



Report To: DSB Program Planning Committee  
From: Michael Maclsaac, Chief of EMS  
Date: April 22, 2015  
Re: Wikwemikong Staffing Enhancement – Issue Report

### **Recommendation**

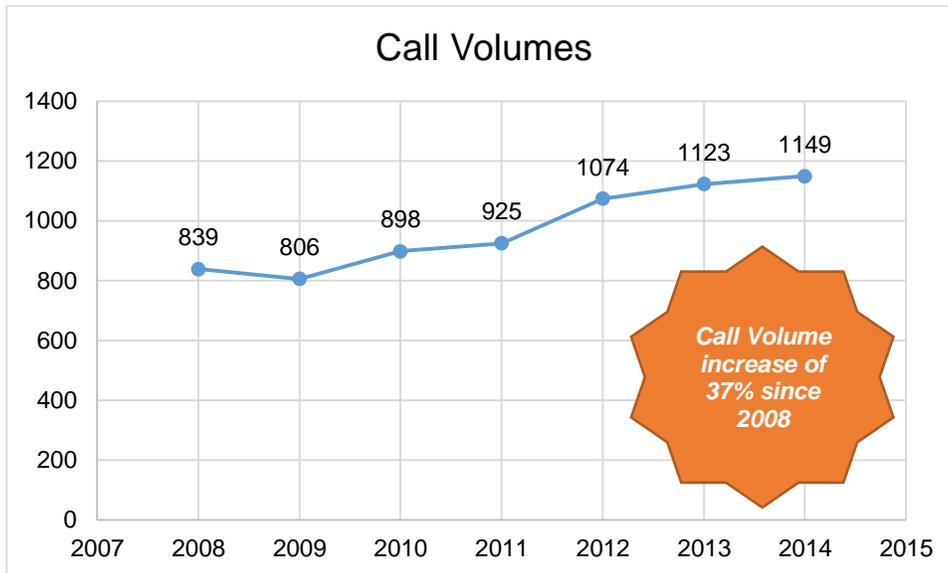
That the staffing levels in Wikwemikong be increased due to call volumes and number of times calls are being serviced by other locations.

### **Background**

As the land ambulance service provider for the area, the Manitoulin-Sudbury DSB continually reviews its ability to response to emergency calls based on the hours of staffing. Since 2011 there have been yearly staffing plan updates presented to the Board for consideration in the enhancement of needed services. Staffing enhancements have been made in Hagar, Mindemoya, Massey, Noëlville, Foleyet, Killarney, and Gogama. These enhancements have required a significant investment by our municipal property taxpayers. We also must acknowledge the MOHLTC in maintaining its commitment to fund land ambulance services at 50/50 with these enhancements. After a much needed and careful review of statistics an enhancement of services in Wikwemikong must be considered.

