

Appendix D – Fire Protection Service Level Adjustment Report

Option 1: Reassign Existing Full-time Firefighters from Aerial

Public Risk & Operational Challenges	Incremental Financial Impact
<p>Longer response times without intervention can result in increased risk for the public</p> <ul style="list-style-type: none"> • With only two responders this truck would be designated “to not respond” as a first due apparatus on certain call types, which currently occurs an average of 88 times per year, delaying response. • New OPs and training would have to occur restricting the capability of the apparatus on initial response and which calls the aerial would be able to respond as a single unit i.e., Medical Tiered Response. <p>Due to the minimum required staffing of 22 does not reduce firefighter overtime</p> <ul style="list-style-type: none"> • The location of the firefighters has no impact on minimum fire staffing of 22. <p>Impact on fire ground staffing (minimum 16 firefighters for residential fires and 44 firefighters for high-risk fires)</p> <ul style="list-style-type: none"> • Lowering the capability of aerial in the city core where 75% or more of the fire incidents occur to which the aerial staffing of four is required. • Staffing reduction on aerial by two firefighters will impact fire ground staffing in the city core where the highest number (833) of high-risk occupancies exist, including the majority of high rise (6+ stories), institutional and vulnerable occupancies. • Frequently the aerial staff are required to achieve minimum fire ground staffing of 16 responders for a residential fire. • A reduction in aerial staffing would result in the dependence of the Val Therese career truck to respond into the city core to meet the minimum fire ground staffing. This would leave Valley East without a career response during these periods. <p>Impact on fire resources – aerial staffing pickup tanker (Long Lake) when called to areas in the city core</p> <ul style="list-style-type: none"> • Fire Services maintains a single tanker response in the city core with water supply challenges such as areas without hydrants or low municipal water flow. Two firefighters from the aerial respond with the tanker to calls while the remaining two respond with the aerial. This ensures the safe and proper operation of both apparatuses. <p>Although the aerial is not typically a first responding apparatus it is the first unit on scene an average of 88 times per year</p> <ul style="list-style-type: none"> • The aerial is not typically a first responding apparatus, however, it is the first responding vehicle 88 times per year (from 2017 to 2019), and the only vehicle on scene an average of 30 times per year for the same period. • Aerial apparatus can and does arrive first on scene when supporting other stations and response areas within the municipality. <p>Reduced capability of a two-person aerial apparatus (slows deployment and setup of the apparatus)</p> <ul style="list-style-type: none"> • With only two responders this truck would take longer to properly deploy the apparatus to commence elevated operations during fire calls and other types of emergencies. <p>Reduced emergency response to all occupancy types</p> <ul style="list-style-type: none"> • To address this would require revising the deployment recommends ensuring the aerial would not be a first arriving apparatus, potentially resulting in the need to hold back an emergency response. 	<ul style="list-style-type: none"> • No cost

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<p>Increased response times (medical tiered response, fires and accidents go longer without mitigation)</p> <ul style="list-style-type: none">• New OPs and training would be required, restricting the calls the aerial would be able to respond as a single response unit (i.e., Medical Tiered Response). <p>FUS reduces fire protection rating resulting in potential insurance rate increase for property owners</p> <ul style="list-style-type: none">• Closure of a full-time station within a district that services 75% of all calls would result in a delayed response to the area where the station closure occurred.	
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Option 2: Change Val Therese Station to Volunteer Only

