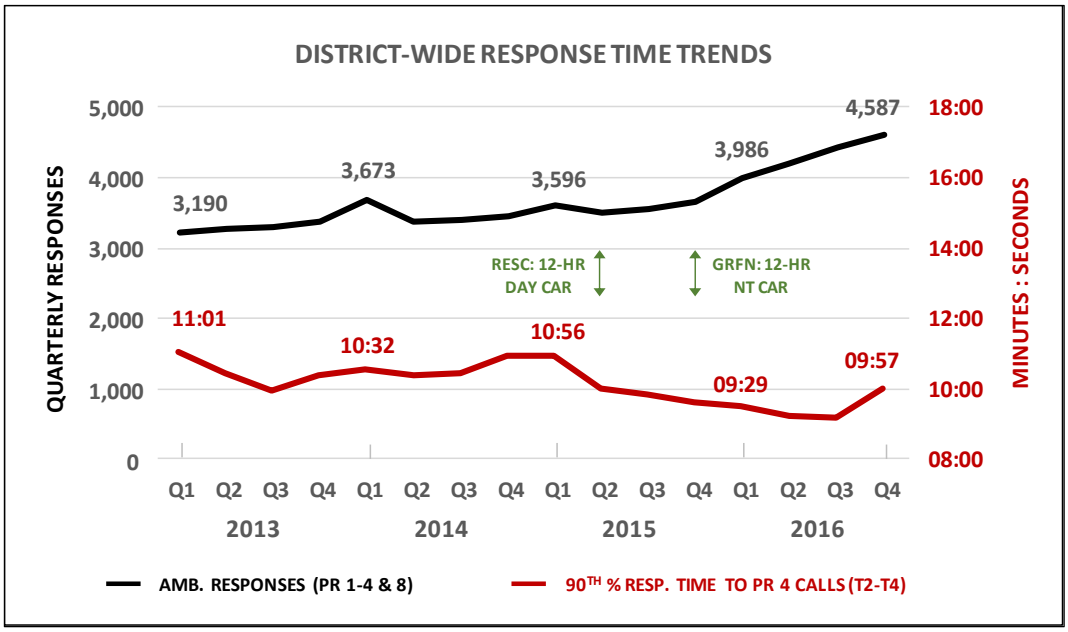
An additional observation with respect to Exhibit 6.1, is that despite the rapid increase in the overall call volume, proportionately call volumes by dispatch priority, have been relatively constant over the years, with:

- 81% dispatched as high priority calls (Pr 3 & 4)
- 14% as low priority calls (Pr 1 & 2)
- 5% as standby (Pr 8).

6.2 Response Time Trends, 2013-2016

Exhibit 6.2 presents both, ambulance response volume and response time, on a quarterly basis for the period 2013 to 2016.

EXHIBIT 6.2: DISTRICT-WIDE RESPONSE TIME TRENDS



Response times shown in this exhibit, are for calls of highest priority, i.e., calls dispatched as Priority 4. They are for the interval T2-T4, where T2 is the time that an ambulance crew is notified of the call, and T4 is the time of their arrival on scene; and the values presented are the 90th percentiles, i.e., 90% of the calls were responded to in a time frame equal to or less than that specified.

As illustrated by the exhibit, after 2 additional ambulance shifts were added in 2015 (1 at RESC and 1 at GRFN), the 90th percentile response time decreased by almost 90 seconds, from 10:56 in Q1 2015, to 09:29 in Q1 2016.

However, because of the more recent rapid escalation in call volume, response times are again on the rise, with the 90th percentile response reported at 09:57 in Q4 2016.

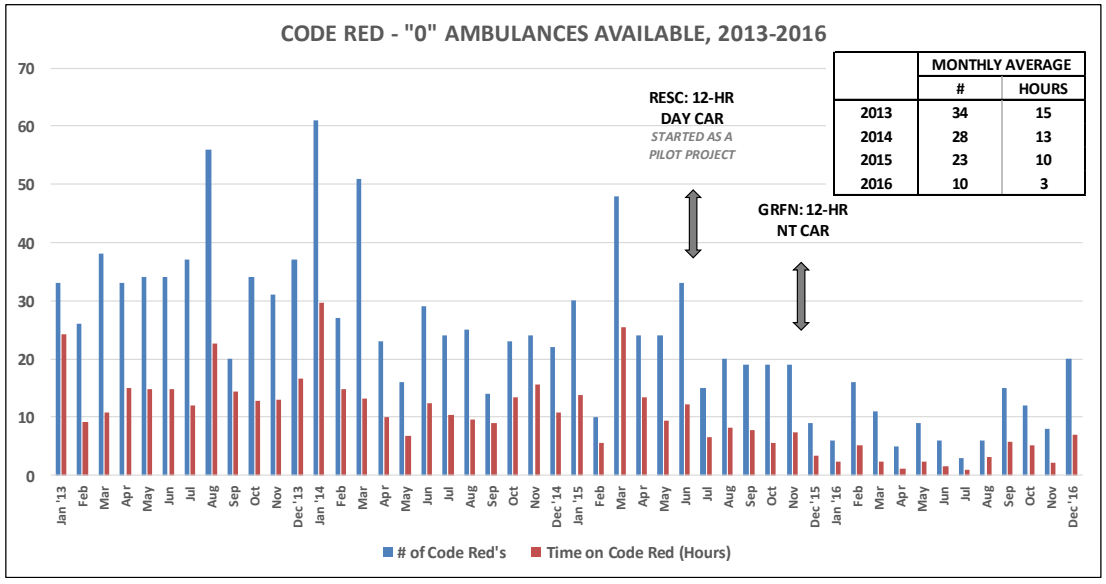
6.3 Code Red / Delayed Emergency Responses, 2013-2016

Exhibit 6.3 presents the Code Red trends for the DSSMSSAB service area, i.e., instances when there were no ambulances available to take the next call.

In 2013, the number of Code Reds averaged 34 a month, and the elapsed time on Code Red averaged about 15 hours a month. In 2016, following the prior year's implementation of two additional ambulance shifts, the number of Code Reds diminished significantly to a monthly average of 10, and the elapsed time on Code Red decreased to an average of 3 hours.

The above notwithstanding, because of the recent rapid increases in call volume, we may anticipate a re-escalation in both the number and elapsed time on Code Red.

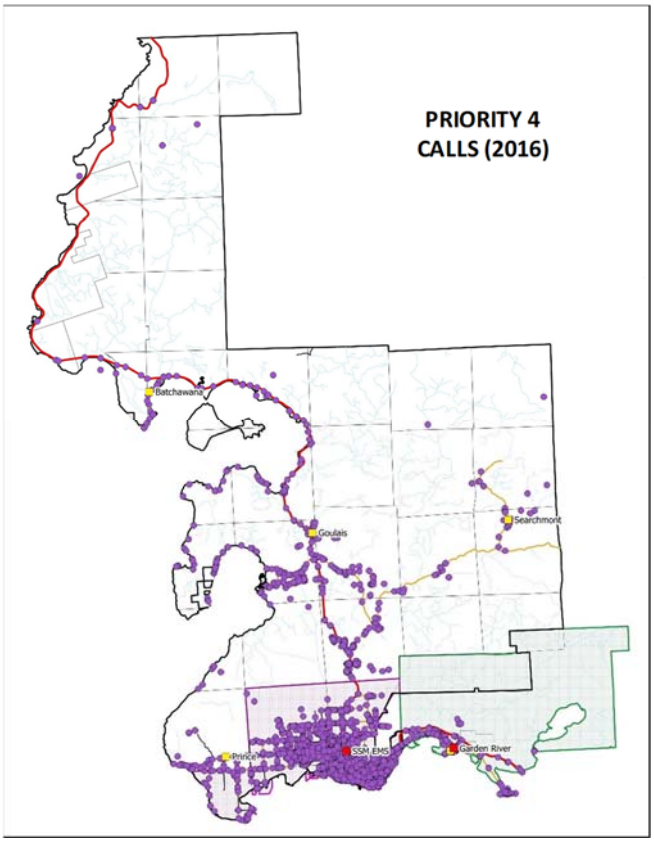
EXHIBIT 6.3: CODE REDS, 2013-2016



6.4 Response Dispersion by Call Origin, 2016

In calendar year 2016, the DSSMSSAB's ambulance service performed 10,118 responses to medical incidents of highest dispatch priority (Priority 4). Exhibit 6.4 (next page) shows the location of these incidents plotted onto a service area map.

EXHIBIT 6.4: GEOGRAPHIC DISPERSION OF PR 4 CALLS (2016)



According to the information in the ADRS database, the DSSMSSAB's ambulances were first on scene to all incidents that originated within the City and GRFN geographic jurisdictions.

They were also first on scene for 50% of the incidents that originated in Prince Township and the Sault North Planning Board area. EFRT were first on scene for the other 50%, where they provided medical assistance to the extent permitted by their training, and awaited arrival of an ambulance.

Exhibit 6.5 shows the number of ambulance responses to calls dispatched as Priority 1-4 for calendar year 2016, as well as response times, at the 90th percentile, for Priority 4 calls.

EXHIBIT 6.5: GEOGRAPHIC DISPERSION OF PR 1-4 CALLS (2016)

	PR 1-4		90% RESP. TIME
	#	%	
CITY OF SSM	15,296	94%	8:57
PRINCE TWP	48	0%	22:56
GARDEN RIVER FIRST NATION	238	1%	11:21
SSM UNORGANIZED	566	3%	22:45
OUTSIDE SERVICE AREA	174	1%	--
TOTAL	16,322	100%	9:26

District-wide, the 90th percentile response time to Priority 4 calls in 2016, was 09:26.

Ninety-four percent (94%) of the total call volume was generated in the City, at a 90th percentile of under 9 minutes.

Up to 4% of the total call volume was generated in rural settlements (Sault North Planning Board area and Prince Township), at 90th percentile response times exceeding 20 minutes.

One percent (1%) was generated in GRFN, at a 90th percentile of 11:21.

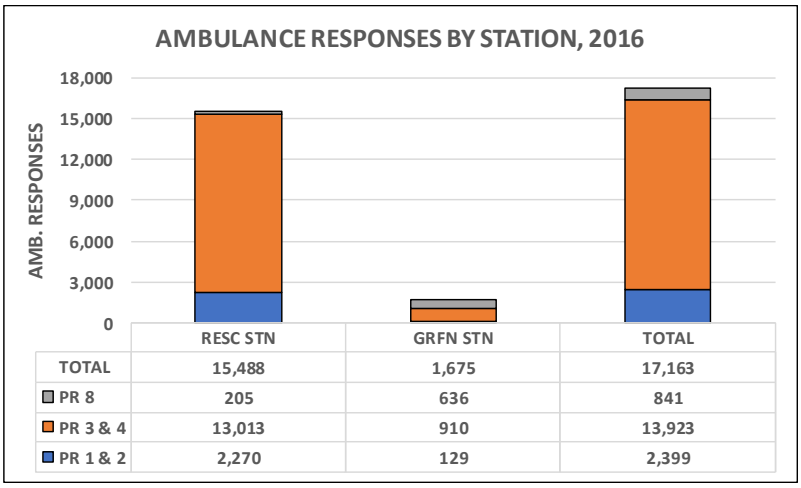
Below are two additional noteworthy observations:

- With an ambulance base situated in GRFN, one might have expected the response time in GRFN to be similar to that of the City. The higher value in GRFN is attributed to the following. The GRFN ambulance is frequently at a distance from base, either responding to a call in the City, serving on standby, or assigned by CACC to a call outside the service area.
- The call stat's in Exhibit 6.5, are based on data contained in the ADRS database and they do not include persons who, in lieu of calling/awaiting an ambulance response, are transported to hospital by family or other means. Anecdotally, we are advised that in rural settlement areas, particularly the Sault North Planning Board area, the potential demand for ambulance transport could be up to 50% higher than the statistic shown.

6.5 Responses by Station, 2016

Exhibit 6.6 shows ambulance responses for 2016 by responding station. RESC ambulances performed 15,488 responses (90% of the total 17,163). GRFN ambulances performed 1,675 responses (10%).

EXHIBIT 6.6: AMBULANCE RESPONSES BY STATION (2016)



	RESC STN	GRFN STN	TOTAL
TOTAL	15,488	1,675	17,163
PR 8	205	636	841
PR 3 & 4	13,013	910	13,923
PR 1 & 2	2,270	129	2,399

Eighty-four percent (84%) of RESC responses were dispatched as Pr 3 & 4. The comparative statistic for GRFN ambulances is substantially lower, at 54%. Fifteen percent (15%) of RESC responses were dispatched as Pr 1 & 2. Again, the comparative GRFN statistic is lower, at 8%.

RESC ambulances perform relatively few standby calls (Pr 8). In contrast, 38% of all ambulance responses performed by GRFN ambulances were dispatched as standby Pr 8. This statistic reaffirms the above observation that the GRFN ambulance is frequently at a distance from base.

6.6 Monthly, Daily & Hourly Response Profiles, 2016

Exhibit 6.7 presents the monthly ambulance response profile for calendar year 2016. The month-to-month variations are relatively small, varying on average about +/- 0.5%. This finding is consistent with both the service's historical profile, and statistics reported by other land ambulance services.

EXHIBIT 6.7: MONTHLY RESPONSE PROFILE (2016)

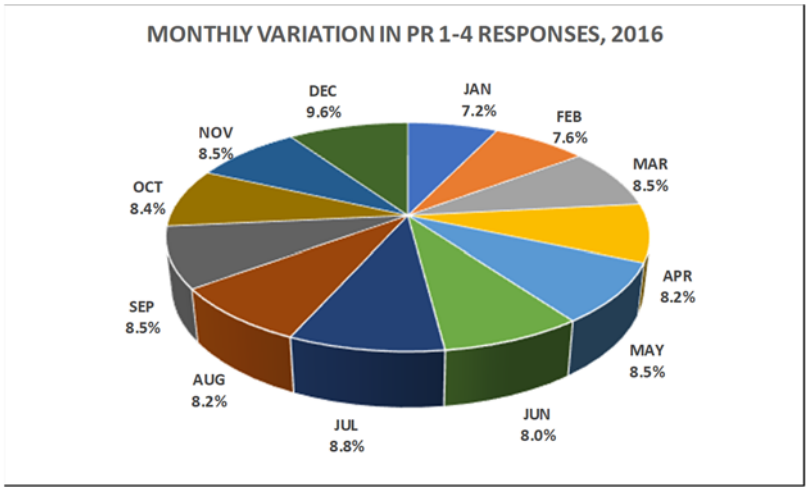


Exhibit 6.8 presents the daily variation in ambulance responses for 2016. Weekdays (Mon-Fri) account for 72% of ambulance response activity; weekends (Sat-Sun) account for 28%. These statistics also are consistent with those reported by other land ambulance services.

EXHIBIT 6.8: DAILY RESPONSE PROFILE (2016)

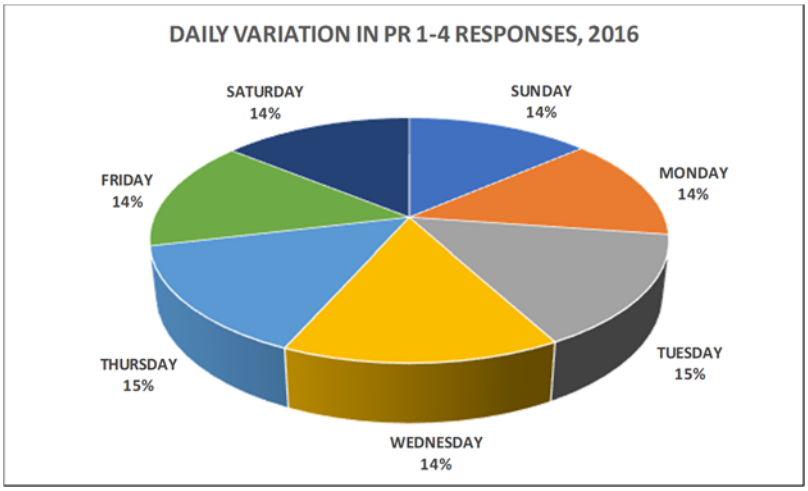
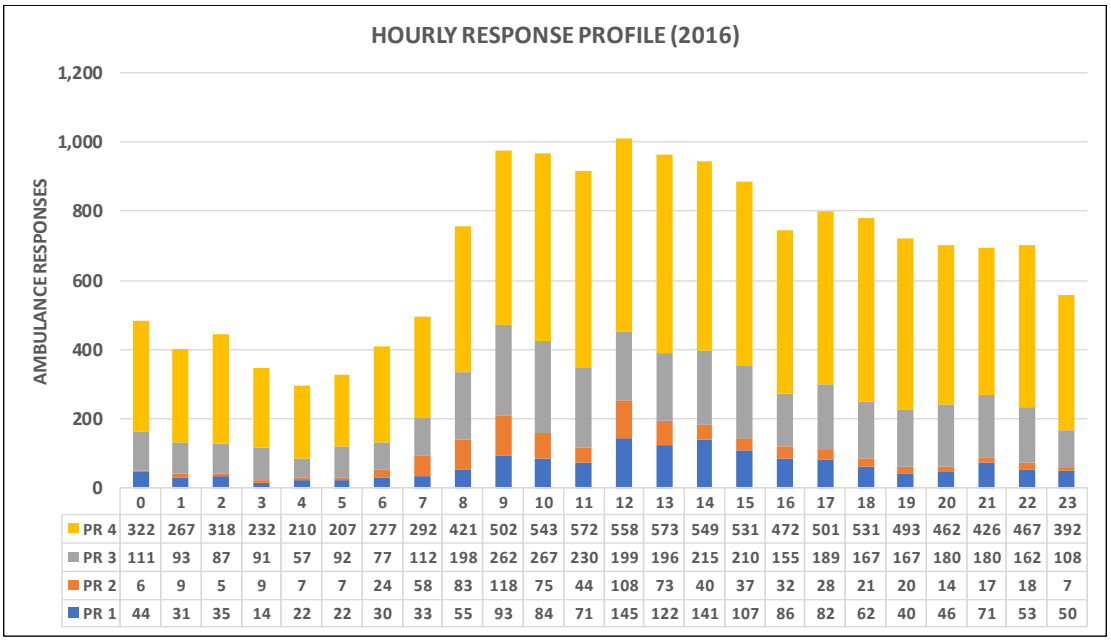


Exhibit 6.9 presents the hourly response profile for calendar year 2016. Day shifts (07:00-19:00 hours) account for almost 65% of all ambulance response activity; night time shifts (19:00-07:00 hours) account for about 35%. Most ambulance responses dispatched as Pr 1 & 2, take place on day shifts (07:00-19:00 hours).

EXHIBIT 6.9: HOURLY RESPONSE PROFILE (2016)



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PR 4	322	267	318	232	210	207	277	292	421	502	543	572	558	573	549	531	472	501	531	493	462	426	467	392
PR 3	111	93	87	91	57	92	77	112	198	262	267	230	199	196	215	210	155	189	167	167	180	180	162	108
PR 2	6	9	5	9	7	7	24	58	83	118	75	44	108	73	40	37	32	28	21	20	14	17	18	7
PR 1	44	31	35	14	22	22	30	33	55	93	84	71	145	122	141	107	86	82	62	40	46	71	53	50

6.7 Time-on-Task, 2016

Time-on-task (i.e., call duration) is defined as the amount of time that an ambulance spends attending to a call. Time-on-task is influenced by multiple factors, including: travel time to scene, time at scene, patient transport time to a receiving facility, and offload time (i.e., time at the receiving facility until the paramedic is relieved of their responsibility for the patient).

In keeping with industry best practices, time-on-task, is measured from the time that the ambulance crew is notified (T2 unit dispatched) to the time that the ambulance completes the call (either T7 call cleared, or T13 unit cancelled).

Time-on-task does not include time for discretionary activities that can otherwise be deferred if the ambulance is needed to respond to a medical emergency, i.e., to complete documentation, restock or clean an ambulance, etc.

Call completion occurs mainly at hospital, nursing home or other like facility, following patient transport. Occasionally it may take place at scene if the patient declines ambulance transport.