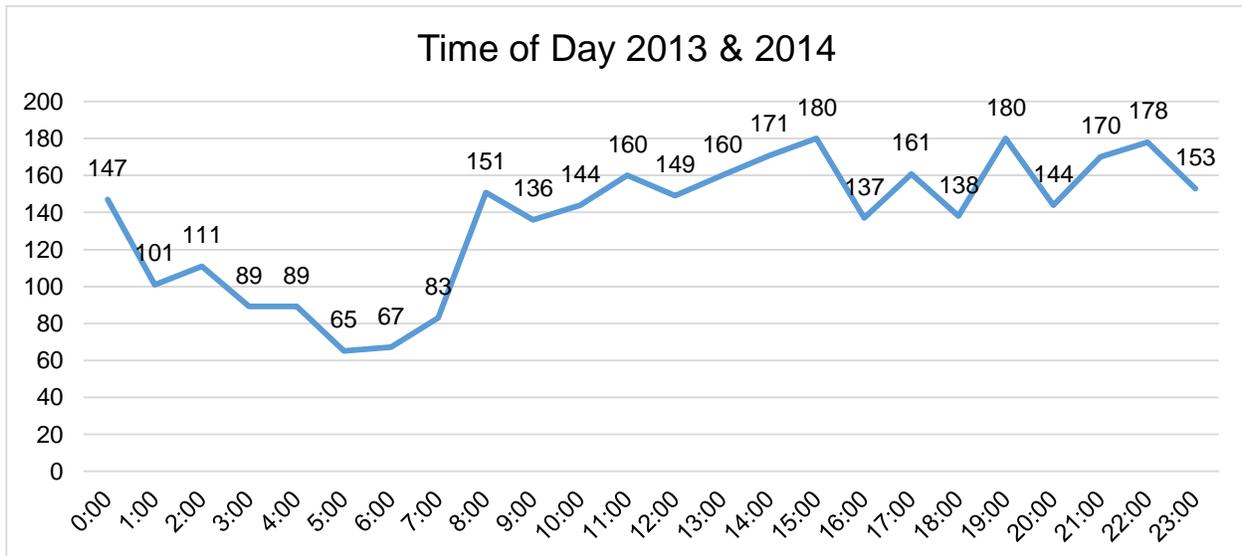
### **Current Issues**

As is generally the case across the province calls for service are increasing. This is no different in Wikwemikong. The following chart details the increase in call volumes over the last 7 years. Please note that these call volumes do not reflect code 8 standbys and they only reflect the work of the Wikwemikong station and not the calls performed in Wikwemikong by other resources.



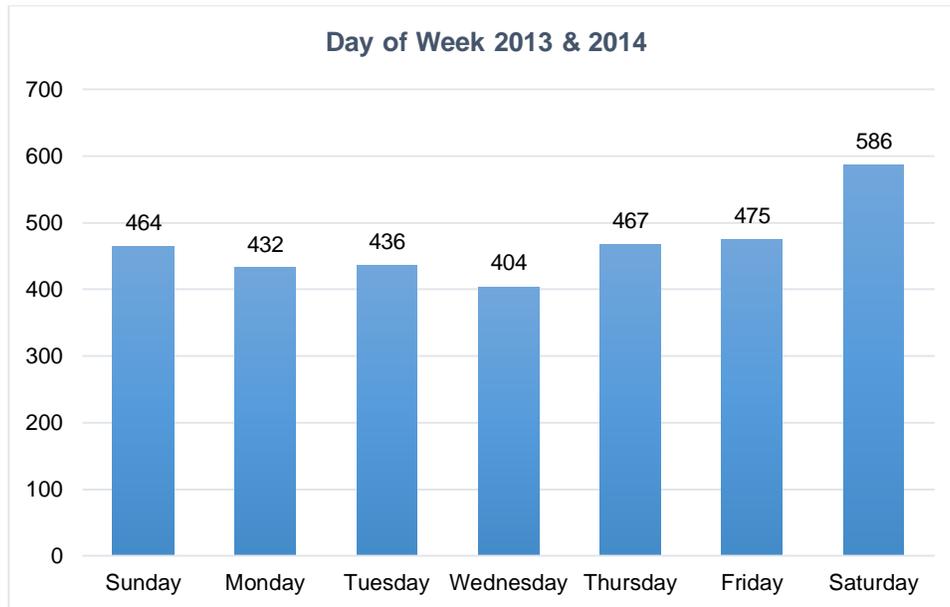
This trend in call volumes is not expected to curb. The province is expecting an increase in healthcare costs and usage of service as the population continues to age. It is a well-known fact that the elderly use healthcare in a very disproportionate amount as compared to the rest of the population.

So while call volumes continue to rise it was important to review other finer details in terms of deployment. At this point it became important to review not only the call volumes of the Wikwemikong ambulance but also to include calls that were being serviced by other ambulances. Time of day statistics were reviewed with the aforementioned criteria. The following chart reveal those findings. Please note that a review of 2 calendar years of data was used in the calculation of these statistics in an effort to ensure a greater consistency and to eliminate possible abnormalities during any one period within a year.



The trend as shown above is fairly respective of what we have reviewed in our service as a whole and is not unexpected with a rapid increase in activity around 8am and peaks late in the afternoon and early evening. It is interesting to note however the high volumes at 11pm.

Next a review of day of week statistics was undertaken to see if there were any busier days than normal. Again this including the factoring all calls for service in the Wikwemikong area. The following chart reveals those findings. Again please note that the statistics include 2 years of data again for the purpose as listed above.



These statistics again are fairly expected. Day of week usage is pretty flat with peaks slightly higher during the weekend period.

