



**TOWN OF ERIN
Special Council Meeting
AGENDA**

**February 26, 2016
10:00 AM**

Municipal Council Chamber

Pages

1. Call to Order
2. Declaration of Pecuniary Interest
3. Topics for Discussion
 - 3.1 Fire Department Operational Review Presentation 1 - 51
4. Adjournment



Town of Erin Operational Review of the Fire Department

February 26, 2016

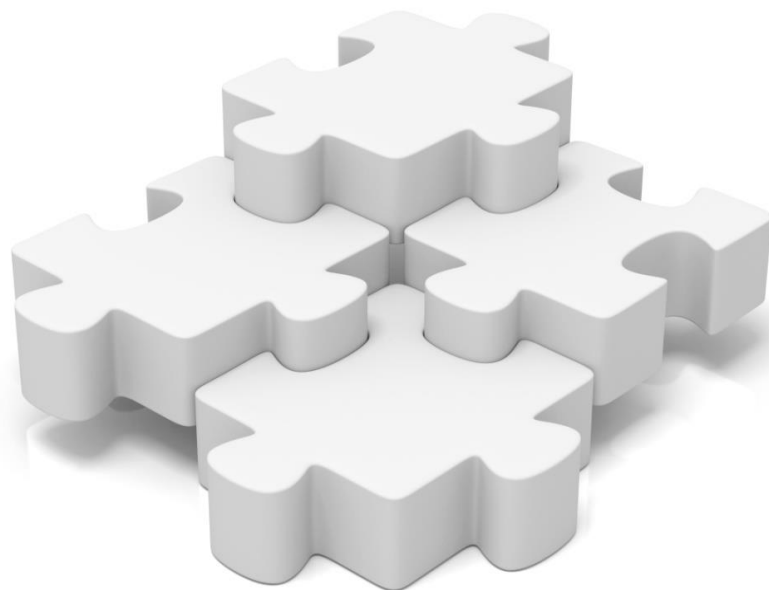


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About this Document

In October 2015, the Town of Erin engaged StrategyCorp to work with the Town in conducting an Operational Review of the Fire Department.

Due to the limited budget available, it was agreed that this review would not be a comprehensive, in-depth analysis. The study objectives approved by Town Council were:

- An assessment of the overall organizational structure;
- An assessment of the efficiency and effectiveness of the operations;
- An assessment of the mix, use and age of vehicles and other equipment at each fire station;
- An identification of the key issues and gaps and opportunities for improvement; and,
- A comparison with other similar fire services in the area and across Ontario, with similar characteristics.

Project Methodology: The work began with a round of consultations with municipal officials and representatives from the Fire Service, at each Station, and an assessment of the organization, operations and equipment of the Fire Service.



Executive Summary

Overview

- Erin has a professionally-led volunteer fire force that provides emergency services.
- Erin's level of service is typical for rural communities of its kind.
- Based on our review, there are opportunities for improvement. Opportunities could be characterized as incremental and transformational.
- **Incremental improvements** include such tools as:
 - Improvements to performance measurement;
 - Maintaining the viability of the volunteer base; and,
 - Improvement measures to suppress demand through fire prevention activities.
- **Transformational change** would include moving to a greater use of professional fire service personnel, either in part or in whole.
- While this approach would be expected to yield operational improvement, it would come at significant expense. Accordingly, the main recommendations of this report relate to taking measures to ensure the continued viability of the volunteer fire services model that has served Erin to date.

Overarching Recommendation


- Following the Operational Review, StrategyCorp's primary recommendation is to maintain the volunteer model for as long as possible.
- The two primary factors that allow for the viability of the volunteer model are:
 1. Ensuring there are well-motivated, well-trained, effective and reliable volunteers; and,
 2. Managing the Town's fire service demands
- Through a two-pronged approach, the Town of Erin can maintain the viability of the volunteer system for as long as possible. When it is no longer possible, a move to a composite model will be necessary. This approach includes:
 1. Continuous improvement measures to better the efficiency of the volunteer model; and,
 2. Demand management measures to reduce the need for fire services as the Town grows
- A summary of recommendations and specific pathways are summarized on the following slides.