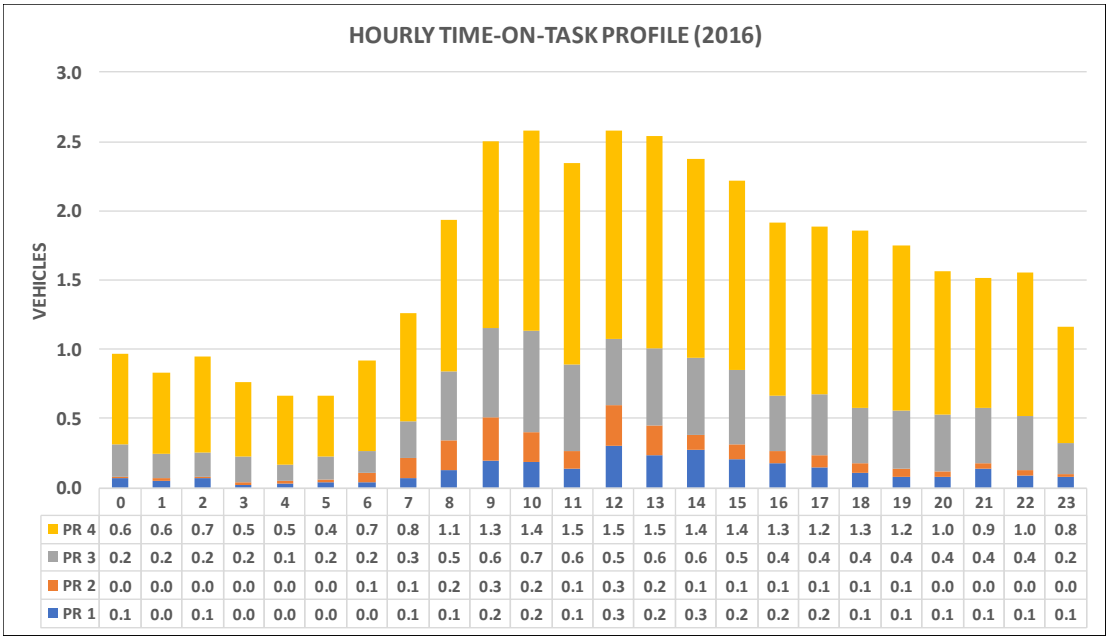
Using the ADRS data we investigated the DSSMSSAB service's time-on-task for 2016.

District-wide, the service's time-on-task averaged 0.9 hours per response. For GRFN ambulances, the average value was slightly higher at 1.2 hours per response; this due primarily to longer travel times to/from incident locations and the Sault Area Hospital. [19]

Exhibit 6.10 (below) presents the hourly time-on-task profile for calendar year 2016. The profile is similar to those of other ambulance services, with higher values occurring mid-day and early evening.

A more comprehensive set of time-on-task profiles are shown individually by station, and separately for weekdays and weekends, in Appendix G.

EXHIBIT 6.10: HOURLY TIME-ON-TASK PROFILE (2016)



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PR 4	0.6	0.6	0.7	0.5	0.5	0.4	0.7	0.8	1.1	1.3	1.4	1.5	1.5	1.5	1.4	1.4	1.3	1.2	1.3	1.2	1.0	0.9	1.0	0.8
PR 3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.5	0.6	0.7	0.6	0.5	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2
PR 2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.2	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
PR 1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1

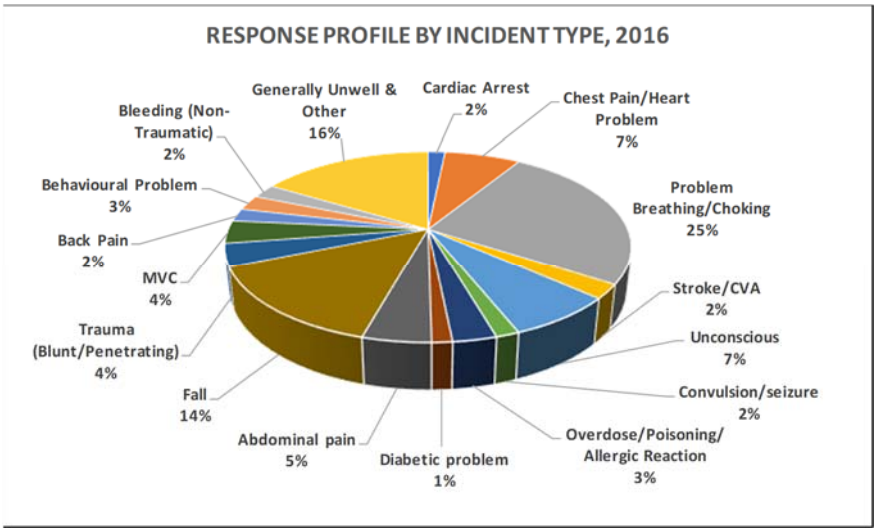
6.8 Response Profile by Incident Type, 2016

Exhibit 6.11 (next page) presents the response profile by incident type, for 2016.

Incident type is categorized by the CACC call taker based on information provided by the caller. Of note, are the following statistics: calls potentially involving sudden cardiac arrest or stroke, respectively account for 2% of the total.

[19] Note: An ambulance response may be cleared at a distance from the station, e.g., a response by the GRFN ambulance may be cleared while the vehicle is in the City, at the Sault Area Hospital. ADRS data does not account for the time required to return to base. In determining the service's time-on-task, we have incorporated a return to base trip adjustment for such responses. The return trip adjustments are identified in Appendix F.

EXHIBIT 6.11: RESPONSE PROFILE BY INCIDENT TYPE (2016)



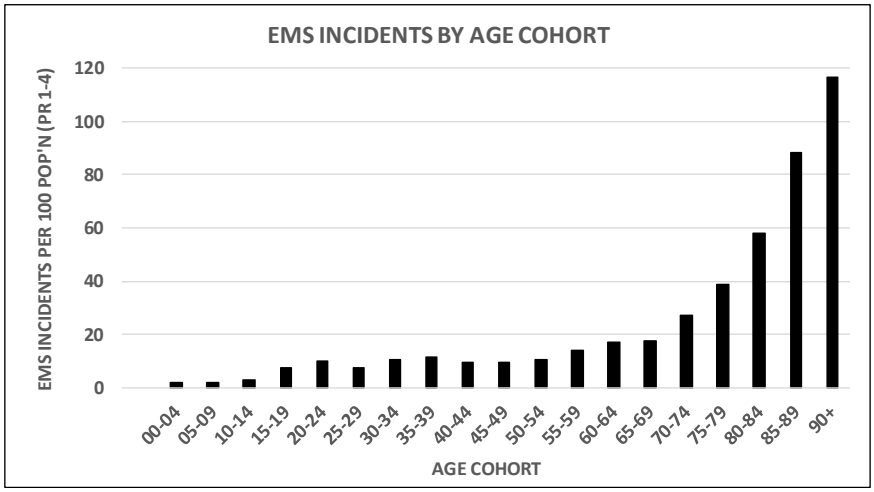
6.9 EMS Demand by Age Cohort, 2016

Exhibit 6.12 presents the District's EMS service demand for year 2016, organized by age cohort. The graphic was derived using the District's incident volumes (Pr 1-4) for 2016, as recorded in the 2016 e-ACR database, and the population by age cohort reported by the 2016 Census. Demand is expressed as the number of EMS incidents per 100 population.

As illustrated by the graphic, EMS demand is relatively low for all ages, below the seniors age group (65+ years). Whereas, within the seniors group, the demand for EMS rises exponentially by age. This relationship, between EMS demand and age, is not unique to the DSSMSSAB service area. It has been affirmed by multiple other jurisdictions.

As discussed further in Section 11 of this report, seniors presently account for approximately 22% of the District's total population, and they generate over 50% of all land ambulance calls (Pr 1-4). By 2031, seniors will account for over 30% of the District's population, and they will place considerably higher demand on the DSSMSSAB's land ambulance resources.

EXHIBIT 6.12: EMS INCIDENTS BY AGE COHORT



7 INTER-FACILITY PATIENT TRANSFERS

7.1 Best (Leading) Practices

An inter-facility patient transfer is intended to mean transport of a patient (either an inpatient or an outpatient) by vehicle between two hospitals, or between a hospital and a nursing home, or like facility. It is not intended to mean the internal portering of a patient within a facility.

Historically, Ontario hospitals have relied extensively on ambulance services for emergency and non-emergent (non-urgent) patient transport.

To manage the rapidly growing demand for ambulance services, many designated delivery agents have adjusted their land ambulance Deployment Plans, introducing policies that permit the continued use of ambulances for non-urgent patient transport, so long as the ambulance service's emergency response capability is not compromised. The DSSMSSAB's Deployment Plan includes such a policy statement.

Such polices are consistent with the Ambulance Act, which states that … *an ambulance is intended for the transportation of persons*

- *who have suffered a trauma which could endanger their life, limb or function; or*
- *have been judged to be in an unstable medical condition and to require, while being transported, the care of a health care provider and the use of a stretcher.*

By extension, many hospitals have contracted with alternative (non-ambulance) providers of patient transportation services for the routine transport of non-urgent, medically stable patients, i.e., for patients who do not meet the provincial criteria for transport by ambulance.

To be clear, the reference herein, is to a patient who has been judged by a physician or their designate, to be medically stable and where there is relatively little risk that their medical condition will deteriorate during travel.

The non-ambulance transportation provider's scope of service varies by hospital, with options ranging from stretcher van only, to options inclusive of stretcher van, wheelchair van and conventional auto/taxi. Some service agreements also contain provisions for the accompaniment of an escort, with options that may include regulated health professional, personal escort or no escort.

Regardless, industry leading (best) practices require that all decisions concerning a patient's transportation (including transportation by ambulance, and escort decisions) be made by the physician, or their designate, based on the patient's medical condition, care and comfort requirements.

The Sault Area Hospital has not contracted with an alternative (non-ambulance) provider for the routine transport of non-urgent, medically stable patients. For such services, the hospital continues to rely on the DSSMSSAB's land ambulance service.

7.2 Inter-Facility Patient Transfers by Ambulance

Exhibit 7.1 presents a summary of all ambulance responses, performed by the DSSMSSAB's land ambulance service for the period 2013-2016, including both urgent and non-urgent inter-facility patient transfers.

- Ambulance response volumes include all calls that the CACC deployed as Priority 1-4 and Priority 8 (standby).
- Urgent inter-facility transfers are those that the CACC deployed as Priority 3 and 4.
- Non-urgent inter-facility transfers are those that the CACC deployed as Priority 1 and 2.

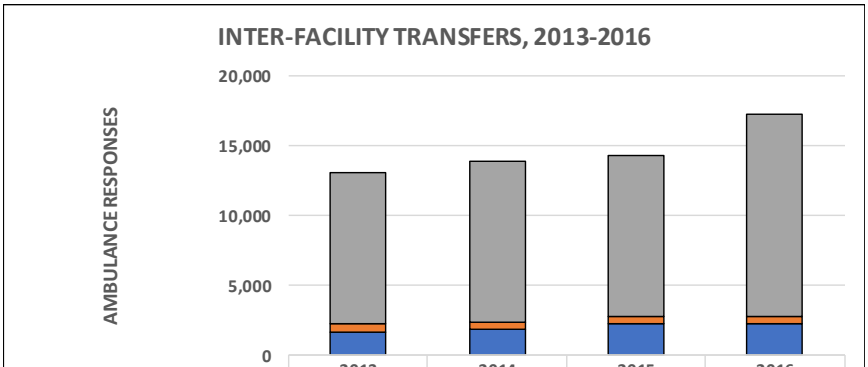
The latter category, labelled non-urgent transfers, is made up largely by the routine transport of non-urgent, medically stable patients i.e., those, who potentially could be transported by means other than an ambulance – if such means were available.

In the absence of an alternative provider, the DSSMSSAB's land ambulance service performs over 2,200 non-urgent transfers annually.

This figure represents about 13% of the service's annual response volume; and taking time-on-task into consideration, it equates to at least 1 ambulance shift daily, at a cost of about $657,000 per annum.

Recommendation: The DSSMSSAB, in consultation with the Hospital and other members of the local health care community, should investigate alternative, less costly, non-ambulance options for the routine transport of non-urgent, medically stable patients. One potential option to consider is the DSSMSSAB providing non-ambulance transportation services on a fee-for-service / cost-recovery basis – this, entirely separate from its services as a land ambulance delivery agent.

EXHIBIT 7.1: INTER-FACILITY TRANSFERS (2013-2016)



	2013	2014	2015	2016
Total Ambulance Responses	13,060	13,818	14,246	17,163
Other Ambulance Responses	10,833	11,466	11,479	14,353
Urgent Transfers	591	507	485	527
Non-Urgent Transfers	1,636	1,845	2,282	2,283

8 RESPONSE TIME PERFORMANCE PLAN

Regulation 257/00 under the Ambulance Act requires the DSSMSSAB to submit a Response Time Performance Plan (RTPP) specifying ambulance response time targets by Canadian Triage Acuity Scale (CTAS) for each funding year. The Regulation also requires the DSSMSSAB to report on service performance.

8.1 Canadian Triage Acuity Scale (CTAS)

On arrival at the scene of a medical incident, paramedics will initially assess and document the patient's condition prior to any medical intervention. The documentation includes the patient's condition categorized using the Canadian Triage Acuity Scale (CTAS). CTAS categories are defined in Exhibit 8.1 (below). [20]

EXHIBIT 8.1: CANADIAN TRIAGE ACUITY SCALE (CTAS)

CTAS CATEGORY	DEFINITION	IDEAL TIME TO PHYSICIAN ASSESSMENT
SCA	Sudden cardiac arrest / requires defibrillation.	Immediate
CTAS 1 Resuscitation	Conditions that are, or may pose, an imminent threat to life or limb (or imminent risk of deterioration) requiring immediate aggressive interventions.	Immediate
CTAS 2 Emergent	Conditions that potentially threaten to life, limb or function, requiring rapid medical interventions or delegated acts.	Within 15 minutes
CTAS 3 Urgent	Conditions that could potentially progress to a serious problem requiring emergency intervention. May be associated with significant discomfort or affecting ability to function at work or activities of daily living.	Within 30 minutes
CTAS 4 Semi Urgent	Conditions that may be related to patient age, distress, or potential for deterioration or complications, which would benefit from intervention or reassurance within 1-2 hours.	Within 1 hour
CTAS 5 Non-Urgent	Conditions that may be acute but non-urgent as well as conditions which may be attributed to a chronic problem. Interventions may be delayed for several hours.	Within 2 hours

[20] Sources: (1) "Implementation Guidelines for The Canadian Emergency Department Triage & Acuity Scale (CTAS)", endorsed by the Canadian Association of Emergency Physicians (CAEP), the National Emergency Nurses Affiliation of Canada (NENA), and L'association des médecins d'urgence du Québec (AMUQ), December 1998. (2) "Revisions to the Canadian Emergency Department Triage and Acuity Scale (CTAS) Adult Guidelines", CTAS National Working Group, Canadian Journal of Emergency Medicine (CJEM), March 2008.

8.2 RTPP Targets & Performance, 2014-2017

Exhibit 8.2 presents the RTPP targets and performance for the DSSMSSAB's land ambulance service, for the period 2014-2017. The 2014-15 data is from the MOHLTC website: http://www.health.gov.on.ca/english/public/program/ehs/land/responsetime.html. The 2016-17 data was provided by the service's management. [21]

EXHIBIT 8.2: RTPP TARGETS & PERFORMANCE, 2014-2017

2014 RTPP TARGETS & PERFORMANCE			
	TARGET - MINUTES	TARGET - PERCENT	PERFORMANCE
SCA *(HIGHEST URGENCY)*	6	40%	79%
CTAS 1 *(HIGHEST URGENCY)*	8	70%	70%
CTAS 2	10	75%	85%
CTAS 3	15	80%	95%
CTAS 4 *(NON-URGENT)*	30	75%	99%
CTAS 5 *(NON-URGENT)*	60	75%	99%

2015 RTPP TARGETS & PERFORMANCE			
	TARGET - MINUTES	TARGET - PERCENT	PERFORMANCE
SCA *(HIGHEST URGENCY)*	6	50%	63%
CTAS 1 *(HIGHEST URGENCY)*	8	70%	74%
CTAS 2	10	75%	84%
CTAS 3	15	80%	95%
CTAS 4 *(NON-URGENT)*	25	80%	99%
CTAS 5 *(NON-URGENT)*	30	80%	100%

2016 RTPP TARGETS & PERFORMANCE			
	TARGET - MINUTES	TARGET - PERCENT	PERFORMANCE
SCA *(HIGHEST URGENCY)*	6	60%	74%
CTAS 1 *(HIGHEST URGENCY)*	8	80%	70%
CTAS 2	10	80%	88%
CTAS 3	10	80%	84%
CTAS 4 *(NON-URGENT)*	15	90%	97%
CTAS 5 *(NON-URGENT)*	15	90%	97%

2017 RTPP TARGETS & PERFORMANCE Q1 - Q3			
	TARGET - MINUTES	TARGET - PERCENT	PERFORMANCE
SCA *(HIGHEST URGENCY)*	6	60%	66%
CTAS 1 *(HIGHEST URGENCY)*	8	75%	81%
CTAS 2	10	80%	88%
CTAS 3	10	80%	84%
CTAS 4 *(NON-URGENT)*	15	90%	97%
CTAS 5 *(NON-URGENT)*	15	90%	96%

[21] For the CTAS 1-5 categories, the response time clock can only be stopped by the arrival of the paramedic service. For the Sudden Cardiac Arrest (SCA) category, the clock can be stopped by anyone with a defibrillator. This notwithstanding, the SCA performance statistics shown above exclude assists by others. This approach, which is consistent with that taken by other Ontario EMS services, is attributed to the challenges in capturing accurate response times for services provided by others.

As illustrated by Exhibit 8.2, the DSSMSSAB has endeavoured to advance the system toward better performance, by building annually on the previous year's performance levels.

Overall, this has been a reasonable approach – with one exception, that being the CTAS 1 target, which was increased much too rapidly in 2016. That year, the target was increased to 80% - up from 70% which was the target for the prior three years – this despite records showing that performance levels in the prior three years did not exceed 74%.

Consequently, in 2016, the service performed well relative to target, in all but the CTAS 1 category. To compensate, the CTAS 1 target for 2017 was reduced to 75%, relative to which, the service is currently performing well.

The reader will also note the significant year-over-year variance in the performance reported for the SCA and CTAS 1 categories. The variance is attributed to the following. Call volumes in these categories are relatively small, and one or two outliers in any year, will significantly skew results, i.e.: the SCA category accounts for less than 1% of all calls (less than 100 calls a year), and the CTAS 1 category accounts for about 2% (between 100 and 200 calls a year).

8.3 Response Time Performance Plan for 2018

On November 16, 2017, the Board approved the Response Time Performance Plan (RTPP) targets for 2018 that are shown in Exhibit 8.3; this, at APEXPRO's recommendation.

EXHIBIT 8.3: RTPP TARGETS FOR 2018

	2018 RTPP TARGETS	
	MINUTES	PERCENT
SCA *(HIGHEST URGENCY)*	6	60%
CTAS 1 *(HIGHEST URGENCY)*	8	75%
CTAS 2	10	80%
CTAS 3	15	80%
CTAS 4 *(NON-URGENT)*	20	80%
CTAS 5 *(NON-URGENT)*	30	80%

As demonstrated by the exhibit, response time targets in the higher priority CTAS categories (SCA, CTAS 1 and CTAS 2) were maintained at the levels set for 2017; whereas for the non-urgent CTAS 3, 4 and 5 categories, the targets were relaxed.

The changes are intended to align the RTPP targets more closely to the CTAS category definitions (shown in Exhibit 8.1), particularly to the relatively long times to physician assessment in the non-urgent CTAS categories; and to targets adopted by EMS peers, which are comprehensively reviewed in Appendix E.

Recommendation: While we applaud the DSSMSSAB's desire to advance the system toward better performance by building annually on the previous year's performance levels, we recommend that the 2018 targets be maintained for the next 2 to 3 years, while continuing to periodically report quarterly / annual performance.

8.4 Response Profile by Call Urgency (2016)

As discussed previously, most Ontario CACCs, including the Sault Ste. Marie CACC, use a medical triage software system known as "Dispatch Priority Card Index (DPCI)" to rapidly assess and assign a dispatch priority to each incoming request.

In 2016, Sault Ste. Marie CACC assessed 62% of all ambulance requests within the District as life-threatening or potential life-threatening, where a delay in medical intervention and transport can have an adverse effect on outcome; and they dispatched these ambulance requests as Priority 4 (highest urgency) with flashing lights and siren – this as shown in Exhibit 8.4.

On arrival at scene, the paramedics assessed and documented the patient's condition using the Canadian Triage Acuity Scale (CTAS).

Based on the paramedics' assessment at scene, only 31% of the requests required a rapid ambulance response – this as shown in Exhibit 8.5.

More specifically, only 3% required aggressive intervention (defibrillation / resuscitation), and 28% required rapid intervention to treat a potentially threatening situation.

On June 5th, 2017 MOHLTC announced that Ontario will be enhancing its emergency health services system to provide people with increased flexibility and more options for medical transportation and paramedic services.