Lastly, and most importantly a review of overall community response was undertaken. Understanding that there is only one ambulance dedicated to the community of Wikwemikong at any one point in time, when that ambulance is on a call, there is no second Wikwemikong ambulance available to respond. In cases of a secondary response the ambulance is coming from another location on Manitoulin Island.

During this review it became evident that the “stacking” of calls was the most important statistic in terms of operational capabilities. Using again a two year period, calls occurring in the Wikwemikong response area were reviewed with a focus on who was providing the response to the call. The following table reveals those findings.

<b>2013 &amp; 2014 Ambulance Responses to Wikwemikong Area</b>		
	Wikwemikong Ambulance Response	Other Ambulance Response
# of Calls	2068	805
% of Calls	72%	28%
Avg. Response Time	9 minutes 2 seconds	28 minutes 9 seconds

It is quite evident that the stacking of calls is an issue in the Wikwemikong area. From the information above 28% of the calls in the Wikwemikong area are being serviced by other resources. To put it another way, in the case of 28% of the calls the Wikwemikong ambulance is already performing care with another patient. This presents a high level of concern in terms of deployment capability. Of even greater concern is the average response time for calls serviced by the Wikwemikong Ambulance versus Other Ambulances. From the time of “call received” to “arrived scene” in the case of a Wikwemikong ambulance response the average is 9 minutes and 2 seconds. It has to be noted here that this average response time also encompasses when Wikwemikong was out of the community but still the closest resource. In other words this response time could be lower if those responses were factored out. An overall response of 9 minutes is not too concerning especially considering that this response time includes a MOHLTC allowable 2 minute reaction time by the paramedic crew to be mobile. In the case of other resources responding to the Wikwemikong area, an average response time of 28 minutes and 9 seconds is of great concern.

### **Proposed Actions**

After reviewing all relevant statistics in the case of response capability in the Wikwemikong area it becomes evident that an enhancement to the services in the area is warranted.

The proposed solution on this matter is to add a Paramedic Response Unit (PRU) to deployment in Wikwemikong. This PRU would be staffed by one paramedic which enables the ability to provide a response to an emergency call inclusive of all treatment possibilities but without the ability to transport a patient to definitive care. A number of factors were reviewed in coming to this decision.

From a deployment standpoint a PRU has a benefit in that it is not used in the transport of patients therefore does not become part of a system that can perform urgent or non-urgent inter-facility transportation. This ensures the availability and reliability of the resource in the provision of response and treatment.

From a financial standpoint, the PRU model costs half of what a full ambulance does in terms of staffing dollars. As noted above however in exchange for the financial savings, transportation to definitive care is not within the scope of this model.

After careful review of day of week statistics this PRU would be staffed 7 days a week. Reviewing Time of day statistics this PRU should be staffed for 12 hours per day.

The start of this program would begin within the 2015/16 Wikwemikong budget year. The start date would be dependent upon receipt of approval of the enhancement factoring in time to get this program operationally established.

### **Funding Parameters**

There will be a number of costs associated with this enhancement. From a staffing perspective the budget will increase by \$293,674. This is an ongoing cost that includes all salary, wages, and benefits. From a vehicle perspective there will be the need for an

additional capital resource. This would be in the form of an additional Emergency Response Vehicle. The cost for such a vehicle is in the neighbourhood of \$60,000. This would be a one-time cost. Ongoing operational costs in relation to the running of this vehicle will be approximately \$12,000, nominal in the grand scheme of the overall budget and enhanced response performance.

## **Conclusion**

The successful deployment of emergency medical services is of fundamental concern to this organization. We must review any and all options to both efficiently and effectively provide for our citizens during the course of our legislated mandate. In keeping with Manitoulin-Sudbury DSB processes a much needed review was undertaken to assess the levels of deployment in Wikwemikong as it related to response capability. Reviewing many factors including call volume increases, “stacking” of calls, and response time pitfalls, it has become evident that a staffing enhancement is essential to continue to provide effective care to the citizens of Wikwemikong.

Understanding that Manitoulin-Sudbury DSB operates the Wikwemikong ambulance station on behalf of the Ministry of Health and Long Term Care and that budget is 100% funded by the MOHLTC, a proposal will be made in conjunction with the 2015/16 budget submission that includes this enhancement.