Summary of Recommendations

- StrategyCorp recommends that:
 1. The Fire Service establish a benchmark set of response criteria and begin a computer-based tracking practices.
 2. The Town take all reasonable measures to ensure that the volunteer fire service is supported in discharging its responsibilities, and to avoid migrating to a composite force with full-time firefighters.
 3. The Town undertake measures to support the volunteer base and reduce the demand for a composite force to In order to maintain the viability of the volunteer system.
 4. The Town maintain the two fire stations, until the day comes when they must be replaced due to age.
 5. The Fire Chief, the Deputy Fire Chief and the volunteer companies undertake measures to increase the regularity of briefings among in the two stations on initiatives within the Fire Service and by Town Council and management.
 6. A dedicated administrative position be added to the Fire Service.
 7. The Town explore practical ways in which “tiered response” is used when it is needed.
 8. The Town look into increasing the Fire Chief’s hours, eventually transitioning the position into full-time, as the population grows and the volume of calls increases.
 9. The Fire Service institute regular inspections of major industrial, institutional and other structures.

Summary of Pathways

- StrategyCorp recommends the following courses of action with order of magnitude timelines:

Timeline	Organizational Model	Operational Model	Equipment Mix
	<ul style="list-style-type: none"> • Increase the number of regular briefings between the Chief and the stations • Establish benchmark response criteria 	<ul style="list-style-type: none"> • Review the level of life insurance provided to firefighters • Expand the Erin Station • Support recognition programs for volunteers • Simplify the processes for volunteers to account for their time and expenses 	<ul style="list-style-type: none"> • Conduct equipment studies to determine the usable lifetime of large and expensive equipment
	<ul style="list-style-type: none"> • Increase the administrative support, including adopting computer-based reporting practices 	<ul style="list-style-type: none"> • Expand fire prevention services to regular and commercial inspections • Progressively increase the Chief’s hours to accommodate the Town’s growth • Collaborate with the OPP and EMS to explore practical approaches to tiered-response 	<ul style="list-style-type: none"> • Conduct a Fire Underwriters Survey
	<ul style="list-style-type: none"> • Maintain the volunteer force for as long as possible, when necessary, transition to a composite force 	<ul style="list-style-type: none"> • Maintain the two fire halls, thereby the functionality of the volunteer force, for as long as possible • Consider the elevated volume of medical calls when determining budget allocations 	<ul style="list-style-type: none"> • Purchase tankers with a larger carrying capacity



Context and Environmental Scan

Organizational Overview

- The Town of Erin is home to approximately 11,800 residents, and is located in Wellington County. The Town was amalgamated in 1998, with the joining of the communities of Erin and Hillsburgh, six smaller hamlets, and the surrounding rural area. After a decade-and-a-half since amalgamation, it is timely to review the degree to which services have been integrated, both to serve all of the communities within the municipality, but also to promote the concept of a single Town of Erin municipality (“One Town”), serving all communities equally and efficiently. This Fire Service review is part of a broader review, which was completed last year.
- The Town’s Strategic Plan, adopted by the previous Council, but targeted for the 2015-2020 time horizon, identified three pillars of priority to support its future growth:
 - Organizational Effectiveness: Maximizing the effectiveness of the municipal administration, quality customer service, corporate resilience and learning, and effective corporate management practices;
 - Resource Management: Financial strength and viability, infrastructure planning, public safety, fire and emergency services; and,
 - Community Capacity Building: Building an engaged and involved community, building a strong local economy, etc.

The Fire Service

- Erin has its own volunteer fire service which provides fire and emergency services to the Town of Erin and a portion of the Township of East Garafraxa through a “mutual aid” plan.
 - Mutual aid plans are agreements, whereby a fire service provides assistance to another jurisdiction
 - These plans are approved by the Fire Marshal and allow for fire departments to request assistance from neighbouring departments.
- The Town also has “mutual aid” plans in place with Halton Hills and Guelph-Eramosa, where it receives back-up coverage or additional resources in the case of a major incident.
- These services are provided by volunteer firefighters, and include response to a variety of fires, motor vehicle collisions, carbon monoxide alarms, medical emergencies, natural disasters, and other types of extractions and rescues.
- The Town’s fire stations are located at the north end of the Village of Erin (Station #10) and in the Village of Hillsburgh (Station #50).
- Emergency fire calls are dispatched from the Guelph Department through the 911 emergency network; the ambulance-related medical calls are dispatched through the Central Ambulance Communication Centre (CACC) in Cambridge; unless a call is made directly for police or ambulance assistance, it is customary for emergency calls to initiate so-called “tiered response,” in which fire, police and ambulance / paramedics respond to each call.