EXHIBIT 8.4: CALLS BY DISPATCH PRIORITY (2016)

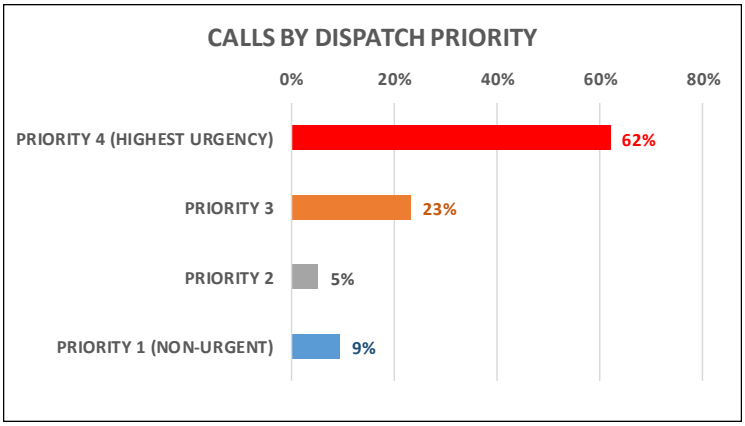
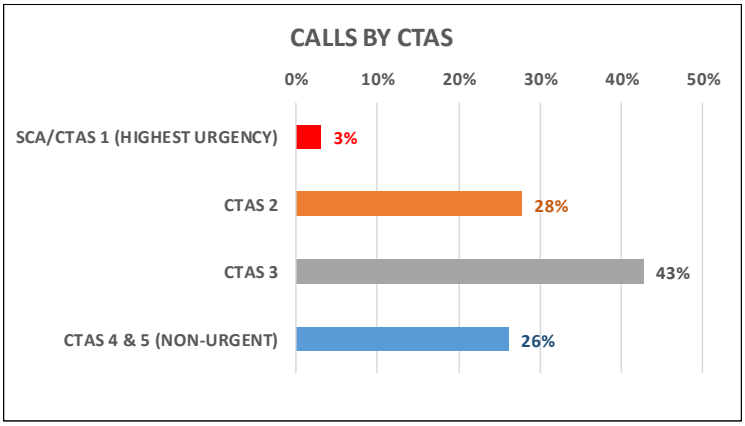


EXHIBIT 8.5: CALLS BY CTAS (2016)



The proposed enhancements include investment in a new medical dispatch system that will improve the triaging and prioritization of 911 calls for ambulance service.

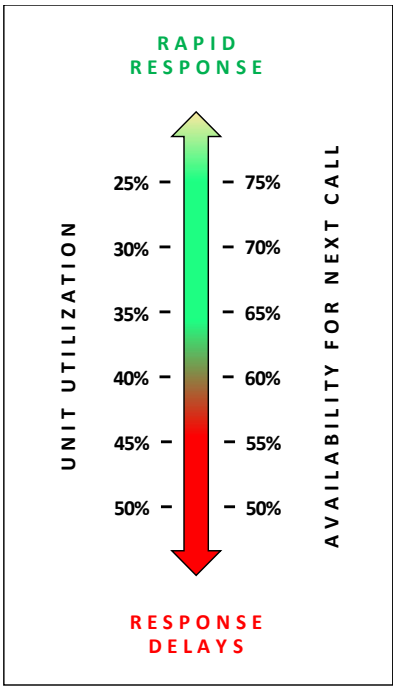
The new system is expected to be in place in the first site by March 2018. Full roll out to all provincial CACCs will take approximately 24 months to complete.

9 UNIT HOUR UTILIZATION

9.1 Best (Leading) Practices

Ambulance workload is measured by Unit Hour Utilization (UHU), which is defined as the number of hours that an ambulance spends on task relative to the number of hours on shift.

Time-on-task is measured from the time that the ambulance crew is notified (dispatched), to the time that the paramedic is relieved of their responsibility for the patient, i.e., the call is cleared.



Time-on-task does not include time for discretionary activities that can otherwise be deferred if the ambulance is needed to respond to a medical emergency, i.e., to complete documentation, restock or clean an ambulance, etc.

For example, if an ambulance shift is 12 hours, and during shift the ambulance is on task attending to one or more calls for a total of 4 hours, then its UHU is 33%.

Alternatively, if an ambulance were to spend 6 of the 12 hours, on task attending to calls, then its UHU would be 50%.

UHU may be reported for a single ambulance, for the service, and for any period – a shift, a day, month or year.

UHU is typically higher when, and where, call volumes are higher, i.e., during the daytime, or in urban communities.

'High performance' land ambulance services are designed to operate at UHU of 25% or less. At such levels the likelihood of an ambulance to be available to respond to the next call is 75% or better; and on this basis, the service can attain a relatively rapid response time to medical emergencies, of 8:59 or better at the 90th percentile. These services are expensive to operate and consequently, there are relatively few such services.

Experience shows that it is undesirable to operate for an extended period at a UHU of 40% or higher, since at such levels, there would be little capacity-in-reserve for overlapping calls, the likelihood of an ambulance to be available to respond to the next call would be 60% or less, and service would operate at relatively lengthy response times.

Best (leading) practices suggest targeting to an annual UHU of 35% or less, where the likelihood of an ambulance to be available, to respond to the next call is 65% or better. This is the range in which many Ontario EMS services operate, attaining 90th percentile response times to medical emergencies of 9:00 to 11:59, or better. [22]

[22] Factors influencing the response time variance between services include: the size of the service area, population density, and the quality and density of the road network.

Recommendation: The DSSMSSAB should adopt an annual UHU of 35% as its preferred land ambulance service level target. At this level the likelihood of an ambulance to be available, to respond to the next call would be 65% or better, and the service should be able to sustain its current 90th percentile response time to Priority 4 medical emergencies of 09:26 or better.

9.2 Annual Unit Hour Utilization (UHU), 2016

Exhibit 9.1 presents a Unit Hour Utilization (UHU) summary for the DSSMSSAB land ambulance service. The statistics are based on 2016 times-on-task for ambulance responses dispatched as Priority 1-4.

In 2016, the service's daytime UHU averaged 46%, and the likelihood of an ambulance to be available to respond to the next call was 54%.

The service's night time UHU was 26%, and the likelihood of an ambulance to be available to respond to the next call was 74%.

For ambulances stationed at RESC, the daytime UHU was inordinately high, at 52%, i.e., ambulance availability for the next call was only 48% - this, despite the support provided by the GRFN ambulance.

EXHIBIT 9.1: UNIT HOUR UTILIZATION (2016)

	UNIT HOUR UTILIZATION (UHU)			
	2016		1 ADD'L DAY CAR (12/7) AT RESC	
	DAY	NIGHT	DAY	NIGHT
RESC	0.52	0.32	0.41	0.32
GRFN	0.20	0.08	0.20	0.08
SERVICE	0.46	0.26	0.38	0.26

Day: 07:00-19:00 hours Night: 19:00-07:00 hours

At GRFN station, the workload was appreciably lower and the likelihood of an ambulance being available to respond to the next call was appreciably higher, as would be expected since that station responds to substantially fewer calls.

While the 2017 statistics are not readily available, it is our opinion based on rising call volumes, that the 2017 UHU are higher than those shown in the exhibit, and by extension ambulance availability is lower.

Response volume is projected to continue to increase over the next 10 to 15 years (as discussed in Section 11 of this report). The rising call volumes will only exacerbate the workload situation at RESC.

Recommendations

Presented below are our near-term resourcing recommendations, based on a preferred UHU of 35%.

- The service's resourcing at RESC should be increased by at least 1 additional day shift ambulance (operating 12/7), in the next funding year (2018). This additional ambulance, if implemented, will reduce the day time workload at RESC to a UHU of 41% (down from 52%), as shown in Exhibit 9.1.
- To further reduce the daytime UHU beyond the levels shown in Exhibit 9.1, the service's near-term resourcing should also be increased by 1 daytime Paramedic Response Unit

(PRU), potentially operating 12/7. As discussed in Section 10 of this report, the PRU should be stationed at Goulais River - this, to improve coverage and response time in the District's rural northern area.

9.3 Hourly UHU Profile, 2016

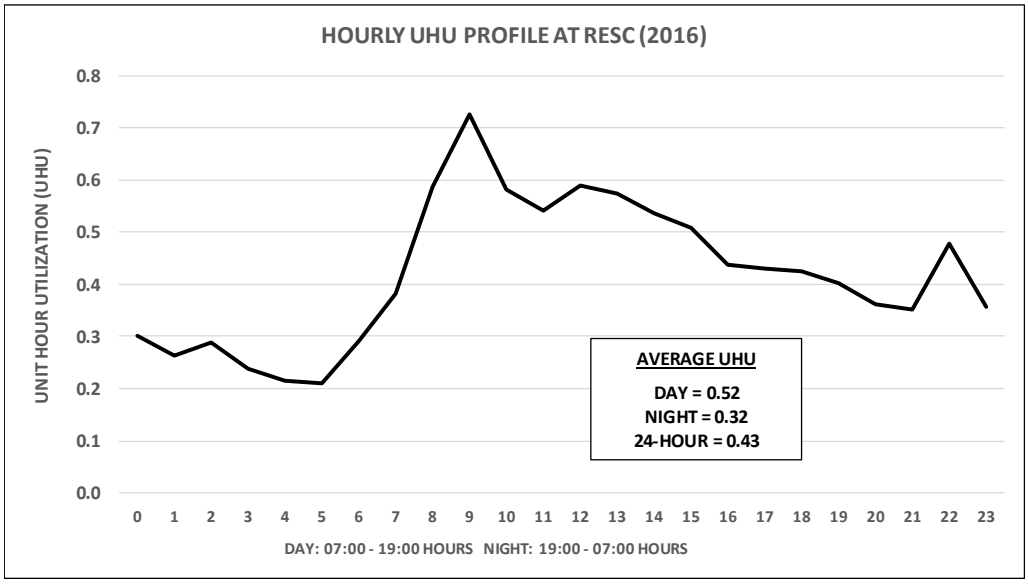
Hourly UHU profiles for the service, and by station, are contained in Appendix H.

Exhibit 9.2 presents the hourly UHU profile at RESC for 2016. While the daytime UHU averaged 52%, the value peaked at over 70%, at 09:00 hours.

APEXPRO reviewed this information with the service operator, and to address the 09:00 peak, we have recommended a relatively simple solution - that the day vehicle, currently operating between 10:00 and 22:00 hours, be deployed 1 to 2 hours earlier, i.e., from 08:00 to 20:00 hours.

We are advised that the operator proposes to implement a change in shift schedule, early in 2018.

EXHIBIT 9.2: HOURLY UHU PROFILE AT RESC (2016)



10 EMS GEOGRAPHIC COVERAGE

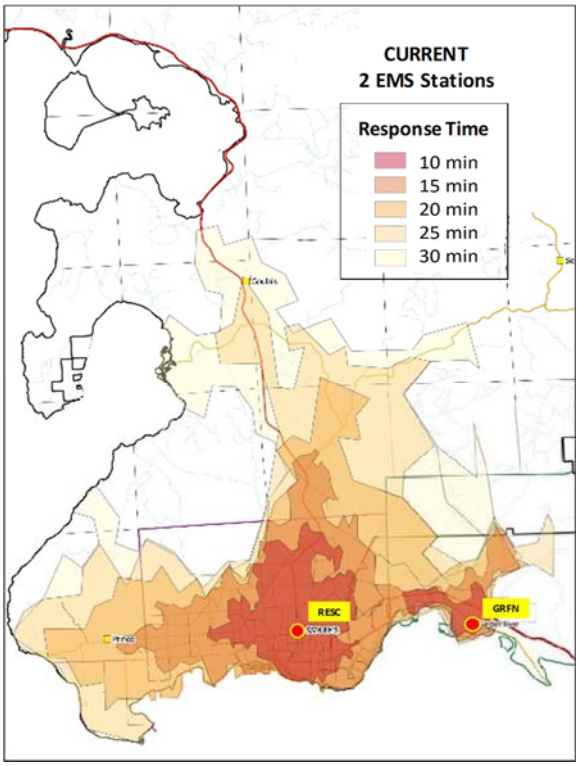
10.1 Current Response Time Coverage

Response times for year 2016 were presented previously in Section 6 of this report. As discussed therein, 94% of the total call volume was generated in the City, at a 90th percentile response time to Priority 4 calls of under 9 minutes; whereas, up to 4% of the total call volume was generated in rural settlements (Sault North Planning Board area and Prince Township), at 90th percentile response times exceeding 20 minutes.

Exhibit 10.1 contains a map that more clearly illustrates the response time coverage provided by ambulances based at the two existing stations (RESC/GRFN). APEXPRO developed this exhibit using GIS mapping that was provided by the Sault Ste. Marie Innovation Centre. Response time coverage is shown at 10, 15, 20, 25 and 30-minute intervals. [23]

Options for improving EMS geographic coverage are discussed on the following pages.

EXHIBIT 10.1: CURRENT RESPONSE TIME COVERAGE



[23] The response time intervals shown in the above graphic, are simulated values derived from information contained in the GIS data base. They may vary slightly from actuals, depending on such factors as vehicle operating speed, road traffic volume, roadway condition, and weather. The simulated response times assume a station chute time (T2-T3) of one (1) minute.

10.2 Option 1 – Coverage w' EMS Posted at the City's West End

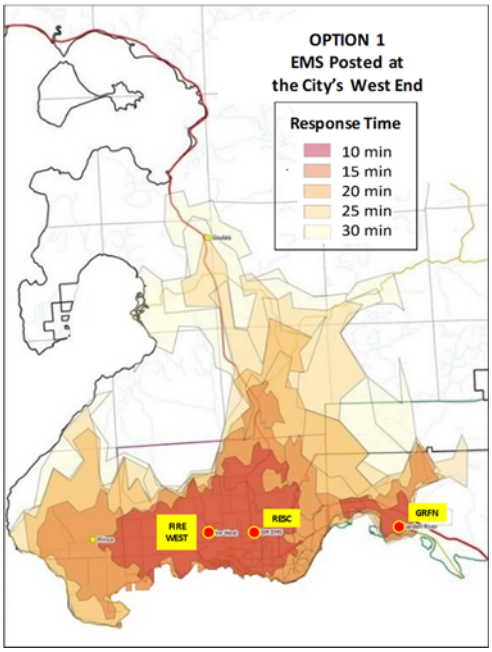
Option 1 is to post one of the ambulances based at RESC, to a location at the City's west end. The ambulance would move to the post at start of shift, and stay there between calls, for the duration of the shift.

We are advised that Fire Station 2, located at 363 Second Line West, may be a feasible post location; albeit, if not, then another location would need to be identified.

Exhibit 10.2 illustrates the change in response time coverage with a post located at SSM Fire West; this, in addition to the existing ambulance stations at RESC and GRFN.

As demonstrated, such a post would significantly improve response times in the City's west end - our estimate being a 30-second reduction in the 90th percentile response time for Priority 4 responses in the City.

EXHIBIT 10.2: COVERAGE W' EMS POSTED AT THE CITY'S WEST END



10.3 Option 2 – Coverage w' EMS Posted at Prince Township

Option 2 is to post one of the ambulances based at RESC, to a location in Prince Township. The ambulance would move to the post at start of shift, and stay there between calls, for the duration of the shift.

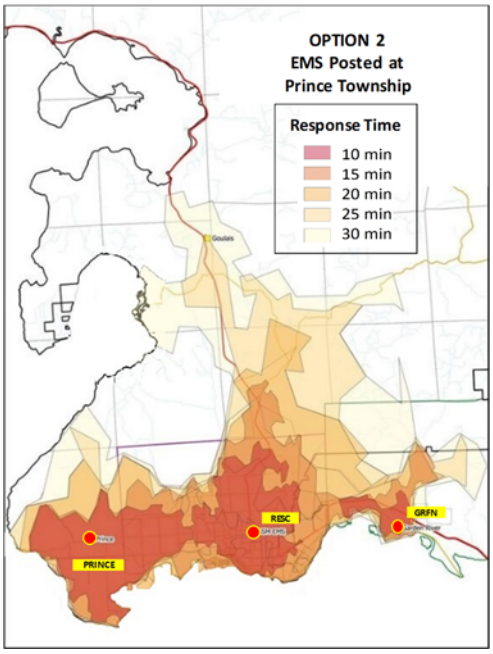
For this purpose, the Prince Township volunteer fire hall may be a feasible location.

Exhibit 10.3 illustrates the change in response time coverage with a post located at the Prince Township volunteer fire hall; this, in addition to the existing ambulance stations at RESC and GRFN.

As demonstrated, such a post would significantly improve the Township's EMS response coverage.

However, with less than 50 ambulance calls a year, few Township residents would see a benefit.

EXHIBIT 10.3: COVERAGE W' EMS POSTED AT PRINCE TOWNSHIP



10.4 Option 3 – Coverage w' EMS Posted at Goulais River

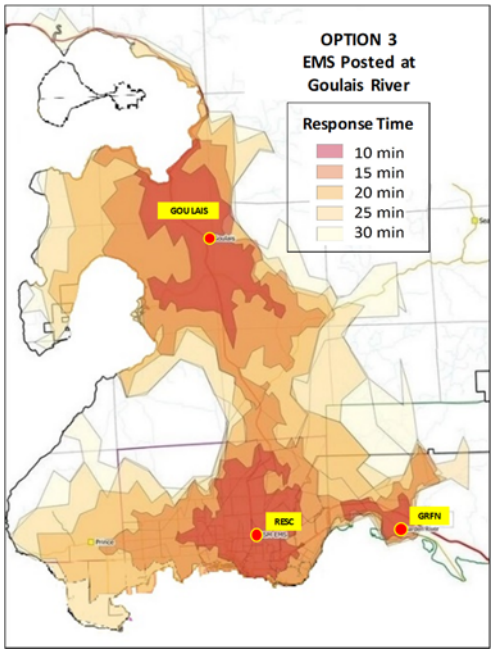
Option 3 is to post a local EMS presence at Goulais River. For this purpose, the Goulais River volunteer fire hall may be a feasible location.

Exhibit 10.4 illustrates the change in response time coverage with an EMS presence at Goulais River volunteer fire hall; this, in addition to the existing ambulance stations at RESC and GRFN.

In our opinion, a local EMS presence would significantly improve EMS response coverage in the Goulais River FRT service area, potentially reducing paramedic response times for up to 2/3 of the annual 300 responses currently performed by the Goulais River FRT, to 15 minutes or less.

Accounting for area residents who, in lieu of awaiting an ambulance response, are transported to hospital by family or other means, the number of persons who would currently benefit from a local EMS presence, could be even higher - estimated anecdotally by local officials at about 450-500 responses a year.

EXHIBIT 10.4: COVERAGE W' EMS POSTED AT GOULAIS RIVER



Regardless of the actual number, we expect the figure to increase in step with the rapidly rising demand for land ambulance services, which is projected to continue to increase at about 3% a year for the next 15 years (as discussed in Section 11 of this report).

10.5 Option 4 (Recommended)

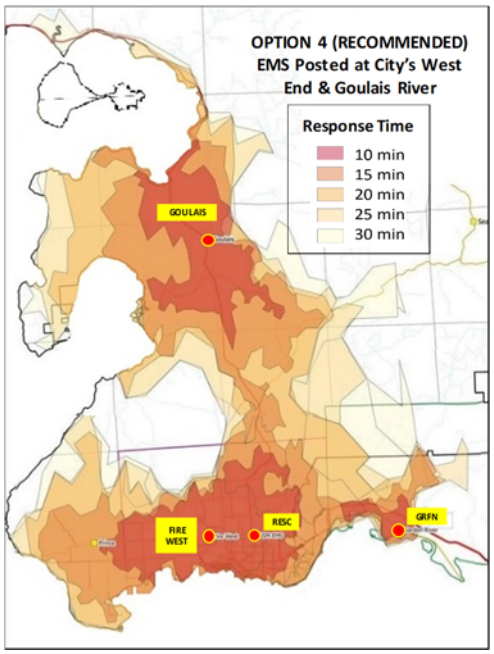
In consideration of the above information we recommend the option illustrated by Exhibit 10.5, specifically:

a) Post one of the ambulances based at RESC, to a location at the City's west end, potentially at SSM Fire West. If space is readily available, there should be no significant additional cost.

b) Post a daytime EMS presence, in the form of a Paramedic Response Unit (PRU), at Goulais River. Staff the PRU 12 hours a day, potentially up to 7 days a week. The cost to operate 12-hour PRU is about $328,500/year.

Both recommendations should be implemented in the near term.

EXHIBIT 10.5: RECOMMENDED OPTION



11 FORECAST GROWTH IN SERVICE DEMAND

11.1 Key Drivers of Service Demand

Population growth, and seniors' population growth (65+ years), are the principal drivers of land ambulance service demand, across Ontario.

Exhibits 11.1 and 11.2 present three (3) forecasts of future population, and future seniors' population, to 2036. APEXPRO developed the forecasts using the following sources, as the primary basis for the projections:

- Statistics Canada Census, which reports total population, and population by age cohort, separately for the District, City of Sault Ste. Marie, Prince Township, and Garden River First Nation. Census data is readily available for years 2001, 2006, 2011 and 2016.
- Long-term (25-year) projections of future population by age cohort, that the Ontario Ministry of Finance (MOF) publishes for all upper-tier and single-tier municipalities in Ontario. The published data includes projections for Algoma District. The Ministry's forecasts are updated annually. The most recent update was published in spring 2017.