Public Risk & Operational Challenges	Incremental Financial Impact																								
<p>Longer response times without intervention can result in increased risk for the public</p> <ul style="list-style-type: none"> Increased response time of a minimum of five minutes in leaving the station for volunteer first responding units in Valley East. Increasing guaranteed response time to Val Caron, Val Therese, Hanmer and occasionally Capreol from career firefighters in New Sudbury (Leon Station). Without a 24/7 staffed fire station there will be a delay in response times allowing incidents to progress without intervention. Delayed response due to the variability of volunteer attendance including potential for no response. <p>Guaranteed response (career) for the Valley is coming from Station 3 (New Sudbury)</p> <ul style="list-style-type: none"> Station 3 (New Sudbury) is 17.4 km away from Station 16 (Val Therese) and 32 km away from Station 18 (Capreol). Station 3 drive times (on average): 12 minutes to Val Caron, 15 minutes to Val Therese, 18 minutes to Hanmer and 22 minutes to Capreol. <p>Due to the minimum required staffing of 22 does not reduce firefighter overtime</p> <ul style="list-style-type: none"> Moving eight Val Therese firefighters to the city core does not reduce overtime as the CBA’s requirement for a minimum staffing of 22 firefighters does not change as per Article 8:02 of the SPFFA Collective Bargaining Agreement. <p>Impact on fire ground staffing (minimum 16 firefighters for residential fires and 44 firefighters for high-risk fires)</p> <ul style="list-style-type: none"> Volunteer attrition rates average 18.6% per year over the past three years in Valley East. This impacts attendance rates for emergency calls, impacting response times and fireground staffing. The ability to provide interior fire attack with trained responders would be a challenge due to training attendance. Val Caron, Val Therese and Hanmer median training attendance is 42%. The ability to provide an effective fire attack would be delayed until adequate fire responders could arrive. <p>Increased volunteer call volumes in Valley East</p> <ul style="list-style-type: none"> Without a guaranteed career response in the Valley all three stations would be required to be called out for all calls. High call volumes are not sustainable for volunteer firefighters and could require further reductions in service levels to bring the volume down. Val Therese volunteers would see a significant increase in the number of calls unless service levels are altered. Valley East Call volumes at current (2019) levels would require, on average, an increase in volunteer responses by 453% (with MTR) or 370% (no MTR). 	<p>\$448,967 - Volunteer Costs without Medical Tiered Response (based on 2019 Fire data)</p> <ul style="list-style-type: none"> Call volume based on district wide paging to get adequate volunteer staffing. Increased call volume by 370% excluding 62 medical tiered calls. <p>\$531,426 - Volunteer Costs with Medical Tiered Response (based on 2019 Fire data)</p> <ul style="list-style-type: none"> Call volume based on district wide paging to get adequate volunteer staffing. Increased call volume by 453% including 64 medical tiered calls. Average staffing cost of a station call-out (\$542.33). The introduction of medical tiered response would be \$82,459 in year one which includes volunteer response costs of \$34,709 and initial training costs (32 staff) of \$47,750. Subsequent years would cost approximately \$47,125 which includes volunteer response, on-going training, and new staff training costs. 																								
<table border="1"> <thead> <tr> <th>Station</th> <th>Calls (2019)</th> <th>Attendance Rate (2019)</th> <th>Projected Increase in Calls (based on 2019)</th> <th>Total Percentage Increase (with MTR)</th> <th>Total Percentage Increase (without MTR)</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>43</td> <td>38%</td> <td>426</td> <td>890%</td> <td>742%</td> </tr> <tr> <td>16</td> <td>119</td> <td>33%</td> <td>426</td> <td>258%</td> <td>204%</td> </tr> <tr> <td>17</td> <td>69</td> <td>39%</td> <td>426</td> <td>517%</td> <td>370%</td> </tr> </tbody> </table>	Station	Calls (2019)	Attendance Rate (2019)	Projected Increase in Calls (based on 2019)	Total Percentage Increase (with MTR)	Total Percentage Increase (without MTR)	15	43	38%	426	890%	742%	16	119	33%	426	258%	204%	17	69	39%	426	517%	370%	<p>\$55,000 - Additional Support Unit for Redeployed Staff</p> <ul style="list-style-type: none"> As per the CBA article 8:02 Staffing “The parties agree that the Employer shall maintain a minimum of twenty-two full-time firefighters...shall be assigned to in-service emergency vehicles or be in training at all times.”
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<p>Surplus staff must be assigned to an emergency response vehicle (CBA)</p> <ul style="list-style-type: none">• CBA requirement for a minimum staffing of 22 firefighters per platoon does not change. The location of the firefighters has no impact on minimum fire staffing. 8:02 Staffing: The parties agree that the Employer shall maintain a minimum of twenty-two (22) full-time firefighters on each of the four platoons at all times. On duty suppression personnel shall only be assigned to in-service emergency vehicles or be in training (within the confines of the geographical response area and available to respond) at all times. <p>Volunteer firefighter burnout (increasing attrition rate) due to the higher call volumes which may not be sustainable</p> <ul style="list-style-type: none">• High call volume has the potential to burn out volunteers, resulting in diminishing response, training, and higher attrition rates (average length of service for a volunteer is five years). <p>Insufficient number of available volunteer firefighter applicants (recruitment)</p> <ul style="list-style-type: none">• In volunteer/combination departments, the retention of members is a critical concern. Across the country, fire chiefs are sounding alarms to their communities about their recruitment and retention problems. Another challenge for volunteer fire departments is that firefighters do not have the time to keep up with rigid training requirements while balancing the commitments of a full-time job and family life. In North Carolina, for example, the number of volunteer firefighters has declined by 22% in the past two years, according to FEMA – and many other states face similar shortages. <p>https://insights.samsung.com/2019/06/17/four-critical-issues-facing-fire-services-today/</p> <p>Reduced emergency response to all occupancy types</p> <ul style="list-style-type: none">• Multiple vulnerable occupancies in the coverage area will experience a delay in response to both fire and medical tiered incidents (a vulnerable occupancy is a building or organization that is either a care and treatment occupancy, a care occupancy, or a retirement home). <p>Loss of technical rescue stations</p> <ul style="list-style-type: none">• The existing space within stations is unable to support the additional delivery of technical rescue.• Decreased capability and increased response time of technical rescue. <p>Insufficient number of available volunteer firefighters for incident response</p> <ul style="list-style-type: none">• The number of volunteer firefighter responders is unknown as they maintain a discretionary response. <p>Service level reduction in Valley East and Capreol</p> <ul style="list-style-type: none">• Service level reduction for the 27,713 residents in Fire District 4 (Val Caron, Val Therese, Hanmer, and Capreol). <p>Loss of Medical Tiered Response</p> <ul style="list-style-type: none">• Council would need to determine if medical tiered response would be maintained.• There may be a number of volunteers who do not wish to train on or respond to medical calls, as we have recently experienced in Fire District 3.• If we were able to find a suitable number of volunteers it would take several months to re-establish MTR due to training requirements.	<ul style="list-style-type: none">• Costs related to renovations of stations in order to accommodate additional displaced equipment.
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<p>Increased response times (medical tiered response, fires and accidents go longer without mitigation)</p> <ul style="list-style-type: none">• Increasing the response time an additional five minutes or more, which is the average time it takes volunteers to report to the station or to arrive on scene for first responding units in the Valley (number of first responders remains unknown).• Increasing guaranteed response time to Val Caron, Val Therese, and Hanmer from career firefighters (New Sudbury Station).• Delayed response due to the variability of volunteer response, including potential for no response within the incident fire beat.• Loss of effective Medical Tiered Response, although volunteers (32 X 44 hours training = \$35,200 not including instructor time) can be trained, they will have a slower response time or may not respond. In the case of sudden cardiac arrest, for every minute that passes without CPR and defibrillation the chances of survival decrease by 7-10%. <p>FUS reduces fire protection rating resulting in potential insurance rate increase for property owners</p> <ul style="list-style-type: none">• Potential for a Fire Underwriters Survey re-evaluation of fire coverage area to lower protection rating due to loss of career firefighters. An updated audit of Greater Sudbury is due to occur in 2021 which may impact residential and/or commercial rates.	
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Option 3: Realign Existing Full-time Stations