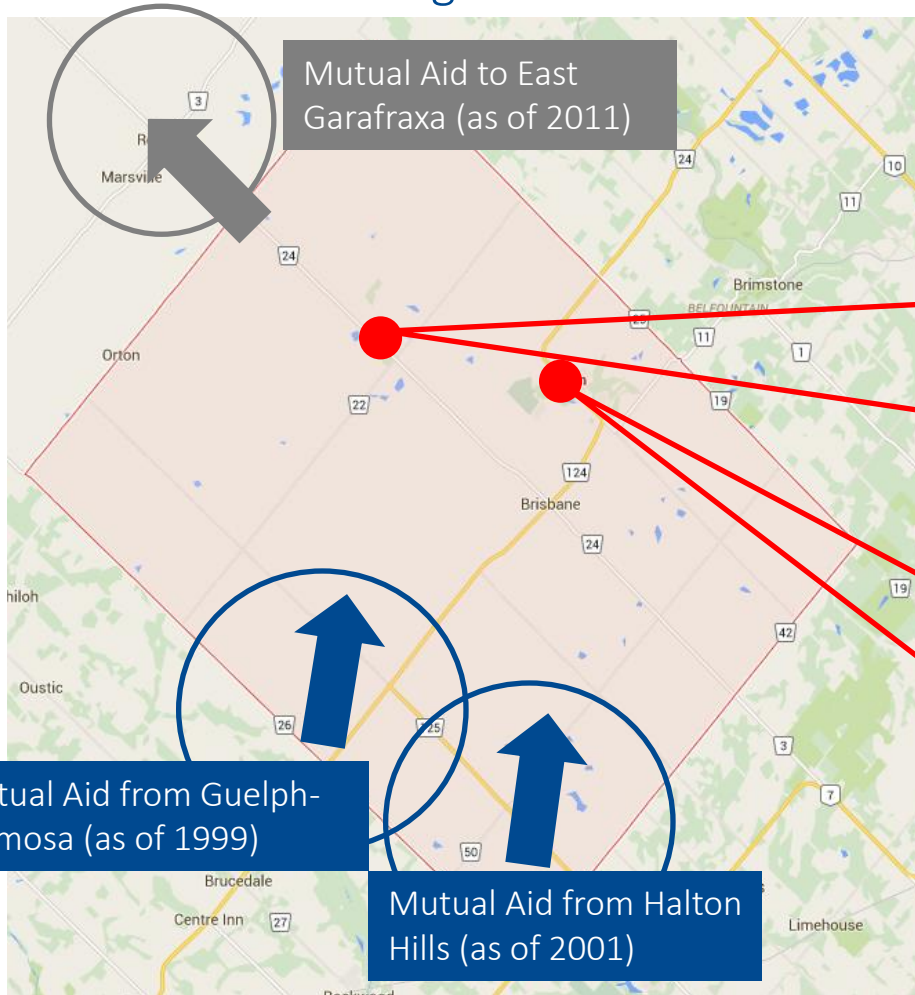
The Town of Erin's Fire Service

- Overall, among the Fire Service, it is clear that there is a strong commitment to community service, and a high level of experience and esprit-de-corps.
- With a high retention rate and many long-standing volunteers, there is significant experience within the Service from the volunteer firefighters through to the Captains, Deputy Chiefs and Fire Chief.
- All members of the Fire Service with whom we consulted were proud of their work in and service to the community, and Staff at Town Hall referred to the passion of the Fire Service members as being well appreciated and understood within the community.