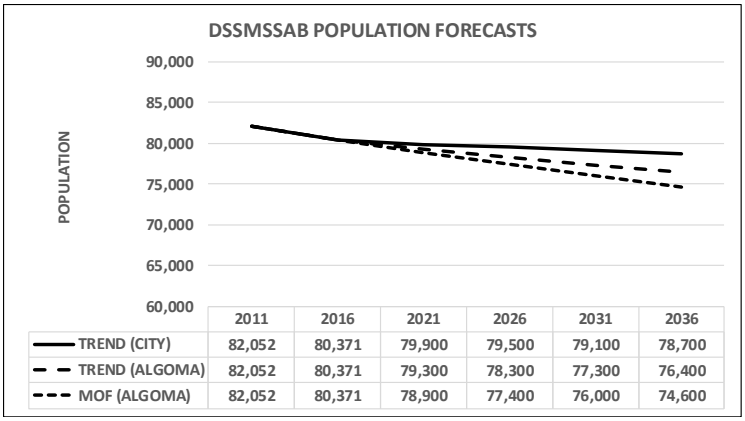
The forecast labeled 'Trend (City)' is a forward looking extrapolation of the District's population tempered by past population changes in the City of Sault Ste. Marie.

The forecast labeled 'Trend (Algoma)' is a forward looking extrapolation tempered by past population changes in Algoma District.

The forecast, labeled 'MOF (Algoma)' is based on the MOF population projection for Algoma District, which we calibrated to approximate the DSSMSSAB service area.

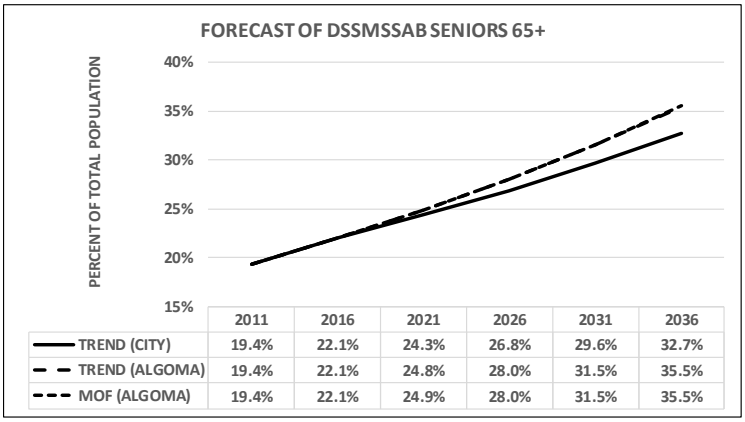
As demonstrated by Exhibit 11.1, the District's total population has been decreasing for a number of years, and is projected to decline further over the next 15 years – this, as expected of the forecasts, since they are influenced heavily by current trends.

EXHIBIT 11.1: DSSMSSAB POPULATION FORECASTS



	2011	2016	2021	2026	2031	2036
TREND (CITY)	82,052	80,371	79,900	79,500	79,100	78,700
TREND (ALGOMA)	82,052	80,371	79,300	78,300	77,300	76,400
MOF (ALGOMA)	82,052	80,371	78,900	77,400	76,000	74,600

EXHIBIT 11.2: FORECAST OF DSSMSSAB SENIORS 65+



	2011	2016	2021	2026	2031	2036
TREND (CITY)	19.4%	22.1%	24.3%	26.8%	29.6%	32.7%
TREND (ALGOMA)	19.4%	22.1%	24.8%	28.0%	31.5%	35.5%
MOF (ALGOMA)	19.4%	22.1%	24.9%	28.0%	31.5%	35.5%

The projected future rate of decline ranges between -0.11% and -0.37% per annum.

In contrast to the projected decline in the District's population, seniors' population is projected to continue to increase over the next 15 years, at 1.5% to 2.1% per annum.

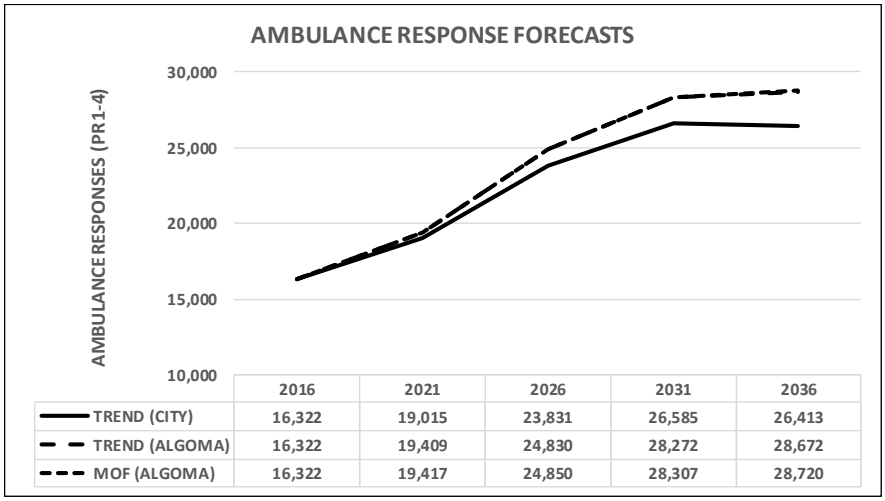
Seniors, who presently account for approximately 22% of the District's total population, generate over 50% of all land ambulance calls (Pr 1-4). By 2031, seniors will account for over 30% of the District's population, and will place considerably higher demand on the DSSMSSAB's land ambulance resources.

Relatively rapid increases in seniors population are not unique to the DSSMSSAB service area. All jurisdictions across Ontario are facing similar trends.

11.2 Ambulance Response Forecasts

Exhibit 11.3 presents our forecasts of ambulance response growth in the DSSMSSAB service area, to 2036.

EXHIBIT 11.3: AMBULANCE RESPONSE FORECASTS



	2016	2021	2026	2031	2036
TREND (CITY)	16,322	19,015	23,831	26,585	26,413
TREND (ALGOMA)	16,322	19,409	24,830	28,272	28,672
MOF (ALGOMA)	16,322	19,417	24,850	28,307	28,720

The forecast labeled 'MOF (Algoma)' is a forward looking projection developed from a regression analysis of the service area's Pr 1-4 call volumes and Algoma District's seniors growth as reported by MOF, 2013-2015. More specifically, the regression analysis treats the huge rise in calls, in 2016, as an anomaly, and excludes it from the calculations.

The forecast labeled 'Trend (Algoma)' is based on the above projection, tempered by past population changes in Algoma District, as reported by Census. The forecast labeled 'Trend (City)' is also based on the above projection, tempered by past population changes in the City of Sault Ste. Marie, as reported by Census.

The 'Trend (City)' forecast projects a relatively low 3% year-over-year increase in EMS demand over the next 15 years, at which point the rate of increase flattens out, reflecting the MOF projected decrease in the pace of seniors growth around that period. The other two forecasts project a 4.5% year-over-year increase in EMS demand for the next 15 years, at which point they too begin to flatten out.

Our projections of future resourcing requirements (discussed in Section 12 of this report), are based on the relatively low demand growth forecast labelled 'Trend (City)'. Under this forecast, demand increases by +7,500 calls (+46%) to 2026, and +10,300 calls (+63%) to 2031.

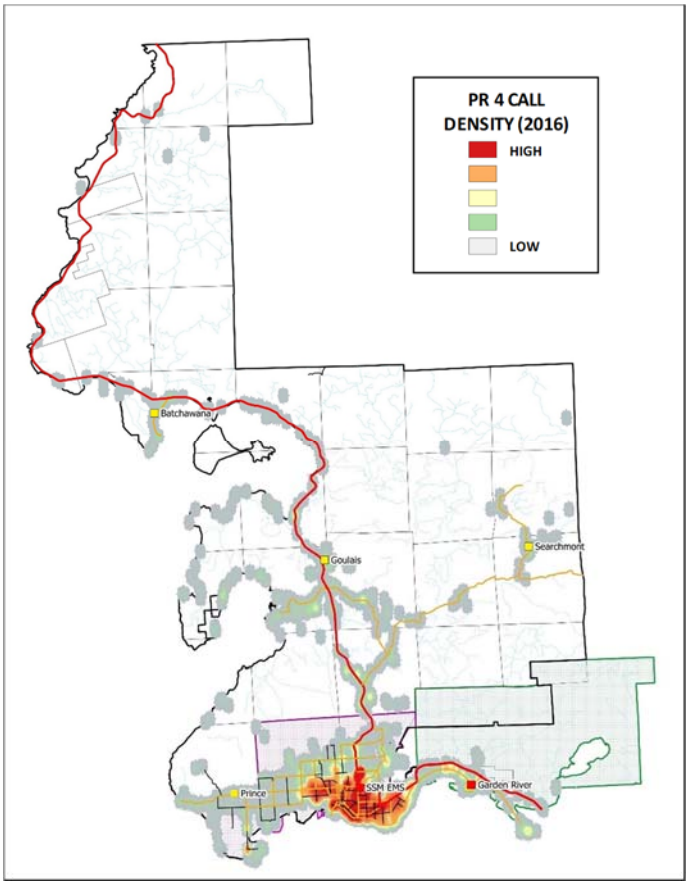
11.3 Projected Call Distribution

Exhibit 11.4 presents a 'heat map' showing the current (2016) dispersion of ambulance responses across the DSSMSSAB service area by call density, ranging from areas of high call concentration (shown in red) to areas of low call concentration (in grey).

The exhibit clearly illustrates the high concentration of calls in the City, and relatively low call concentrations throughout the rest of the service area, including Prince Township and the Sault North Planning Board area.

The present dispersion pattern is not expected to change materially over the next 10-15 years. The City of Sault Ste. Marie is expected to generate over 90% of all new calls. Prince Township is expected to generate 1-2%; Garden River First Nations 1-2%; and the unorganized areas about 6%.

EXHIBIT 11.4: PR 4 CALL DENSITY (2016)



12 RESOURCING FORECASTS & RECOMMENDATIONS

12.1 Near-Term Recommendations

Exhibit 12.1 presents our near-term service resourcing recommendations, and cost estimates, based on an annual UHU of 35% as the preferred land ambulance service workload target.

The near-term recommendations are spread over two years, 2018 and 2019; this, to soften the near-term financial impact.

Costs are presented in 2017 dollars. They are the gross costs, which are potentially eligible for MOHLTC subsidy at 50%.

EXHIBIT 12.1: NEAR-TERM RESOURCING RECOMMENDATIONS

NEAR-TERM RESOURCING RECOMMENDATIONS	EST'D OPERATING COST IMPACT	EST'D CAPITAL COST IMPACT	TARGET
1. The DSSMSSAB should recruit a contract oversight manager to manage the land ambulance portfolio.	$120,000 / year	--	2018
2. The service's front-line resourcing should be increased by 1 additional day time ambulance (12/7) at RESC; this, to improve service workload.	$657,000 / year	$200,000 (for a fully-equipped ambulance)	2018
3. One of the ambulances at RESC should be posted at the City's west end, potentially at SSM Fire West; this, to improve coverage and response time.	--	-- (assumes space is available at no charge in an existing facility)	2018
4. The service's front-line resourcing should be increased by 1 Paramedic Response Unit (PRU). The PRU should be stationed at Goulais River on days, potentially 12/7 - this, to improve coverage and response time in the District's rural northern area.	$328,500 / year	$100,000 (for a fully-equipped PRU / assumes space is available at no charge at Goulais River)	2019

12.2 2018 Operating Budget

The cost to operate the DSSMSSAB land ambulance service in 2018, is estimated at $8.68 million. This figure represents an increase of about $1.37 million over the approved 2017 operating budget. A breakdown of the cost increase is provided in Exhibit 12.2 (next page).

EXHIBIT 12.2: ESTIMATED OPERATING COST FOR 2018

ESTIMATED OPERATING COST FOR 2018		
Land ambulance service operating budget for 2017		$7.31 million
Cost increases for 2018		
· 2017 budget adjustment	$0.30 million	
· Contract oversight manager	$0.12 million	
· One add'l daytime ambulance shift at RESC	$0.66 million	
· Fleet & equipment replacement allowance	$0.30 million	
· Total increase for 2018		$1.38 million
Estimated operating cost for 2018		$8.68 million

Operating cost increases for 2018 include:

- 2017 budget adjustment: While the budget is well-managed by both DSSMSSAB and City management, expenditures for 2017 are projected to be about $300,000 higher than budgeted. The overrun is mainly attributed to a 2015/16 Business Case that under-estimated the cost of adding an additional day car at RESC.
- Contract oversight manager: As discussed previously in Section 3 of this report, the DSSMSSAB CAO, supported by the Finance Director, manage the ambulance service portfolio; this, in addition to their many other responsibilities. It is our opinion that despite current best efforts, the ambulance service portfolio requires additional management oversight, either on a full-time or part-time basis; this, to safeguard and ensure the DSSMSSAB's accountabilities to the Province. The cost of this position is estimated at $120,000 a year.
- One additional daytime ambulance shift at RESC: This as recommended in Section 12.1, at an additional/marginal cost of $657,000 a year, for a 12-hour shift.
- Fleet and equipment replacement allowance: Our cost estimates for 2018 and beyond, include annual allowances for the future replacement of fleet, upon their retirement on an 8-year life cycle. Allowances are based on the following 2017 cost estimates: $200,000 to replace a fully-equipped ambulance; $100,000 to replace a fully-equipped PRU; and $65,000 to replace an administrative vehicle.

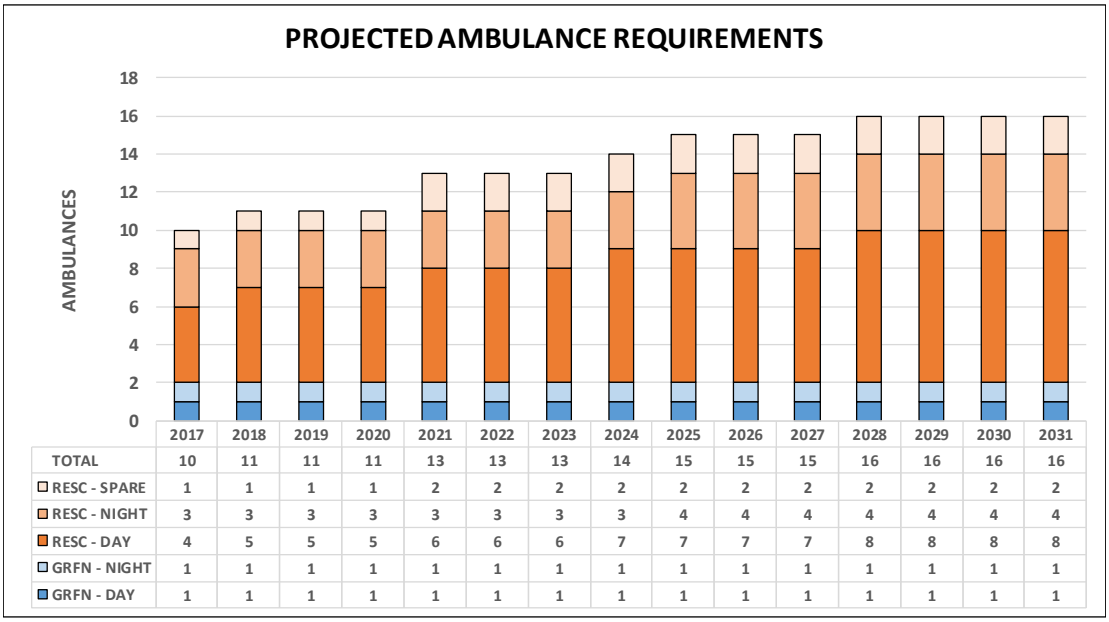
As discussed previously in Section 5 of this report, the DSSMSSAB's spending on land ambulance services is presently about $85 per capita. Spending on EMS by northern-based peers is higher, with most expending between $100 and $200 per capita.

If the Board approves the cost increase for 2018, as shown above, then the DSSMSSAB's spending on land ambulance services will increase to approximately $110 per capita.

12.3 Projected Fleet Requirements (Long-Term)

Our forecast of the service's future ambulance requirements is shown in Exhibit 12.3. The forecast is based on a preferred UHU of 35%.

EXHIBIT 12.3: PROJECTED AMBULANCE REQUIREMENTS



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
TOTAL	10	11	11	11	13	13	13	14	15	15	15	16	16	16	16
RESC - SPARE	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2
RESC - NIGHT	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4
RESC - DAY	4	5	5	5	6	6	6	7	7	7	7	8	8	8	8
GRFN - NIGHT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
GRFN - DAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

The fleet currently consists of 10 ambulances. The projected long-term requirement is 16 ambulances, as follows:

- GRFN: Deployment to stay at 1 ambulance staffed round the clock.
- RESC: Deployment to be increased by 1 additional day car in each of 2018, 2021, 2024 and 2028. Also, deployment to be increased by 1 additional night car in 2025. [24]
- The number of spare ambulances at RESC to be increased to 2 spares in 2021.

We also recommend that the ambulance fleet be augmented with one (1) PRU, which should be introduced / stationed at Goulais River in 2019.

The projected resourcing requirements are based on a low growth demand forecast of about 3% per annum.

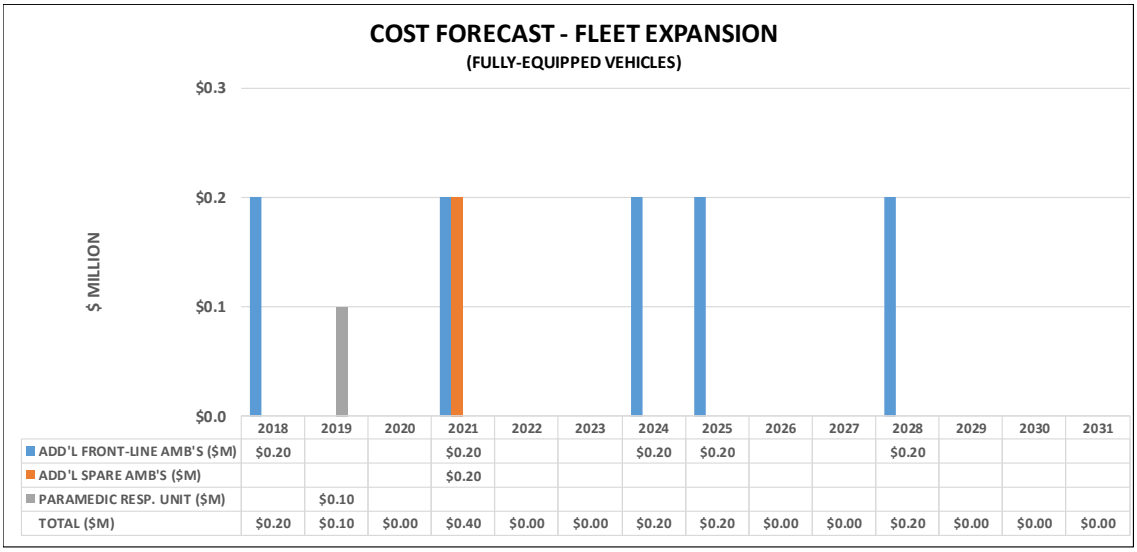
If EMS demand increases at a faster pace, then so also will the requirement for additional ambulance resources increase more rapidly. Conversely, if EMS demand increases at a slower pace, then so also will the requirement for additional resources slow down.

[24] All new shifts will of 12 hours duration; this, per the service's current approach to deployment.

12.4 Cost Forecast – Fleet Expansion (Long-Term)

Exhibit 12.4 presents our projected in-year costs for fleet expansion to 2031. Costs are presented in 2017 dollars. They are the gross costs, which are potentially eligible for MOHLTC subsidy at 50%.

EXHIBIT 12.4: COST FORECAST – FLEET EXPANSION



	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
ADD'L FRONT-LINE AMB'S ($M)	$0.20			$0.20			$0.20	$0.20			$0.20			
ADD'L SPARE AMB'S ($M)				$0.20										
PARAMEDIC RESP. UNIT ($M)		$0.10												
TOTAL ($M)	$0.20	$0.10	$0.00	$0.40	$0.00	$0.00	$0.20	$0.20	$0.00	$0.00	$0.20	$0.00	$0.00	$0.00

12.5 Cost Forecast – Land Ambulance Operating (Long-Term)

Exhibit 12.5 presents our projected costs for future land ambulance operations to 2031. Costs are presented in 2017 dollars. They are the gross costs, which are potentially eligible for MOHLTC subsidy at 50%.

EXHIBIT 12.5: COST FORECAST – LAND AMBULANCE OPERATING

YEAR	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
PRIOR YEAR BUDGET - GROSS ($M)	$7.31	$8.68	$9.03	$9.03	$9.73	$9.73	$9.73	$10.41	$11.10	$11.10	$11.10	$11.78	$11.78	$11.78
INCREMENTAL OPERATING COSTS ($M)														
2017 BUDGET ADJUSTMENT	$0.30													
CONTRACT OVERSIGHT MANAGER	$0.12													
ADD'L AMB. SHIFT - DAYS	$0.66			$0.66			$0.66				$0.66			
ADD'L AMB. SHIFT - NIGHTS								$0.66						
PRU SHIFT - DAYS		$0.33												
CAPITAL ($M)														
REPL'T OF FULLY-EQUIPPED AMB'S	$0.28			$0.05			$0.03	$0.03			$0.03			
REPLACEMENT OF ADMIN. VEHICLES	$0.02													
REPLACEMENT OF PRU		$0.01												
TOTAL INCREMENTAL COST ($M)	$1.38	$0.34		$0.71			$0.68	$0.68			$0.68			
PROJECTED EXPENDITURE - $ MILLION	$8.68	$9.03	$9.03	$9.73	$9.73	$9.73	$10.41	$11.10	$11.10	$11.10	$11.78	$11.78	$11.78	$11.78

Assumptions underlying the operating cost forecast are set out below.