Public Risk & Operational Challenges	Incremental Financial Impact
<p>Longer response times without intervention can result in increased risk for the public</p> <ul style="list-style-type: none"> • Closure of a full-time station where 75% of the City's calls occur, would result in a delayed response from the remaining stations depending on what area of the City the call occurred. • Closure of a full-time station would result in having to use the career truck in the Valley as a primary response during major incidents in the city core. <p>Due to the minimum required staffing of 22, it does not reduce the number of firefighters</p> <ul style="list-style-type: none"> • The location of the firefighters has no impact on minimum fire staffing of 22. <p>Impact on fire ground staffing (minimum 16 firefighters for residential fires and 44 firefighters for high-risk fires)</p> <ul style="list-style-type: none"> • With the closure of a career station, the remaining three stations would be required to respond to all fire calls to get the required 16 responders, leaving the City without fire protection. • In the event of a fire, the career truck from the Valley would be required to come into the city core to provide emergency coverage leaving the Valley without a career response. <p>Surplus staff must be assigned to an emergency response vehicle (CBA)</p> <ul style="list-style-type: none"> • Collective Bargaining Agreement requirement for a minimum staffing of 22 firefighters per platoon does not change. The location of the firefighters has no impact on minimum fire staffing. Article 8:02 - Staffing: The parties agree that the Employer shall maintain a minimum of twenty-two (22) full-time firefighters on each of the four platoons at all times. On duty suppression personnel shall only be assigned to in-service emergency vehicles or be in training (within the confines of the geographical response area and available to respond) at all times. <p>Reduced emergency response to all occupancy types</p> <ul style="list-style-type: none"> • Multiple vulnerable occupancies in the coverage area will experience a delay in response to both fire and medical tiered incidents (a vulnerable occupancy is a building or organization that is either a care and treatment occupancy, a care occupancy, or a retirement home). <p>Loss of technical rescue stations</p> <ul style="list-style-type: none"> • The existing space within stations is unable to support the additional delivery of technical rescue. • Decreased capability and increased response time of technical rescue. <p>Service level reduction in the city core</p> <ul style="list-style-type: none"> • Service level reduction that will result in increased response times in an area of the City where a career station will be closed. • Would require a potential relocation of Paramedic Services. • The lack of available space within existing stations will create additional challenges to deliver technical rescue. <p>Increased response times (medical tiered response, fires and accidents go longer without mitigation)</p> <ul style="list-style-type: none"> • Closure of a full-time station within a district that services 75% of all calls would result in a delay into the area where the station closure occurred. 	<p>Relocation Costs</p> <ul style="list-style-type: none"> • It is anticipated that the remaining three halls would need to be relocated and the cost and time to do so would be substantive.

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<p>FUS reduces fire protection rating resulting in potential insurance rate increase for property owner</p> <ul style="list-style-type: none">• Potential for a Fire Underwriters Survey re-evaluation of fire coverage area to lower protection rating due to loss of career firefighters. An updated audit of Greater Sudbury is due to occur in 2021 which may impact residential and/or commercial rates.	
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