Findings Summary– SWOT Analysis

<p>Strengths</p> <p>Organizational</p> <ul style="list-style-type: none"> • Operates a cost-effective volunteer system • Highly-skilled volunteer corps, with many also holding full-time firefighting positions elsewhere • Broad range of competencies which extend to medical calls– the most frequent service demand • Strong esprit-de-corps among volunteers <p>Operational</p> <ul style="list-style-type: none"> • Innovative model of deploying the chief as a first responder • Strong training, conducted regularly • Co-located EMS at Hillsburgh station 12 hours /day <p>Equipment Mix</p> <ul style="list-style-type: none"> • Lifecycle costing is being practiced on capital equipment • Reserves maintained for capital equipment • Favourable cost per capita compared to benchmark municipalities • Hillsburgh station is new; Erin station older, but still serviceable 	<p>Opportunities</p> <p>Organizational</p> <ul style="list-style-type: none"> • Undertake measures to further improve volunteer morale <p>Operational</p> <ul style="list-style-type: none"> • Expand fire prevention services • Expand cooperation with EMS and OPP in first responder coordination • Conduct a Fire Underwriters Survey <p>Equipment Mix</p> <ul style="list-style-type: none"> • Expand the lifecycle costing program
<p>Weaknesses</p> <ul style="list-style-type: none"> • Lack of contemporary performance tracking of response times • Last Municipal Fire Protection Information Survey was completed in 2001 • No current commercial fire prevention program • Administrative burden on staff and volunteers is not optimized 	<p>Threats</p> <ul style="list-style-type: none"> • Increased costs from a composite or full-time force may be needed, due to <ul style="list-style-type: none"> • Increased demand for services • Decline in the effectiveness of the volunteer model

Fire Service Coverage



Hillsburgh Station #50 (2013)

- Houses an ambulance 12hrs/day, which is operated by Guelph-Wellington EMS

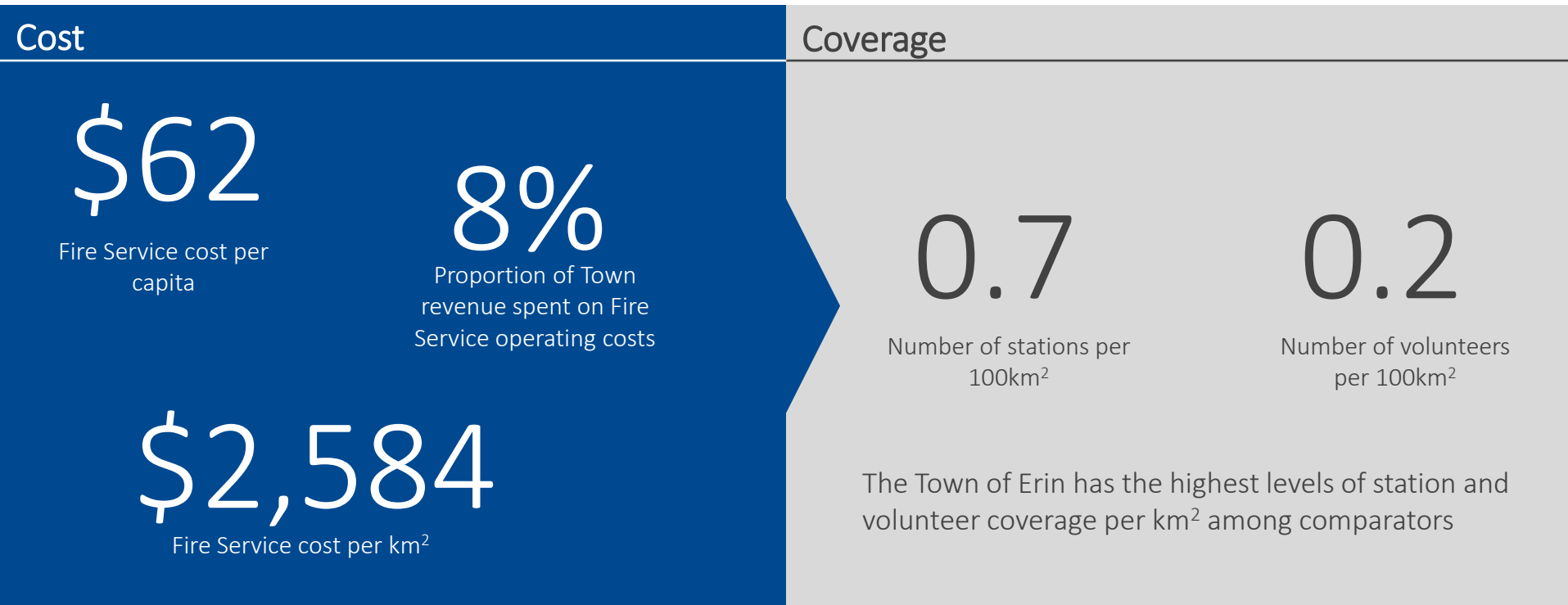
STATION 50 HILLSBURGH
ERIN FIRE & EMERGENCY SERVICES

Erin Station #10 (1985)

ERIN FIRE DEPT.