- 2018 cost increases were discussed previously in Section 12.2. They include: a 2017 budget adjustment of $300,000; introducing a new contract oversight manager position estimated at $120,000 a year; adding an additional daytime ambulance shift at RESC at an estimated operating cost of $657,000 a year; and incorporating an allowance of $30,000 for the future replacement of fleet with fully-equipped vehicles on an 8-year life cycle.
- Introduce/station a day-shift PRU at Goulais River in 2019, at an estimated operating cost of $328,500 a year.
- Add additional daytime ambulance shifts at RESC in 2021, 2024 and 2028; each at an estimated operating cost of $657,000 a year.
- Add an additional night time ambulance shift at RESC in 2025, at an estimated operating cost of $657,000 a year.
- Adjust the annual allowance for the future replacement of fleet and equipment, in step with the above noted fleet expansions.

APPENDIX A: LIST OF ACRONYMS

APPENDIX A: LIST OF ACRONYMS

ACP	Advanced Care Paramedic
ACR	Ambulance Call Report *(this term is used interchangeably with PCR)*
ADRS	Ambulance Dispatch Reporting System
AMO	Association of Municipalities of Ontario
AMPDS	Advanced Medical Priority Dispatch System
ASR	Ambulance Service Review
BEC	Balanced Emergency Coverage
CACC	Central Ambulance Communications Centre
CAD	Computer Aided Dispatch
CAO	Chief Administrative Officer
CARE	Community Awareness and Response to Emergencies Program
CCAC	Community Care Access Centre
CME	Continuous Medical Education
CODE YELLOW	3 or fewer ambulances are available to respond to the next call
CODE RED	No ambulances are available / they all are tied up on calls
CTAS	Canadian Triage Acuity Scale
CVA	Cerebrovascular accident (stroke)
DDA	Designated Delivery Agent
DPCI2	Dispatch Priority Card System V2.0
DSSAB	District Social Services Administration Board
DSSMSSAB	District of Sault Ste. Marie Social Services Administration Board
e-ACR	Electronic Ambulance Call Report *(this term is used interchangeably with ePCR)*
ED	Emergency Department *(also referred to as Emergency Room)*
EFRT	Emergency First Response Team *(typically operated by a volunteer fire department)*
EMS	Emergency Medical Services *(this phrase is used interchangeably with the phrases 'ambulance services' and 'paramedic services')*
EOC	Emergency Operations Centre
e-PCR	Electronic Patient Care Report *(this term is used interchangeably with eACR)*
ERU	Emergency Response Unit staffed with 1 paramedic *(this term is used interchangeably with PRU)*
ERV	Emergency Response Vehicle *(typically operated by a field Supervisor / Commander)*
FTE	Full time equivalent
GRFN	Garden River First Nation

HR	Human Resources
HRI	Human Resource Information
IT	Information Technology
KPI	Key Performance Indicators
LHIN	Local Health Integration Network
MBNCanada	Municipal Benchmarking Network Canada *(formerly known as OMBI)*
MOF	Ministry of Finance
MOL	Ministry of Labour
MOHLTC	Ministry of Health and Long-Term Care
NEOPCP	Northeastern Ontario Prehospital Care Program (Base Hospital) based in Sudbury
NFPA	National Fire Protection Association
OAPC	Ontario Association of Paramedic Chiefs
OH&S	Occupational Health and Safety
PAD	Public Access Defibrillation
PCP	Primary Care Paramedic
PCR	Patient Care Report *(this term is used interchangeably with ACR)*
PRU	Paramedic Response Unit staffed with 1 paramedic *(this term is used interchangeably with ERU)*
PTSD	Post-Traumatic Stress Disorder
QA	Quality Assurance
RERU	Rural Emergency Response Unit
RESC	Regional Emergency Services Centre *(fire station #4 located at 65 Old Garden River Road in the City of Sault Ste. Marie)*
RGMS	Regional Growth Management Strategy
RTPP	Response Time Performance Plan
SSM	City of Sault Ste. Marie
UTM	Upper Tier Municipality
UU	Unit Utilization
VSA	Vital Signs Absent
WKDY	Weekday
WSIB	Workplace Safety and Insurance Board

APPENDIX B: PCP / ACP COMPETENCIES

APPENDIX B: PCP / ACP COMPETENCIES

	PRIMARY CARE PARAMEDIC (PCP)	ADVANCED CARE PARAMEDIC (ACP)
ACADEMIC TRAINING	**2-YEAR COLLEGE PROGRAM (LICENSURE)**	**3-YEAR COLLEGE PROGRAM (LICENSURE)**
PARAMEDICAL SERVICE DELIVERY CAPABILITY	• Rooted in formal education and training, including instruction in symptom relief and controlled/delegated medical acts • Measured in terms of knowledge, problem-solving and decision-making	• Added knowledge and skills for more advanced assessment, treatment and management of life-threatening problems
ASSESSMENT / DIAGNOSTICS	• Triage and manage a multiple-patient incident • Take patient history / conduct assessment including cardiovascular, neurological, respiratory, gastrointestinal, psychiatric and bariatric • Assess vital signs / perform diagnostic tests including sepsis, stroke and heart attack • Perform 12 lead ECG and identify S-T Elevation Myocardial Infarction (STEMI) cardiac patients	*All PCP skills PLUS* • More advanced assessment and treatment for toxicological syndromes and neonatal patients • More advanced cardiac and ECG assessment, including 15 lead ECG and ability to identify complex cardiac dysrhythmias
AIRWAY MANAGEMENT / VENTILATION	• Placement of Oro and Nasopharyngeal airways and King LT Supraglottic airway • Use of Continuous Positive Airway Pressure (CPAP) on patients with severe respiratory difficulty	*All PCP skills PLUS* • Advanced Airway placement via Nasal or Oral Endotracheal intubation • Foreign body airway blockage removal via laryngoscope and McGill Forceps
RESPIRATORY SUPPORT	• Administer oxygen using portable delivery system • Ventilation using manual (mechanical) positive pressure device	*All PCP skills*
CARDIAC	• Cardiopulmonary Resuscitation (CPR) • Automated external defibrillation (AED) • Manual defibrillation • PCP-IV, IV fluid	*All PCP skills PLUS* • IV therapy with medications • Cardioversion and other advanced cardiac pacing
TRAUMA INJURIES	• Dressing, bandaging and immobilization procedures for soft tissue injuries including burns, eyes, penetration wounds, and local cold injuries • Immobilize and treat suspected fractures • Traction splint for femurs • Application of Kendrick Extrication Device (KED) • Taser probe removal	*All PCP skills PLUS* • Needle Chest Decompression (Needle Thoracotomy) for Tension Pneumothorax
MEDICATION ADMINISTRATION	Carries medication to treat: • Diabetic emergencies • Narcotic overdose reversal • Nausea and vomiting • Allergic reactions • Acute respiratory • Minor pain medication (Tylenol and Acetaminophen)	*All PCP medications PLUS* • ACLS cardiac medications • Post cardiac arrest • Sepsis B/P support (Dopamine) • Pain medication (morphine) • Cardiac dysrhythmia management medications • Seizures • Chemical sedation

Principal Source: National Occupational Competency Profile for Paramedics, by Paramedic Association of Canada, 2011

APPENDIX C: REVIEW OF REPORTS CURRENTLY REQUIRED OF THE CITY

APPENDIX C: REPORTING REQUIREMENTS UNDER THE OPERATOR SERVICE AGREEMENT

In accordance with the terms of its agreements with MOHLTC, the DSSMSSAB is required to submit the following reports annually:

UTM / DDA SERVICE AGREEMENT	GRFN SERVICE AGREEMENT
· Service Plan · Designated Delivery Agent (DDA) Report · In-Year Financial Planning Report · Final Program Report · Financial Information Return (FIR) Year End Report · Audited Financial Statement · Response Time Performance Plan · Response Time Performance Report	· Annual Operating Budget · In-Year Expenditure Report · Annual Year-End Financial Report

Appendix B of the operator service agreement, September 2016, requires the City of Sault Ste. Marie / Fire Department's EMS Division to draft the above reports on behalf of the DSSMSSAB.

A full listing of the reports that the City is required to submit to the DSSMSSAB is shown below. APEXPRO reviewed the reporting requirements in consultation with the Client and the Fire Department's EMS Division. Our findings are discussed below, with recommendations presented in italic-bold.

NAME OF REPORT	REPORTING PERIOD	DUE DATE	APEXPRO'S FINDINGS
1. In-Year Financial Planning Report	For the next Funding Year	August 31 of each Funding Year	There are 2 such reports; an 'In-Year Financial Planning Report' to satisfy the UTM/DDA agreement, and an 'In-Year Expenditure Report' to satisfy the GRFN agreement. The names may differ, but the reports serve the same purpose. They detail actual expenditures to date and the forecast expenditure to year end. The City provides the reports to DSSMSSAB. The DSSMSSAB reviews the information and forwards it to MOHLTC to satisfy the terms of the two service agreements.

NAME OF REPORT	REPORTING PERIOD	DUE DATE	APEXPRO'S FINDINGS
			The due date shown to the left is for the In-Year Financial Planning Report, to meet the Jan-Dec reporting period under the UTM/DDA agreement. In our opinion, a date of October 31 should be added to satisfy the Apr-Mar reporting period of the GRFN agreement (i.e., the In-Year Expenditure Report).
2. Service Plan	For the next Funding Year	August 31 of each Funding Year	This report is a requirement under the terms of the UTM/DDA agreement. The Service Plan describes how the DSSMSSAB will carry out the program in the current fiscal year. The MOHLTC's fiscal year is Apr1 – Mar 31; for budget planning, they require this report by March 31. The City provides the report to DSSMSSAB. The DSSMSSAB reviews the information and forwards it to MOHLTC to satisfy the terms of the UTM/DDA agreement. The DSSMSSAB's fiscal year is Jan 1 – Dec 31; for budget planning, they require that both the Service Plan and ***Annual Operating Budget*** be submitted earlier. For such purposes, the DSSMSSAB has established a due date of August 31.
3. Financial Information Return (FIR) Monthly Report	For the entire Funding Month	Last Calendar day of each month for the previous Funding Month	This reports details actual expenditures for the previous month and year to date. The report is not expressly specified by either the UTM/DDA or GRFN agreement. However, the DSSMSSAB requires this information from the City, to fulfill its financial and quality management oversight obligations as ambulance delivery agent. The City submits this information to the DSSMSSAB monthly.
4. Financial Information Return (FIR) Year End Report	For the entire Funding Year	February 28 of the following Funding Year	This reports details actual expenditures for the previous funding year. It is a requirement under the terms of the UTM/DDA agreement. The City provides the report to DSSMSSAB. The DSSMSSAB reviews the information and forwards it to MOHLTC to satisfy its obligation. The DSSMSSAB must also submit a similar report to MOHLTC, to satisfy the GRFN agreement. That report is entitled **Annual Year-End Financial Report**. The City also provides this report to DSSMSSAB. The DSSMSSAB reviews the information and forwards it to MOHLTC. Due dates differ under the two service agreements. For the UTM/DDA agreement, the due date is May 31. To ensure sufficient time for review and

NAME OF REPORT	REPORTING PERIOD	DUE DATE	APEXPRO'S FINDINGS
			approval, the DSSMSSAB requires this report by February 28, as shown to the left. ***For the GRFN agreement, the due date is June 30. In our opinion, this date should also be added.***
5. Audited Financial Statements	For the entire Funding Year	February 28 of the following Funding Year	The UTM/DDA agreement requires the DSSMSSAB to submit an audited report on actual expenditures, attested to by a licensed public accountant. The City provides the report to DSSMSSAB. The DSSMSSAB reviews the information and forwards it to MOHLTC.
6. Final Program Report	For the entire Funding Year	February 28 of the following Funding Year	The UTM/DDA agreement requires the DSSMSSAB to submit a report affirming that all requirements in the Service Plan have been met, or to explain major variances. The City provides the report to DSSMSSAB. The DSSMSSAB reviews the information and forwards it to MOHLTC.
7. City of Sault Ste. Marie DDA Service Provider Report	For the entire Funding Year	Request By DSSMSSAB	This report, which is a requirement under the UTM/DDA agreement, is only submitted on request. It details the approved in-year budget and cost apportionments with others, where applicable (i.e., TWOMO budget and apportionment).
8. Response Time Performance Plan	For the upcoming Funding Year	August 31 of each Funding Year	The Plan, which is a requirement under the UTM/DDA agreement, sets out the DSSMSSAB's response time targets by CTAS level for the fiscal year. The DSSMSSAB has requested the plan by August 31. MOHLTC's due date for this information is October 31. ***In our opinion, the October 31 date would suffice.***
9. Response Time Quarterly Performance Report	Quarterly (3 months), based on Funding Year	Q1; April 30 Q2; July 31 Q3; October 31 Q4; January 31	The report provides a quarterly summary of response time performance relative to the planned targets by CTAS level. The report is not expressly specified by either the UTM/DDA or GRFN agreement. However, the DSSMSSAB requires this information from the City, to fulfill its quality management oversight obligations as ambulance delivery agent.
10. Response Time Performance Report	For the entire Funding Year	February 28 of each Funding Year	The report, which is a requirement under the UTM/DDA agreement, details response time performance relative to the established targets for the fiscal year. MOHLTC's due date for this information is March 31. The DSSMSSAB has

NAME OF REPORT	REPORTING PERIOD	DUE DATE	APEXPRO'S FINDINGS
			requested the report by February 28, so that it may be reviewed before it is submitted.
11. Ambulance Availability & Non-Availability Report	Monthly	Last Calendar day of each month for the previous Funding Month	The report provides a monthly summary of ambulance availability; more specifically, it reports on the frequency and duration of Code Red's (0 ambulances available). The report is not expressly specified by either the UTM/DDA or GRFN agreement. However, the DSSMSSAB has requested this information from the City, to fulfill its quality management oversight obligations as ambulance delivery agent. ***We concur that the information is relevant for the reasons specified; however, in our opinion, a quarterly summary (in lieu of monthly) would suffice.***
12. Non-Urgent Patient Transfer Report	Quarterly (3 months), based on Funding Year	Q1; April 30 Q2; July 31 Q3; October 31 Q4; January 31	The report provides a quarterly summary of all non-urgent inter-facility patient transfers. The report is not expressly specified by either the UTM/DDA or GRFN agreement. However, the DSSMSSAB has requested this information from the City, to fulfill its quality management oversight obligations as ambulance delivery agent. ***We concur with the need for this type of information for the reasons specified; however, we recommend the following: (a) Change the request to read a quarterly summary of all long distance inter-facility patient transfers in excess of 1-hour's travel between facilities; and (b) Also request a quarterly summary of all ambulance responses organized by dispatch priority. This would complement the report in #9 above, which summarizes the volumes by CTAS level.***
13. Asset Management Plan Report	Annual	August 31 of each Funding Year	The report provides an annual inventory update for vehicles and other major capital (including depreciation & anticipated replacement). The report is not expressly specified by either the UTM/DDA or GRFN agreement. However, the DSSMSSAB requires this information from the City, to fulfill its financial and quality management oversight obligations as ambulance delivery agent.
14. Asset Management Schedule & Maintenance Activity Report	Quarterly (3 months), based on Funding Year	Q1; April 30 Q2; July 31	This report is not a requirement of either the UTM/DDA or GRFN agreement. It is not currently in use. Its purpose is unclear; albeit, we assume that it would provide a quarterly summary of asset management activities.

NAME OF REPORT	REPORTING PERIOD	DUE DATE	APEXPRO'S FINDINGS
		Q3; October 31 Q4; January 31	The operator must maintain comprehensive records, to satisfy the standards for vehicle and asset maintenance, and standards for documentation, established by MOHLTC; this also to meet the provincial standards for certification as a land ambulance operator. ASR's arranged by MOHLTC, in 2014 and most recently in late April 2017, have affirmed that the service's asset management and documentation practices meet the provincial standards for certification. ***In our opinion, the DSSMSSAB does not require this quarterly summary of asset management activities, to fulfill its quality management oversight obligations as ambulance delivery agent. If a reason to question the operator's practices arises later then, at that time, the DSSMSSAB can ask the City to submit additional information, as per report #19 below.***
15. Staffing and Down Staffing Reports	Monthly	Last Calendar day of each month for the previous Funding Month	The report provides a monthly summary of ambulance downstaffing. The report is not expressly specified by either the UTM/DDA or GRFN agreement. However, the DSSMSSAB has requested this information from the City, to fulfill its quality management oversight obligations as ambulance delivery agent. ***We concur that the information is relevant for the reasons specified; however, in our opinion, a quarterly summary (in lieu of monthly) would suffice.***
16. Quality Assurance Report	Annual	August 31 of each Funding Year	This report is not a requirement of either the UTM/DDA or GRFN agreement. It is not currently in use. We assume that the report would provide an annual summary of Quality Assurance (QA) activities. According to provincial legislation, regulations and standards, the DSSMSSAB (as ambulance delivery agent) and the City (as contracted operator) are jointly and individually responsible to ensure the proper provision of land ambulance services, and quality patient care, that meets local needs; this to be demonstrated by way of documented in-service QA programs and practices. The operator maintains a record of their extensive QA activities, and can readily provide documentation attesting to the activities that they carry out, e.g.: ACR and field performance audits; incident report audits; in-service CME; investigations, and Base Hospital certification.

NAME OF REPORT	REPORTING PERIOD	DUE DATE	APEXPRO'S FINDINGS
			In contrast, were it asked to provide similar documentation, the DSSMSSAB would be hard pressed to present any evidence in this regard, other than the Operator service agreement (September 2016). Section 2 paragraph 3(c) of the Operator service agreement, states: *"The Operator will establish and maintain Quality Assurance programs and practices subject to the prior approval of the DSSMSSAB".* This statement strongly implies that the DSSMSSAB acknowledges the importance of QA as a principal means for ensuring the proper provision of land ambulance services, and quality patient care, that meets local needs; and that it too has implemented internal QA programs and practices to fulfill its obligations as ambulance delivery agent, in compliance with provincial legislation, regulations and standards. ***In our opinion, QA reports, such as those listed below, could readily serve as evidentiary documentation to this effect, and the City should be required to submit such reports: (a) A Plan outlining the proposed QA programs and practices for the coming year; (b) In-year report on the Service's QA programs and practices; and (c) Year-end report on the Service's QA programs and practices.***
17. Patient Outcomes - TBD	Quarterly	Q1; April 30 Q2; July 31 Q3; October 31 Q4; January 31	This report is not a requirement of either the UTM/DDA or GRFN agreement. It is not currently in use; nor is it feasible to expect a paramedic service to prepare such a report, since they do not have access to patient outcome information. A paramedic's responsibilities include stabilizing the patient at the scene of a medical emergency, providing patient care, and patient transport by ambulance to a hospital ED. At the ED, responsibility for a patient's care is transferred to hospital personnel, and the paramedic leaves the ED, to return to base or proceed to another call. They are not at hand to see the medical treatment administered by hospital staff, or the patient's condition following treatment. ***For these reasons, we recommend that the requirement for this report be removed from the Operator contract.***
18. Incident Reports	Upon Request	Upon Request	The recent ASR by MOHLTC affirms that service prepares incident reports in compliance with provincial legislation, regulations and standards. The reports

NAME OF REPORT	REPORTING PERIOD	DUE DATE	APEXPRO'S FINDINGS
			are submitted to MOHLTC as required. It has not been the operator's practice to provide incident reports to the DSSMSSAB. The DSSMSSAB has requested that the City submit copies of incident reports, to fulfill its quality management oversight obligations as ambulance delivery agent. ***APEXPRO concurs with the request for the reasons specified; however, we recommend that the DSSMSSAB's request be restated as "Incident Reports for Major Incidents", e.g.: ambulance involved in a traffic accident. Copies should be sent concurrently to MOHLTC and DSSMSSAB.***
19. Any Additional Report Required and/or Requested by DSSMSSAB	Upon Request	Upon Request	Self-explanatory

APPENDIX D: EMERGENCY RESPONDER TRAINING

APPENDIX D: EMERGENCY RESPONDER TRAINING

(GENERAL ILLUSTRATION)

FIREFIGHTER (EMERGENCY RESPONDER)	EMERGENCY MEDICAL RESPONDER	COMBINED PCP/ACP AMBULANCE CREW
IN SERVICE TRAINING 8-40 HOURS	RECOGNIZED TRAINING PROGRAM 80-120 HOURS	COLLEGE PROGRAM (LICENSURE) PCP - 2 YEARS / ACP - 3 YEARS
• Periodic updates (8-20 hours)	• Recertification 40-44 hrs every 3 years	• Structured CQI / Rigorous QA • Annual recertification (Base Hospital)
• Basic airway management	• Basic airway management	• More advanced airway management including CPAP • Intubation & foreign blockage removal (ACP)
• Administer oxygen	• Administer oxygen	• Administer oxygen • Manual respiratory support
• CPR / AED	• CPR / AED	• CPR / AED • Manual defibrillation / IV starts • Cardioversion and other advanced cardiac pacing (ACP)
• Scene assessment, rapid body survey • Standard first aid, basic wound management, C-spine immobilization	• Basic triage and assessment of multiple patients • Advanced first aid, dressing, bandaging and immobilization	• Advanced triage, assessment & diagnostic testing • 12-lead ECG / 15 lead (ACP) • Advanced problem identification and treatment, ranging from relatively minor to complex life-threatening
• Symptom assist • May administer Glucagon for low blood sugar, and EpiPen (Epinephrine) • No controlled / delegated medical acts	• Trained in symptom assist • May administer Glucagon for low blood sugar, and EpiPen (Epinephrine) • No controlled / delegated medical acts	• Trained in symptom relief and controlled / delegated medical acts • May administer 15+ medications • Presently may not apply EpiPen

APPENDIX E: PEER COMPARISON OF RTPP TARGETS

APPENDIX E: PEER COMPARISON OF RTPP TARGETS

Below is a peer comparison of RTPP targets by CTAS category, derived from MOHLTC data on the website: http://www.health.gov.on.ca/english/public/program/ehs/land/responsetime.html.