Erin Fire Service “By the Numbers”

The Town of Erin’s per capita expenditures and portion of total Town tax revenue expended on the Fire Service is proportional to its comparable municipalities. Erin has relatively high coverage in terms of number of stations and number of volunteers per area.

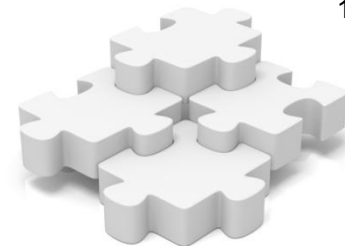


Benchmarking Analysis

- Compared to its peers, Erin:
 - Has the greatest number of fire stations and volunteers per area;
 - Falls within the average range with respect to fire service costs as a portion of town revenue, and fire service costs per capita; while,
 - Comparatively, has a slightly elevated fire service operating cost.

Municipality	Population	Area (km ²)	Population Density	# Fire Stations	Fire		Total Revenues	Fire Service Operating Cost	Fire Service			
					Stations/100km ²	Volunteers/ Area			Cost/Town Revenues	Fire Service Cost/Capita	Fire Service Cost/Area	
Guelph-Eramosa	13,703	291.7	47.0	1	0.3	34	0.12	\$ 9,376,172	\$ 777,642	8%	\$ 57	\$ 2,666
Mapleton	10,907	534.8	20.4	2	0.4	40	0.07	\$ 9,677,951	\$ 666,808	7%	\$ 61	\$ 1,247
Puslinch	6,298	214.4	29.4	1	0.5	37	0.17	\$ 5,698,427	\$ 737,150	13%	\$ 117	\$ 3,438
Wellington North	12,447	526.3	23.7	2	0.4	47	0.09	\$ 15,409,551	\$ 700,161	5%	\$ 56	\$ 1,330
Average	10,839	391.8	30.1	1.5	0.4	40	0.11	\$ 10,040,525	\$ 720,440	8%	\$ 73	\$ 2,170
Median	11,677	409.0	26.5	1.5	0.4	39	0.10	\$ 9,527,062	\$ 718,656	8%	\$ 59	\$ 1,998
Town of Erin	12,327	297.8	41.4	2	0.7	62	0.21	\$ 9,637,207	\$ 769,446	8%	\$ 62	\$ 2,584

Among comparators, Erin provides the greatest coverage for a proportional expenditure in revenues



Emergency Services in the Rural Context: Emerging Trends

Emergency Services in the Rural Context (1 of 2)

- Broadly speaking, there are three types of options for fire service delivery:

Type	Description	Pros	Cons	# of Ontario Departments
Volunteer	24-hour fire service provided by volunteers who respond on an on-call basis	Low cost	Less consistency in turn out and response rate	227
Composite	Fire service made up of both professional and volunteer companies	Mediated cost and part-time professional coverage	Substantial increase in cost from a volunteer force; decline in volunteer effectiveness	196
Professional	Fire service made up of a professional corps	Full-time professional coverage	High cost	32

- It is a well established fact that, in rural Ontario, a well-motivated, well-trained and reliable force of “volunteer” firefighters can provide adequate emergency response
 - With adequate response times; and,
 - Deploying the equipment and staff needed to deal with most conventional personal safety and property damage risks, from fires, medical emergencies, motor vehicle accidents and other rescues, and other perils.