The peers, which are based in both northern and southern Ontario, are responsible for service areas of reasonably comparable population. The comparison is based on the most current data available, i.e., targets for funding year 2016.

SCA

Compared to peers, the DSSMSSAB has adopted a relatively high SCA target.

As discussed in the body of this report, the service performs well relative to this target.

APEXPRO has recommended that this target be maintained for funding year 2018.

EXHIBIT E.1: 2016 RTPP STANDARDS - SCA

PARAMEDIC SERVICE	TARGET - MINUTES PROV'L STANDARD	TARGET - PERCENT DDA DEFINED
GREATER SUDBURY	6 MIN	70%
DSSMSSAB	6 MIN	60%
PERTH	6 MIN	51%
COCHRANE	6 MIN	50%
CHATHAM-KENT	6 MIN	45%
ELGIN	6 MIN	45%
GREY	6 MIN	40%
NIPISSING	6 MIN	40%
ALGOMA	6 MIN	35%
PARRY SOUND	6 MIN	35%
RENFREW	6 MIN	35%
KENORA	6 MIN	30%
KAWARTHA LAKES	6 MIN	25%
MANITOULIN-SUDBURY	6 MIN	25%

CTAS 1

Compared to peers, the DSSMSSAB has adopted a relatively high CTAS 1 target.

As discussed in the body of this report, the service under-performed relative to this target.

To compensate, the DSSMSSAB reduced the target for 2017 to 75%, relative to which, the service is currently performing well.

APEXPRO has recommended that the 2017 target of 75% be maintained for funding year 2018.

EXHIBIT E.2: 2016 RTPP STANDARDS - CTAS 1

PARAMEDIC SERVICE	TARGET - MINUTES PROV'L STANDARD	TARGET - PERCENT DDA DEFINED
GREATER SUDBURY	8 MIN	80%
DSSMSSAB	8 MIN	80%
NIPISSING	8 MIN	70%
PERTH	8 MIN	70%
CHATHAM-KENT	8 MIN	60%
COCHRANE	8 MIN	60%
ELGIN	8 MIN	60%
GREY	8 MIN	60%
RENFREW	8 MIN	55%
ALGOMA	8 MIN	50%
KAWARTHA LAKES	8 MIN	50%
KENORA	8 MIN	40%
PARRY SOUND	8 MIN	35%
MANITOULIN-SUDBURY	8 MIN	30%

CTAS 2

Compared to peers, the DSSMSSAB has adopted a relatively high CTAS 2 target.

As discussed in the body of this report, the service performs well relative to this target.

APEXPRO has recommended that this target be maintained for funding year 2018.

EXHIBIT E.3: 2016 RTPP STANDARDS - CTAS 2

PARAMEDIC SERVICE	TARGET - MINUTES DDA DEFINED	TARGET - PERCENT DDA DEFINED
GREATER SUDBURY	10 MIN	85%
DSSMSSAB	10 MIN	80%
COCHRANE	10 MIN	75%
ELGIN	10 MIN	75%
RENFREW	10 MIN	65%
KAWARTHA LAKES	10 MIN	60%
PARRY SOUND	11 MIN	50%
CHATHAM-KENT	12 MIN	80%
GREY	15 MIN	90%
ALGOMA	15 MIN	70%
KENORA	15 MIN	70%
MANITOULIN-SUDBURY	15 MIN	65%
NIPISSING	15 MIN 45 SEC	90%
PERTH	16 MIN	75%

CTAS 3

Compared to peers, the DSSMSSAB has adopted an overly rigorous CTAS 3 target.

As discussed in the body of this report, the service performs well relative to this target.

Regardless, APEXPRO has recommended that the target for the non-urgent CTAS 3 category, be relaxed to 15 minutes at the 80th percentile for funding year 2018.

EXHIBIT E.4: 2016 RTPP STANDARDS - CTAS 3

PARAMEDIC SERVICE	TARGET - MINUTES DDA DEFINED	TARGET - PERCENT DDA DEFINED
DSSMSSAB	10 MIN	80%
RENFREW	10 MIN	65%
PARRY SOUND	12 MIN	55%
ELGIN	14 MIN	85%
CHATHAM-KENT	15 MIN	90%
GREATER SUDBURY	15 MIN	85%
COCHRANE	15 MIN	75%
KENORA	15 MIN	75%
NIPISSING	15 MIN 45 SEC	90%
PERTH	16 MIN	75%
ALGOMA	17 MIN	75%
GREY	20 MIN	90%
KAWARTHA LAKES	20 MIN	75%
MANITOULIN-SUDBURY	20 MIN	75%

This recommendation is intended to align the target more closely to the CTAS 3 category definition (and ideal time to physician assessment) discussed in the body of the report, and to CTAS 3 targets used by EMS peers.

CTAS 4

Compared to many peers, the DSSMSSAB has adopted a relatively high CTAS 4 target.

As discussed in the body of this report, the service performs well relative to this target.

Regardless, APEXPRO has recommended that the target for the non-urgent CTAS 4 category, be relaxed to 20 minutes at the 80th percentile for funding year 2018.

EXHIBIT E.5: 2016 RTPP STANDARDS - CTAS 4

PARAMEDIC SERVICE	TARGET - MINUTES DDA DEFINED	TARGET - PERCENT DDA DEFINED
RENFREW	10 MIN	65%
PARRY SOUND	13 MIN	60%
DSSMSSAB	15 MIN	90%
GREATER SUDBURY	15 MIN	85%
NIPISSING	15 MIN 45 SEC	90%
PERTH	16 MIN	75%
ELGIN	20 MIN	90%
GREY	20 MIN	90%
ALGOMA	20 MIN	80%
COCHRANE	20 MIN	75%
KENORA	20 MIN	75%
MANITOULIN-SUDBURY	25 MIN	85%
KAWARTHA LAKES	25 MIN	75%
CHATHAM-KENT	30 MIN	95%

This recommendation is intended to align the target more closely to the CTAS 4 category definition (and ideal time to physician assessment) discussed in the body of the report, and to CTAS 4 targets used by EMS peers.

CTAS 5

Compared to many peers, the DSSMSSAB has adopted a relatively high CTAS 5 target.

As discussed in the body of this report, the service performs well relative to this target.

Regardless, APEXPRO has recommended that the target for the non-urgent CTAS 5 category, be relaxed to 30 minutes at the 80th percentile for funding year 2018.

EXHIBIT E.6: 2016 RTPP STANDARDS - CTAS 5

PARAMEDIC SERVICE	TARGET - MINUTES DDA DEFINED	TARGET - PERCENT DDA DEFINED
RENFREW	10 MIN	65%
DSSMSSAB	15 MIN	90%
GREATER SUDBURY	15 MIN	85%
PARRY SOUND	15 MIN	75%
NIPISSING	15 MIN 45 SEC	90%
ELGIN	20 MIN	90%
GREY	20 MIN	90%
ALGOMA	25 MIN	85%
MANITOULIN-SUDBURY	25 MIN	85%
KENORA	25 MIN	75%
CHATHAM-KENT	30 MIN	95%
COCHRANE	30 MIN	75%
KAWARTHA LAKES	30 MIN	75%
PERTH	30 MIN	75%

This recommendation is intended to align the target more closely to the CTAS 5 category definition (and ideal time to physician assessment) discussed in the body of the report, and to CTAS 5 targets used by EMS peers.

APPENDIX F: RETURN TO BASE TRIP ADJUSTMENTS

APPENDIX F: RETURN TO BASE TRIP ADJUSTMENTS

APEXPRO's analysis of time-on-task incorporates return trip adjustments to cover an ambulance's return to base following call completion at a distance.

The return trip adjustments are presented below.

EXHIBIT F.1: RETURN TO BASE TRIP ADJUSTMENTS

FROM	*RETURN TRIP TIME IN HOURS TO*	
	RESC	GRFN STN
CITY OF SAULT STE. MARIE *(Note 1)*	**0.1**	**0.4**
PRINCE TOWNSHIP	**0.3**	**0.7**
GARDEN RIVER FIRST NATIONS	**0.3**	**0.1**
RANKIN L. 15 D	**0.2**	**0.3**
SSM UNORGANIZED *(Note 2)*	**0.3**	**0.7**
ALGOMA DISTRICT *(Note 3)*	**0.5**	**0.3**

NOTES:
1. The return trip is assumed to start at the Hospital.
2. The return trip is assumed to start at Goulais River
3. The return trip is assumed to start at Macdonald Meredith

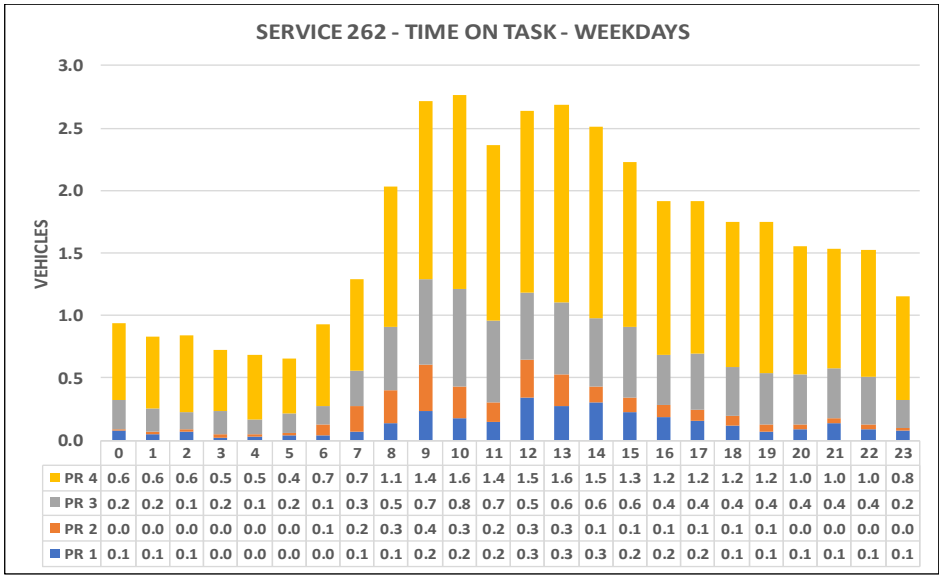
APPENDIX G – HOURLY TIME-ON-TASK PROFILES (2016)

APPENDIX G: HOURLY TIME-ON-TASK PROFILES (2016)

DSSMSSAB LAND AMBULANCE SERVICE (SERVICE 262)

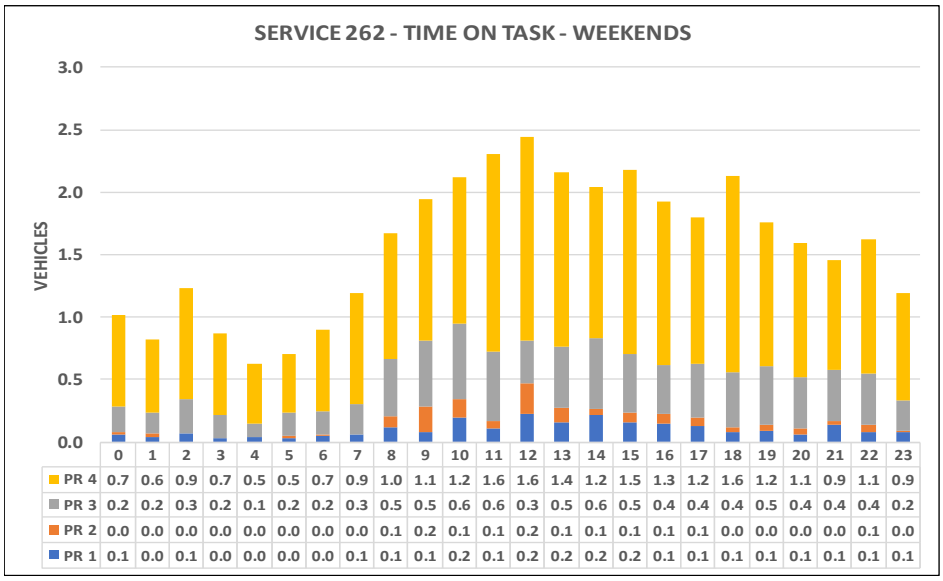
Exhibits G.1 and G.2, show the service's weekday and weekend hourly time-on-task profiles for 2016. The profiles are similar to those of other ambulance services, with higher values occurring mid-day and early evenings; and weekday values generally being higher than those on weekends.

EXHIBIT G.1: HOURLY TIMES ON TASK FOR THE SERVICE - WEEKDAYS



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PR 4	0.6	0.6	0.6	0.5	0.5	0.4	0.7	0.7	1.1	1.4	1.6	1.4	1.5	1.6	1.5	1.3	1.2	1.2	1.2	1.2	1.0	1.0	1.0	0.8
PR 3	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.3	0.5	0.7	0.8	0.7	0.5	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2
PR 2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.3	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
PR 1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1

EXHIBIT G.2: HOURLY TIMES ON TASK FOR THE SERVICE - WEEKENDS

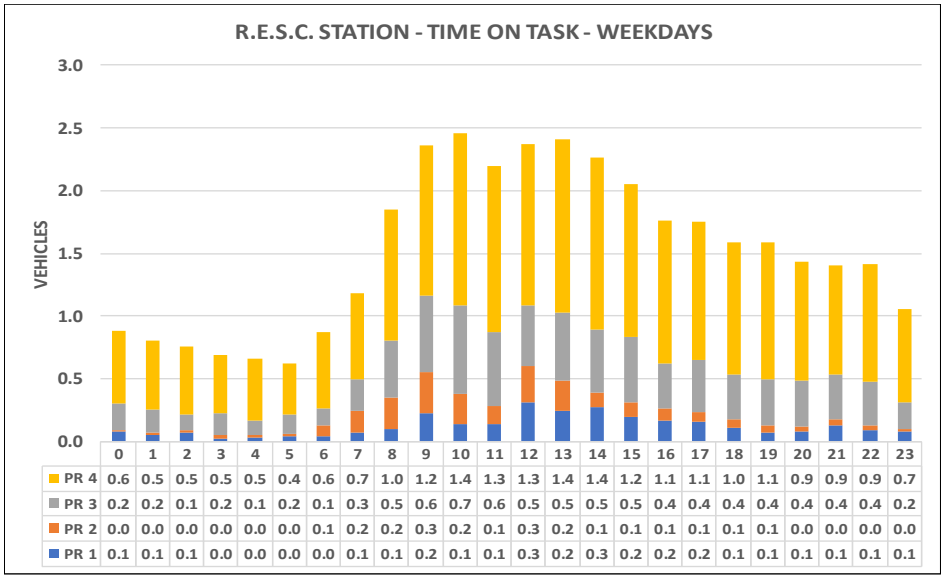


	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PR 4	0.7	0.6	0.9	0.7	0.5	0.5	0.7	0.9	1.0	1.1	1.2	1.6	1.6	1.4	1.2	1.5	1.3	1.2	1.6	1.2	1.1	0.9	1.1	0.9
PR 3	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.3	0.5	0.5	0.6	0.6	0.3	0.5	0.6	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.2
PR 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0
PR 1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

RESC STATION

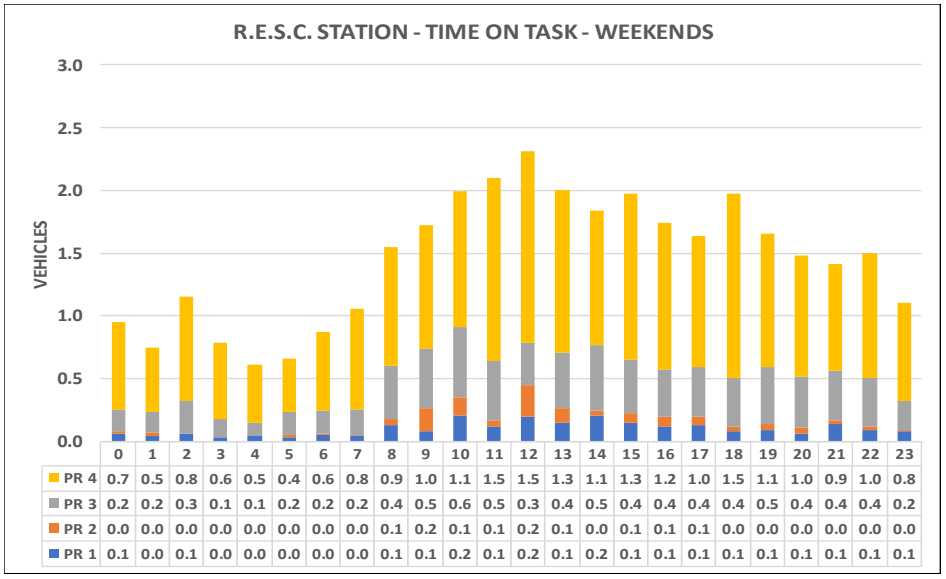
Exhibits G.3 and G.4, show the weekday and weekend hourly time on task profiles for ambulances deployed from RESC, for 2016. Again, the profiles are similar to those of other ambulance services, with higher values occurring mid-day and early evenings; and weekday values generally being higher than those on weekends.

EXHIBIT G.3: HOURLY TIMES ON TASK FOR RESC STATION - WEEKDAYS



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PR 4	0.6	0.5	0.5	0.5	0.5	0.4	0.6	0.7	1.0	1.2	1.4	1.3	1.3	1.4	1.4	1.2	1.1	1.1	1.0	1.1	0.9	0.9	0.9	0.7
PR 3	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.3	0.5	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2
PR 2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.2	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
PR 1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1

EXHIBIT G.4: HOURLY TIMES ON TASK FOR RESC STATION - WEEKENDS

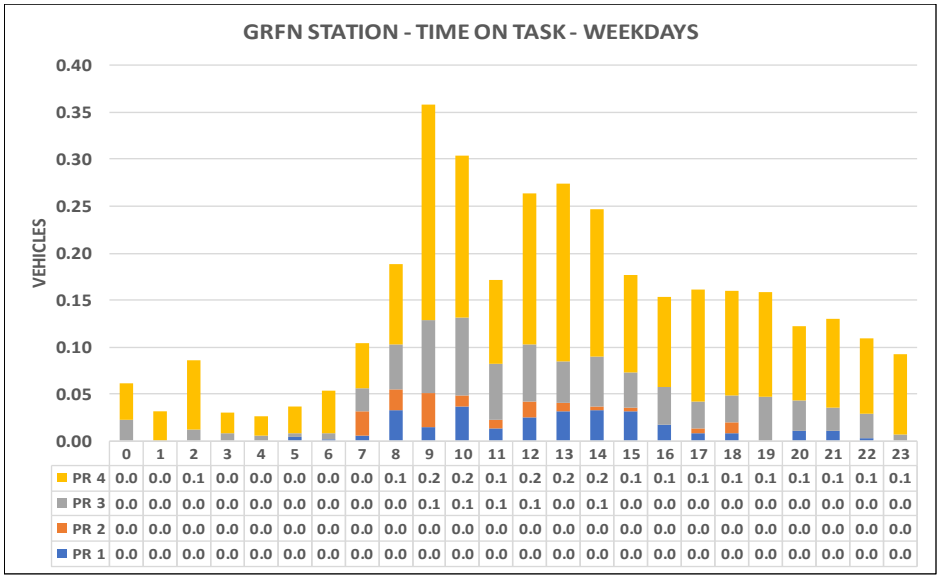


	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PR 4	0.7	0.5	0.8	0.6	0.5	0.4	0.6	0.8	0.9	1.0	1.1	1.5	1.5	1.3	1.1	1.3	1.2	1.0	1.5	1.1	1.0	0.9	1.0	0.8
PR 3	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.4	0.5	0.6	0.5	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.2
PR 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
PR 1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

GRFN STATION

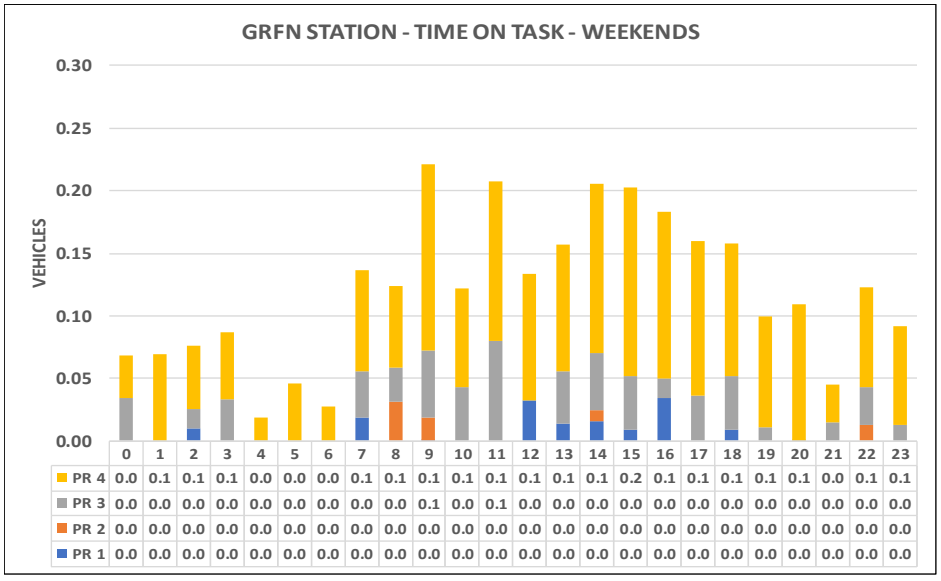
Exhibits G.5 and G.6, show the weekday and weekend hourly time on task profiles for ambulances deployed from GRFN station, for 2016. Again, the profiles are similar to those of other ambulance services, with higher values occurring mid-day and early evenings; and weekday values generally being higher than those on weekends.

EXHIBIT G.5: HOURLY TIMES ON TASK FOR GRFN STATION - WEEKDAYS



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PR 4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PR 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PR 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PR 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

EXHIBIT G.6: HOURLY TIMES ON TASK FOR GRFN STATION - WEEKENDS

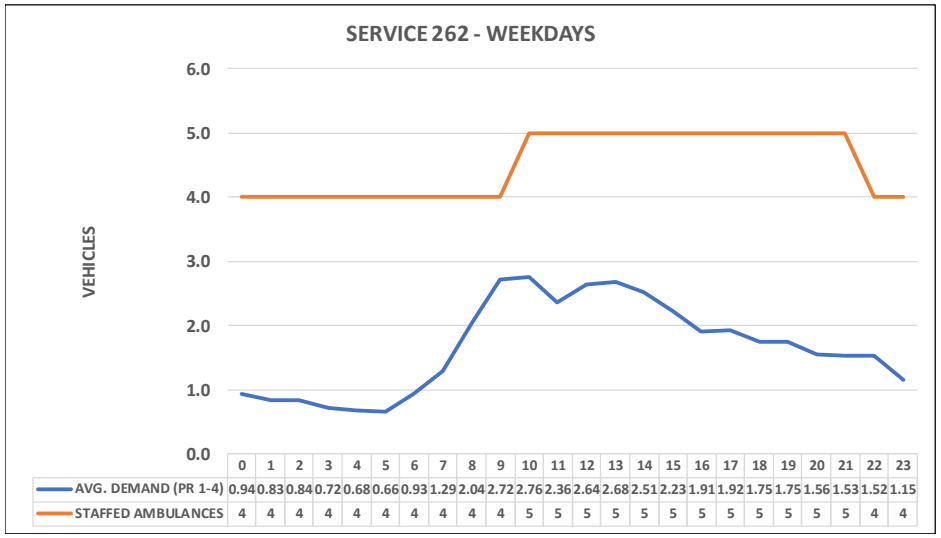


	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PR 4	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
PR 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PR 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PR 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

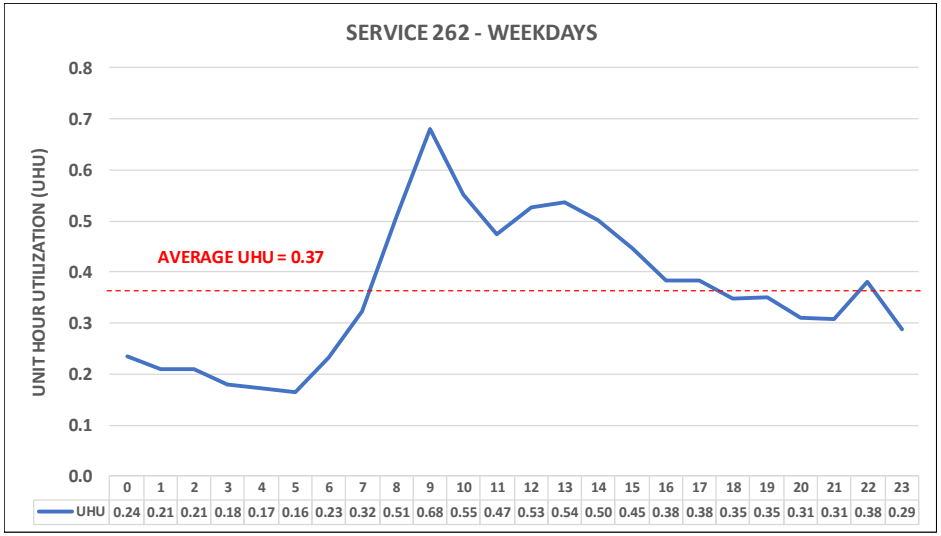
APPENDIX H: HOURLY UNIT HOUR UTILIZATION PROFILES (2016)

APPENDIX H: HOURLY UNIT HOUR UTILIZATION PROFILES (2016)

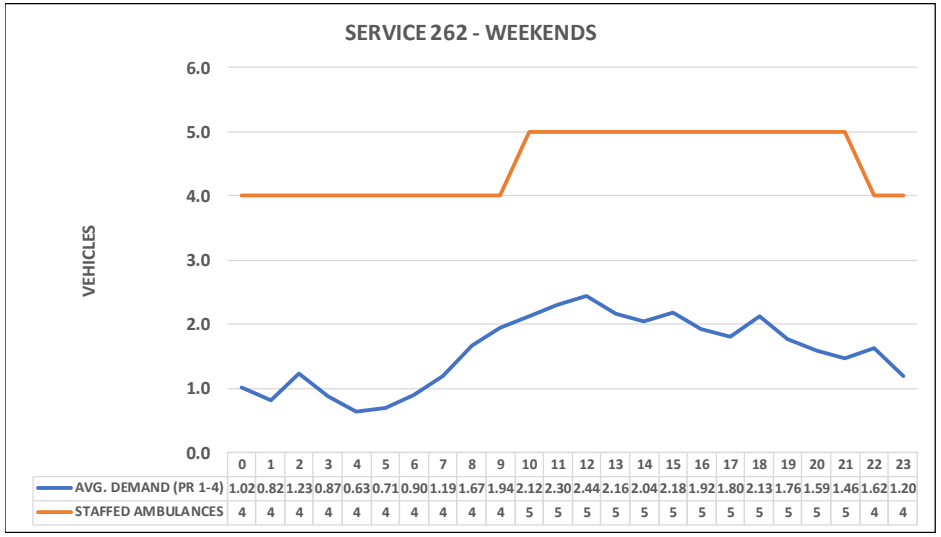
EXHIBIT H.1: TIME ON TASK, STAFFING & UHU FOR THE DSSMSSAB SERVICE (SERVICE 262)



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
AVG. DEMAND (PR 1-4)	0.94	0.83	0.84	0.72	0.68	0.66	0.93	1.29	2.04	2.72	2.76	2.36	2.64	2.68	2.51	2.23	1.91	1.92	1.75	1.75	1.56	1.53	1.52	1.15
STAFFED AMBULANCES	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	4	4



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
UHU	0.24	0.21	0.21	0.18	0.17	0.16	0.23	0.32	0.51	0.68	0.55	0.47	0.53	0.54	0.50	0.45	0.38	0.38	0.35	0.35	0.31	0.31	0.38	0.29



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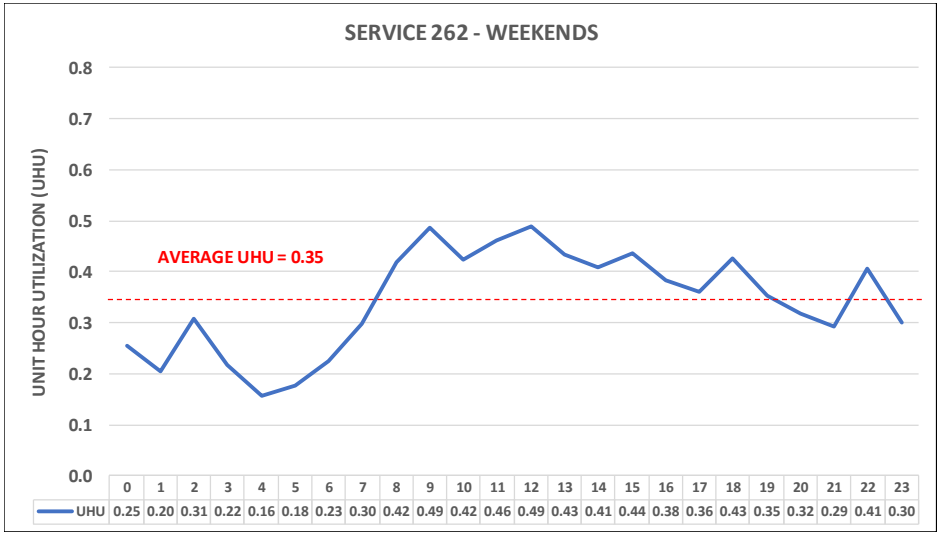
AVG. DEMAND (PR 1-4)	1.02	0.82	1.23	0.87	0.63	0.71	0.90	1.19	1.67	1.94	2.12	2.30	2.44	2.16	2.04	2.18	1.92	1.80	2.13	1.76	1.59	1.46	1.62	1.20
STAFFED AMBULANCES	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	4	4



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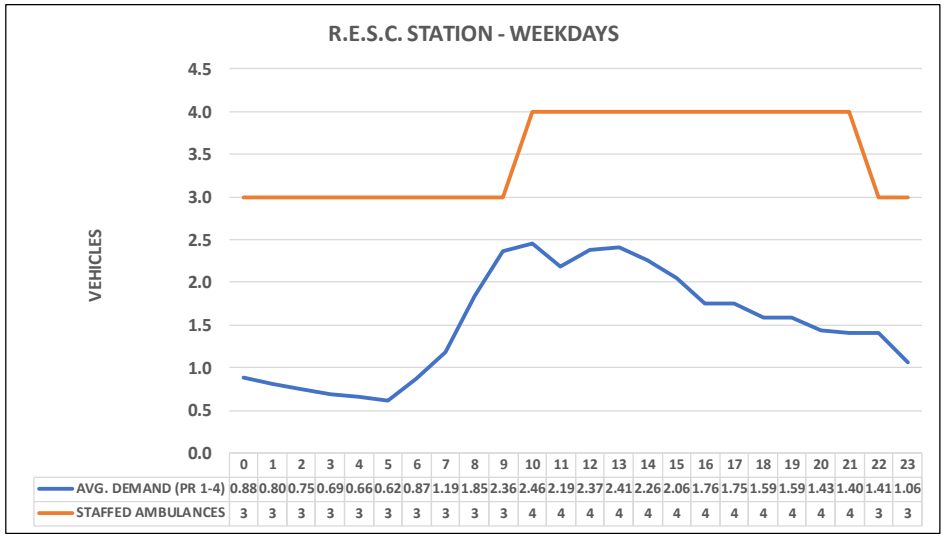
UHU	0.25	0.20	0.31	0.22	0.16	0.18	0.23	0.30	0.42	0.49	0.42	0.46	0.49	0.43	0.41	0.44	0.38	0.36	0.43	0.35	0.32	0.29	0.41	0.30

EXHIBIT H.2: TIME ON TASK, STAFFING & UHU FOR RESC STATION



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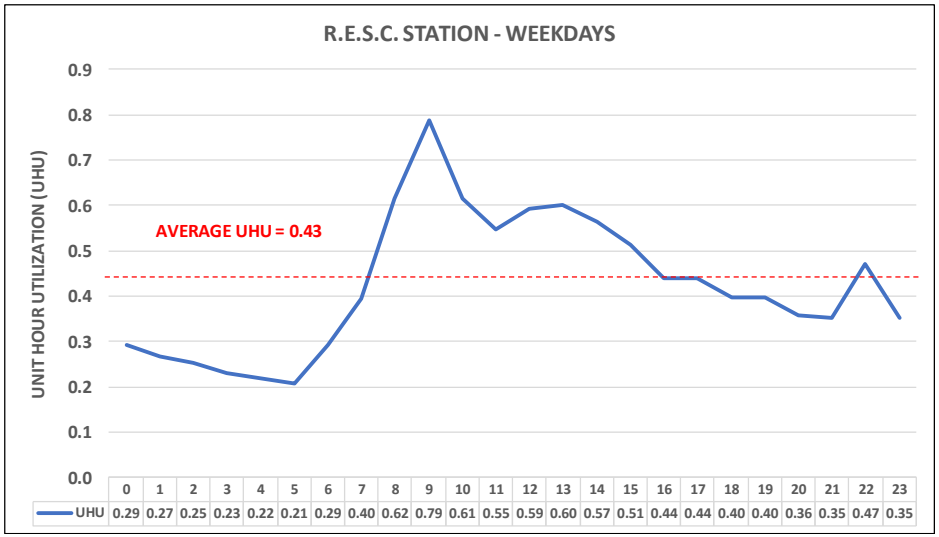
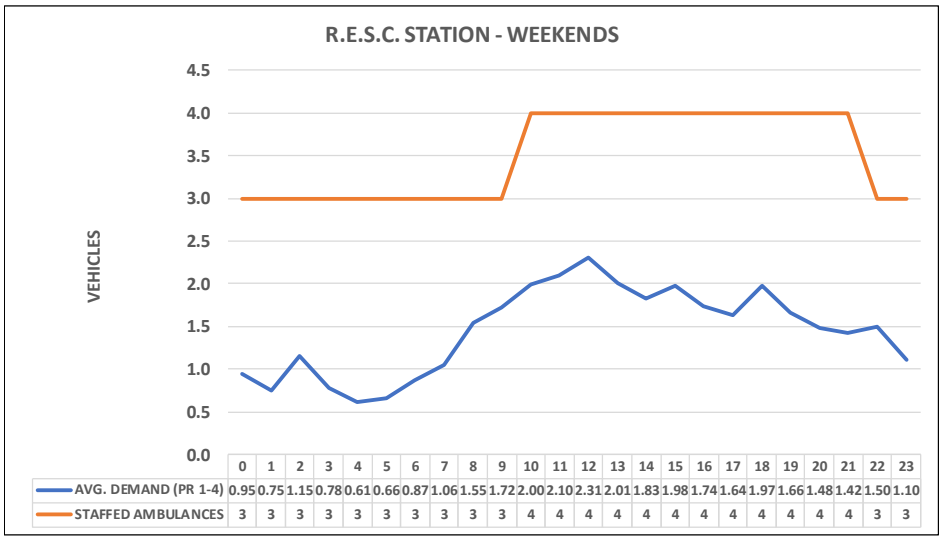
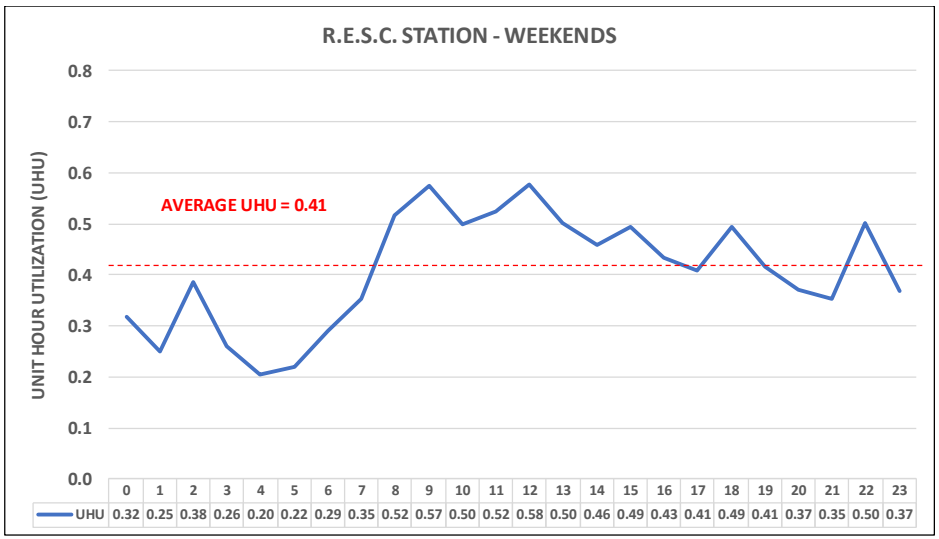
AVG. DEMAND (PR 1-4)	0.88	0.80	0.75	0.69	0.66	0.62	0.87	1.19	1.85	2.36	2.46	2.19	2.37	2.41	2.26	2.06	1.76	1.75	1.59	1.59	1.43	1.40	1.41	1.06
STAFFED AMBULANCES	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	3	3



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
UHU	0.29	0.27	0.25	0.23	0.22	0.21	0.29	0.40	0.62	0.79	0.61	0.55	0.59	0.60	0.57	0.51	0.44	0.44	0.40	0.40	0.36	0.35	0.47	0.35



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
AVG. DEMAND (PR 1-4)	0.95	0.75	1.15	0.78	0.61	0.66	0.87	1.06	1.55	1.72	2.00	2.10	2.31	2.01	1.83	1.98	1.74	1.64	1.97	1.66	1.48	1.42	1.50	1.10
STAFFED AMBULANCES	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	3	3



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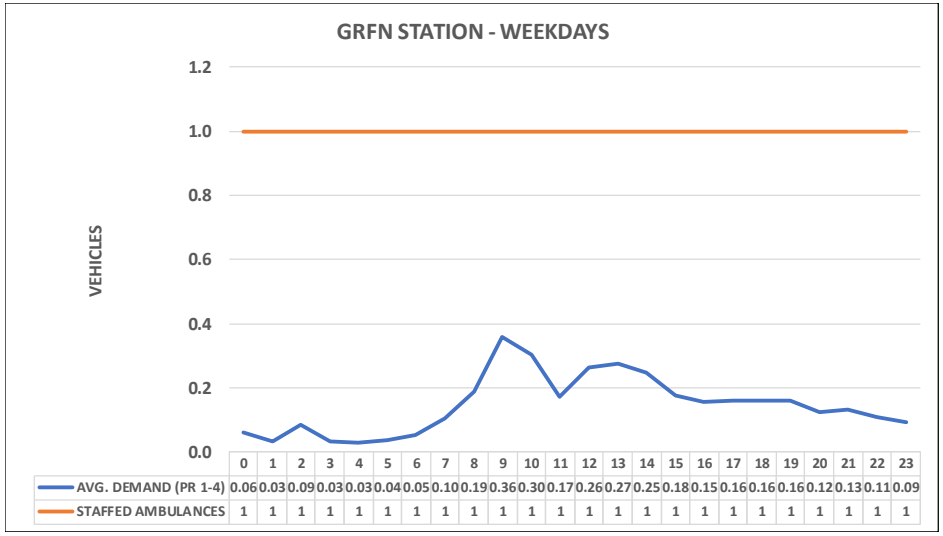
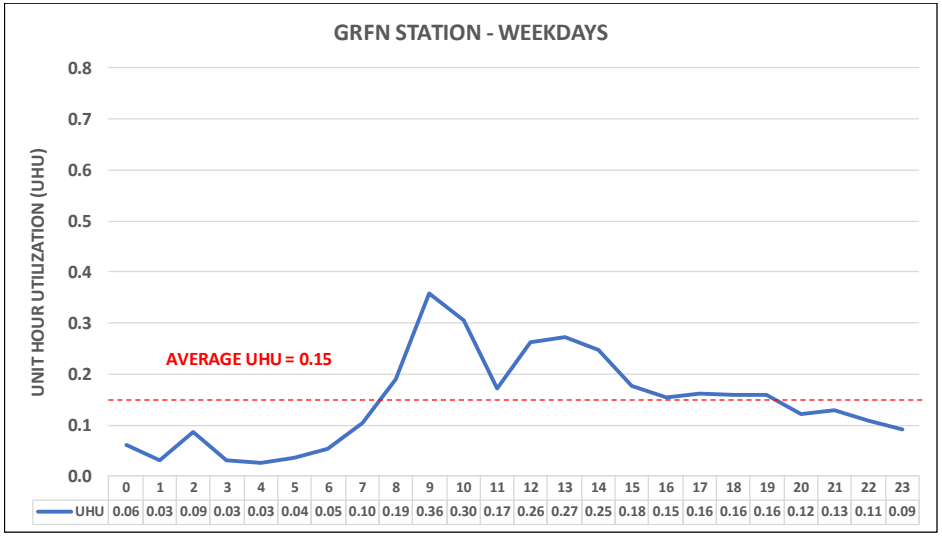
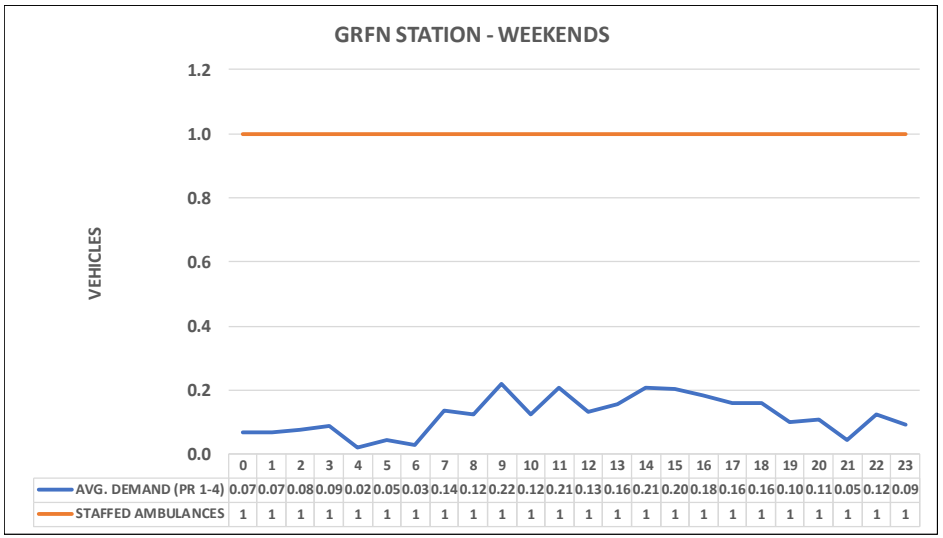
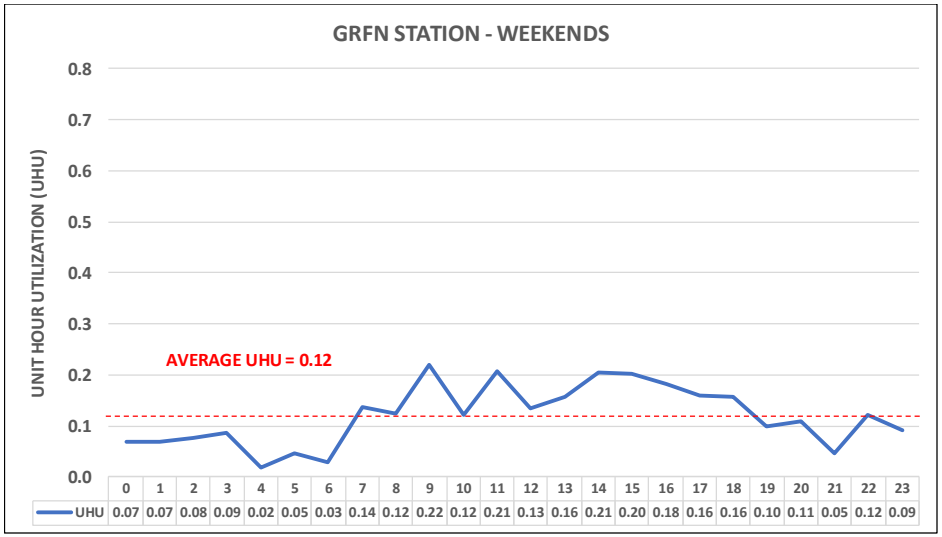
UHU	0.32	0.25	0.38	0.26	0.20	0.22	0.29	0.35	0.52	0.57	0.50	0.52	0.58	0.50	0.46	0.49	0.43	0.41	0.49	0.41	0.37	0.35	0.50	0.37

EXHIBIT H.3: TIME ON TASK, STAFFING & UHU FOR GRFN STATION









APPENDIX I: COMMUNITY PARAMEDICINE

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INTRODUCTION

Ontario's health care system is progressively shifting care delivery from hospitals and long-term care facilities, to people's homes and the community. Also changing is the role of the Ontario paramedic, which is evolving and improving, in step with the provincial health care system shift, to better meet outpatient care needs and improve patient outcomes.

Community Paramedicine is a provincially sponsored program that involves paramedics going beyond their usual emergency response role, to help seniors and people living with chronic health conditions receive non-emergency care from a paramedic, often in their own home.

This includes paramedics providing healthcare services (as listed below), and paramedics connecting patients to more appropriate home and community services, including CCACs, Mobile Mental Health Response Teams, and Collaborative Care teams within Health Links.

- Check-in calls to frequent users of 911 to see how the person is doing and determine if there is a proactive way the paramedic can help, such as referring the person to appropriate health care services.
- Home visits for seniors or others who may be at risk of losing their independence at home, to offer companionship, care and referrals.
- Routine health services, such as blood pressure checks and blood glucose checks, for people who may not have otherwise easily accessed these services.
- Education by paramedics to help people learn about healthy living and chronic disease prevention.

Benefits attributed to the provincially sponsored Community Paramedicine program include:

- Helps people access care closer to home
- Helps seniors and at-risk individuals live safely in their own homes
- Helps reduce 911 calls for ambulance services (particularly, repeat calls), and low acuity ambulance transports to hospital emergency departments.

The Ontario government's proposed legislative changes, set out in Bill 160, the "Strengthening Quality and Accountability for Patients Act, 2017"), if passed, will provide paramedics with increased flexibility to deliver alternative (non-hospital) care options on-scene, by referring/transporting patients to more appropriate home and community services.

PROVINCIAL INVESTMENT IN COMMUNITY PARAMEDICINE

According to provincial media releases, the Ontario government has invested almost $18 million to support the development and expansion of Community Paramedicine programs across Ontario since 2014. These programs have successfully benefited over 21,000 patients, and resulted in over 44,000 completed patient assessments and over 5,000 referrals to appropriate health care services.

The Government's current year investment in community paramedicine projects is estimated at $6 million province-wide.

In May 2017, the Premier of Ontario confirmed that the Government is renewing its support for the province's successful community paramedicine programs in the Cochrane, Manitoulin-Sudbury and Algoma districts, with an estimated in-year investment of about $771,200 for community paramedicine projects in the following predominately rural North East LHIN communities: the districts of Algoma, Cochrane, Manitoulin-Sudbury, Nipissing and Parry Sound; and the City of Greater Sudbury.

To date, community paramedicine projects in the North East LHIN have provided paramedic-based health care services to over 8,200 persons.

ONTARIO COMMUNITY PARAMEDICINE PROJECT EXPERIENCE

About 50% of Ontario's Paramedic Services participate in community paramedicine, in one form or another. The services provided include:

- Paramedics supplementing healthcare services in underserviced rural and remote areas, e.g. wellness clinics, home visits – checking vital signs;
- Paramedics collaborating with healthcare and social service providers to connect patients (often high-volume EMS users) to appropriate community-based resources; and
- Paramedics routinely providing health care services in assisted living facilities in lieu of patient transport.

Many of the programs include a patient referral component focusing on "high risk" callers i.e. individuals with mental health issues or chronic medical conditions who repeatedly call for EMS services multiple times a year (often exceeding 10 times a year). For this relatively small sector of the population, the benefits can be substantial with reductions in ambulance transports of 30 to 50% or more being reported.

In this regard, it also has been shown that in some municipalities (including Sault Ste. Marie), relatively few address locations can be responsible for up to 20% of an ambulance service's total call volume.

Listed below are examples of community paramedicine programs being trialed across Ontario, and in other Canadian jurisdictions.

- CREMS (Community Referral EMS), whereby paramedics refer patients to the appropriate health or social service agency within the community. Reasons for referrals may include: failure to thrive, occupancy safety issues (falls), mental health (dementia and confusion), substance abuse, mobility issues, isolation and frequency of calls to 911. Services participating in this program include but are not limited to; York, Essex, Guelph, Toronto, Hamilton, Middlesex, Grey, Oxford and Niagara;
- PERIL (Paramedics Assessing Elders at Risk of Independence Loss): Studies have shown that 20% of persons over 65, and 44% of persons over 85, lack the support they need to

function independently. Depending on the call, paramedics will assess social isolation and lack of support issues that would reduce independence.

- EPIC (Enhancing Paramedicine in the Community): EPIC is a clinical trial to study the effectiveness of community paramedicine in reducing emergency room visits by chronic disease patients (specifically suffering from congestive heart failure, diabetes, or chronic obstructive pulmonary disorder). There are a number of studies currently underway in Ontario and across Canada, with significant results i.e., up to 50% reduction in ambulance transports to the emergency department.

- Community Wellness Clinics: Paramedics working with other health care professionals, staff fixed or mobile health units, to provide preventative care and educational assessments to the hard to reach and hard to serve populations. There are both urban and rural models designed to serve the most vulnerable and isolated members of the community.

- Extended Care Paramedics: Paramedics will respond to non-emergency calls in nursing homes and private residences to assess and potentially treat residents on site. These paramedics can suture small lacerations, do IVs, cardiograms, casts for minor fractures and coordinate the resident's transport to hospital if required. This program has been shown to reduce patient transports to hospital, as well as ER waits for physician assessment. Treat and release protocols in Ontario are other examples of this type of program.

- Remote Patient Monitoring: Remote Patient Monitoring is a demonstration project being trialed by 8 paramedic services in Ontario including Hastings Quinte, Peterborough, Wellington, Cochrane-Parry Sound, Essex, Grey, Renfrew and Sudbury. The trial uses wireless technology to monitor residents with chronic health failure or chronic obstructive pulmonary disease remotely from the comfort of their own homes. The technology notifies paramedics when warning signs arise. They in turn makes patient contact and will refer the patient to a medical provider for treatment before the onset of a crisis requiring immediate intervention and transport. The project is being funded through Canada Health Infoway and is strongly supported by the Local Health Integration Networks.

- Telehealth: Currently, Ontario MOHLTC manages a telephone-based program whereby citizens can call in, and seek medical advice and treatment options. The program has remained virtually unchanged since 2001. However more recently, it has been publicized more so under the provincial "make the right call" initiative. The concept of telehealth can be extended into the Central Ambulance Communications Centre (CACC) whereby a structured physician oversite model could allow for more patients being treated in place with referrals at a later date to the primary care physician. Many Paramedic Chiefs see the benefit of emerging technology enabling a telehealth type model being implemented, to facilitate treat and release, and avoidance of transport to the ER. This would be combined with extended scope of practice for paramedics.

SUMMARY

Results arising from the above noted community paramedicine trials are encouraging.

While specific trial results will vary depending on factors such as those listed below, overall the trials have been shown to: promote health care access closer to home; help seniors and at-risk individuals live safely in their own homes; help to reduce 911 calls for ambulance services, as well as low acuity ambulance transports to hospital emergency departments.

- Strength of the partnerships / collaborations in delivering the community paramedicine program;
- Integration of community paramedicine within the conventional "Circle of Care", i.e., vis-a-vis information sharing and regular communication among health care professionals;
- Patients' acceptance of the paramedics expanded role, and their willingness to consent to a community service referral; and
- Maturity of the model. On the whole, community paramedicine models involving assessment and referral are evolving relatively swiftly into generally acceptable / highly effective programs. Whereas, relatively recent models (i.e., involving paramedics in Family Health Teams) will require more time to become fully established.

In some cases, trials have also been shown to present fewer documented incidents of medical crisis for patients with chronic conditions; and fewer accidents resulting from preventable causes.

Similar results have been reported by community paramedicine programs in Australia, the United Kingdom, the United States and other Canadian jurisdictions, where it has been concluded that community paramedicine services are feasible, safe and effective in delivering healthcare, at high levels of patient satisfaction. Also, that such services have potential to reduce healthcare costs by reducing unnecessary and avoidable ED and paramedic service usage.

As such, it is not surprising that community paramedicine is incorporated in the "Ontario 2015 Action Plan for Health Care", as a key health care strategy, and that the positive benefits have been sufficiently compelling for the Ontario Government to reaffirm its support and funding for community paramedicine programs province-wide.

Social Services

District of Sault Ste. Marie Social Services
Administration Board
Conseil d'Administration des Services du District Sault Ste. Marie
Zhawenimi-Anokiitaagewin

BOARD REPORT

AUTHOR: Robert Rushworth

DATE: March 18, 2021

RE: Paramedics and Community Vaccinations

RECOMMENDATION

It is recommended that the District of Sault Ste. Marie Social Services Administration Board (DSSMSSAB) accept this report as information on the early stages of paramedic's participation in community Covid-19 vaccination administration.

BACKGROUND INFORMATION

Although the Paramedic Service does not have a recognized community paramedic program, through the support of Dr. Garniss (our base hospital physician), paramedics have been able to participate in the mass immunization clinics (MIC) at the GFL Memorial Gardens. Working with our Algoma Ontario Health Team (AOHT) partners we have joined their efforts to increase the number of vaccines administered locally. Scheduled paramedics are assigned to the clinic in a dual role of vaccinator and as a medical first responder, offering patient care when needed until an ambulance and crew arrives.

SUMMARY/OVERVIEW

At the first three day clinic almost 1300 vaccines were "in the arms" of the first target group, mainly long term care workers and essential care givers. The next clinic scheduled for March 13-16 has a target of another 4800 vaccinations, if delivery and vaccine supply remain as projected.

STRATEGIC PLAN IMPACT

Paramedics, working alongside many other health care professionals, have all been very positive about the experience of working their shift at the clinic. Looking ahead there may be opportunity for participation in assisting with the few truly bedridden population in the community who cannot access the public organized events, but this is just being explored at this time.

FINANCIAL IMPLICATIONS

The cost for this added service to the community in support of the Covid-19 vaccination drive will be tracked and processed as Covid Expenditures and submitted to the Ministry of Health for full reimbursement. There may also be an opportunity to use workers requiring modified accommodation, reducing WSIB and sick time costs.

CONCLUSION

Support of senior management and the paramedics has made this participation in the community possible and is an example of the services professional paramedics can perform for our citizens outside of the treat and transport emergency medical care function.

Respectfully submitted,

Robert Rushworth
Chief Paramedic Services

Approved by:

Mike Nadeau
Chief Executive Officer

Ministry of
Municipal Affairs
and Housing

Office of the Minister
777 Bay Street, 17th Floor
Toronto ON M7A 2J3
Tel.: 416 585-7000

Ministère des
Affaires municipales
et du Logement

Bureau du ministre
777, rue Bay, 17e étage
Toronto ON M7A 2J3
Tél. : 416 585-7000

March 10, 2021

Luke Dufour
Board Chair, Sault Ste. Marie DSSAB
390 Bay Street
Sault Ste. Marie ON P6A 5L8

Dear Luke Dufour:

I am pleased to be writing to you today with important details regarding additional provincial funding being offered to you through the third phase of Ontario's Social Services Relief Fund (SSRF). **To receive this funding, the Ministry requires a completed Investment Plan and your sign back to the terms and conditions of the funding by March 22, 2021.**

As you know, protecting the health and well-being of Ontarians has been the government's number one priority throughout the COVID-19 pandemic. Our government has made several difficult decisions to safeguard Ontarians, as well as public health and workplace safety measures made in consultation with the Chief Medical Officer of Health and other healthcare experts.

We have also invested $510 million to support Ontario's Service Managers and Indigenous Program Administrators through two iterations of the province's SSRF, as well as other provincial investments to support those suffering from mental health and addictions issues and to support isolation centre capacity in select municipalities. We know that this funding has been effective in supporting Service Managers and Indigenous Program Administrators to respond quickly, adapt services, and address the housing and economic impacts of COVID-19 in their communities.

However, we also know that the need for this funding will continue beyond March 31, 2021. We have heard from our municipal partners that additional funding is urgently needed to continue to protect the health and safety of vulnerable people as the province begins to recover from the COVID-19 pandemic. For that reason, our government has announced an additional investment of $255 million in one-time operating funding to enable a third phase of the SSRF, bringing the government's total SSRF investment to $765 million.

I am pleased to confirm that the Sault Ste. Marie DSSAB will receive an additional **$1,398,554** in provincial funding through a third phase of Ontario's SSRF.

Program Details – Social Services Relief Fund Phase 3

To mitigate the continued impact of the COVID-19 pandemic on the homelessness sector, the Ministry has announced funding for a third phase of Ontario's SSRF. This funding supports operating expenses only. Funding is to be used by Service Managers and Indigenous Program Administrators to off-set their eligible operating expenses (in accordance with the Social Services Relief Fund Phase 3 Program Guidelines) beginning March 1, 2021 and incurred up to December 31, 2021.

Additional funding to Service Managers and Indigenous Program Administrators will help allow staff to:

- Maintain, monitor and improve infection prevention and control measures while there is community transmission and risk of transmission in congregate care settings such as emergency shelters; and
- Ensure stability in the homelessness sector by continuing current services and supports that address the negative impact of the on-going COVID-19 pandemic on vulnerable households and more generally on Ontario's economic recovery (e.g., impact of sustained reductions in or loss of income on housing stability and the need for rent supplements or support with rent arrears to avoid eviction).

Consistent with SSRF Phase 2, Service Managers are required to consider the use of operating funding for rental assistance (e.g., "rent banks") to support renter households who may be in rental arrears and at a high risk of becoming homeless.

Of the additional funding, Service Managers and Indigenous Program Administrators may use up to three per cent of their allocation for program administration in line with the approach under the SSRF Phase 2.

Note that unlike the SSRF Phase 2, capital projects are not eligible for funding under the SSRF Phase 3. The funding is only for eligible operating expenses incurred during the funding period. Consistent with SSRF Phase 2, the Ministry will require monthly updates on expenditures under SSRF Phase 3.

This amendment forms part of your Community Homelessness Prevention Initiative (CHPI) Service Manager Service Agreement effective January 1, 2013 with Her Majesty the Queen in right of Ontario as represented by the Minister of Municipal Affairs and Housing ("Service Agreement") and any breach of any of the terms of the amendment shall constitute an Event of Default under the Service Agreement. All other provisions, including Section 17 – Audits and Reviews, of the Service Agreement remain in full force and effect.

Reporting Requirements

Reporting requirements for this phase of the SSRF will be consistent with the current high-level CHPI reporting. However, these requirements will be augmented with monthly reporting to the Ministry. As well, Service Managers will be required to provide specific examples on the use of SSRF Phase 3 funding from time-to-time to demonstrate effectiveness of the investment.

To receive these additional SSRF Phase 3 funds, you are required to complete and submit the sign-back section of this letter and the enclosed Investment Plan, outlining the proposed uses of funding by each eligible spending category and projected quarterly funding needs in your service area and return it to the Ministry by **March 22, 2021**.

Service Managers are encouraged to engage with their local Public Health Unit throughout the delivery of the SSRF Phase 3, to ensure funds are being targeted where they are needed most.

You may submit your signed confirmation and Investment Plan via e-mail to:

Jim Adams, Director of the Housing Programs Branch
Ministry of Municipal Affairs and Housing
jim.e.adams@ontario.ca

If the signed-back letter and Investment Plan are not received by March 22, 2021, the Ministry will not be able to commit your allocation under the SSRF Phase 3 and will need to consider reallocating your portion of SSRF Phase 3 funding to other areas of the province. Please note that as this timeline cannot be amended, Service Managers are strongly encouraged to consider the use of emergency council sessions or other strategies to ensure they can complete and submit the required sign-back letter and Investment Plan by March 22, 2021.

Upon receipt of the sign-back and Investment Plan, the Ministry will confirm and communicate its approval of the Investment Plan, and will proceed to initiate your first payment based on your cash flow requirements outlined in the Investment Plan.

On a separate matter, at the onset of COVID-19, Ontario directed Service Managers to put in place outbreak-management plans to prepare for increases in COVID-19 cases in shelter spaces. With new COVID-19 variants of concern now in Ontario, there is an increased risk of spread to vulnerable people.

As a result, the Ministry recently directed Service Managers to add new requirements to their outbreak management plans and to sign and return updated Infection, Prevention and Control (IPAC) attestations. As communicated by the Ministry, these attestations must be signed and submitted to the Ministry by March 19, 2021.

As a reminder, for all provincial housing programs that provide operating funding, Service Managers must acknowledge support of the province in a form and manner as directed by the Ministry. While we understand these exciting funding

opportunities are often met with anticipation by residents and community agencies, these communication protocols have been agreed to by Service Managers. If you wish to make an announcement of funding, I would like to remind you that you are required to notify your municipal services office well in advance for consideration by the province.

Again, protecting the health and well-being of all Ontarians continues to be the government's number one priority. We sincerely appreciate your efforts to assist vulnerable people in your communities and I look forward to continuing to work together as we move forward with recovering from the COVID-19 pandemic.

Yours truly,

The Honourable Steve Clark
Minister of Municipal Affairs and Housing

Enclosures

c. Mike Nadeau, Chief Administrative Officer
Jeff Barban, Director of Housing