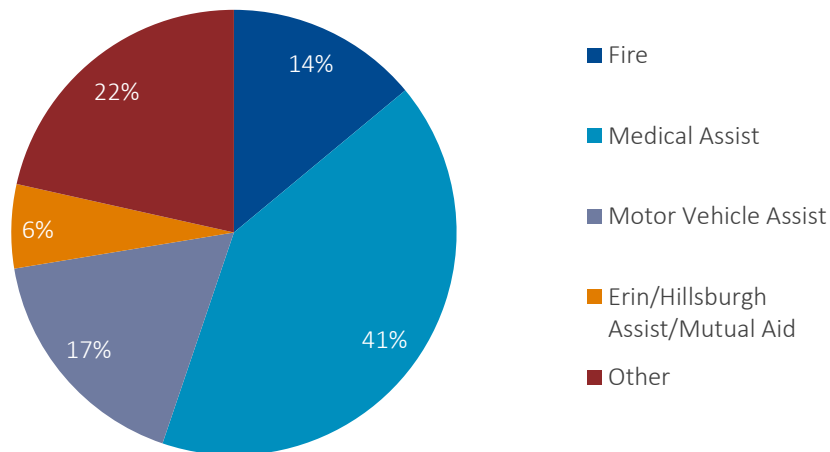
Emergency Services in the Rural Context (2 of 2)

- What are the essential requirements for ensuring that a volunteer fire service can meet the needs of the community at a reasonable cost?
- The test is whether the volunteer force can be relied upon to respond quickly, consistently and in sufficient numbers to deal with a range of emergencies at all hours and in all seasons.
- To meet that test, it is equally important for volunteer firefighters to have the training, equipment, compensation, support and recognition that combine to produce an effective, well-motivated volunteer fire service.
- Unless a municipality has a large and concentrated urban population, the need for urban-scale fire and emergency response represents a significant and probably unnecessary annual expenditure.
- While the priorities of any fire service are inevitably on their own performance and equipment, especially in relation to traditional fire risks, the public safety mandate of a municipal council is broader and must be forwarding looking. Every municipal council must ask itself:
 - “If public safety is to be preserved and advanced in this community, in which public safety programs would scarce municipal tax dollars be best spent?”
- As municipalities develop and populations increase over time, it may be necessary to supplement or reconfigure a volunteer force:
 - Through the introduction of full-time, paid staff in leadership or specialized roles; and / or,
 - By establishing a so-called “composite” fire department, where a core of full-time firefighters are supplemented by volunteer firefighters; and / or,
 - Especially where there is more than one volunteer “company”, by altering the size, number and location of the companies of volunteers.

Emergency Services in the 21st Century

- In Ontario, and across North America, the pattern of calls for emergency assistance has evolved over time.
- The experience of the Erin Fire Department corresponds to that of other Ontario rural, multi-station volunteer fire departments, in terms of the nature and volume of calls received.
- After several generations of improved building and fire codes and other regulations, fire-retardant building materials and diverse public safety measures, the work of “fire” departments has changed materially.

Town of Erin– Fire Department Call Type (2014)



Medical assist calls make up the most significant portion of emergency calls

Whether fire departments are in the best position to respond to medical and motor vehicle emergencies is the source of some debate. The fact that fire services can respond quickly and with significant resources may not be the sole determining factor.

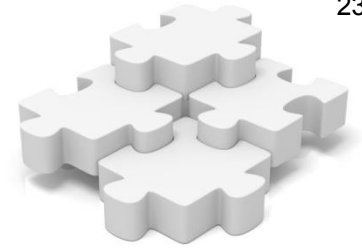
Some have argued that more tax dollars should be prioritized to improvements in police, ambulance / para-medicine, traffic safety, environmental measures, and emergency preparedness.

Establishing a Standard

- The goal of any fire service is to protect public safety. A standard mechanism for benchmarking success among emergency responders is response times. The National Fire Protection Association sets out suggested response times that should be used when evaluating the efficiency and effectiveness of a fire service.
 - For rural areas, the NFPA recommends a minimum response of 6 staff within 14 minutes 80 percent of the time.
- Erin's Fire Service does not currently summarize and routinely analyze its response times, which are manually recorded on a case by case basis. It is important that the Town modernize its reporting practices through digitization in order to better benchmark and track its own performance.
 - Among smaller municipalities, this is not an uncommon practice.
- In order to ensure that the community's needs are being met, and that the Fire Service can undergo continuous improvement, it is essential that the Fire Service works towards identifying a benchmark set of response criteria.
 - This will inform strategic decision-making such as future staffing, deployment practices, and equipment acquisition.



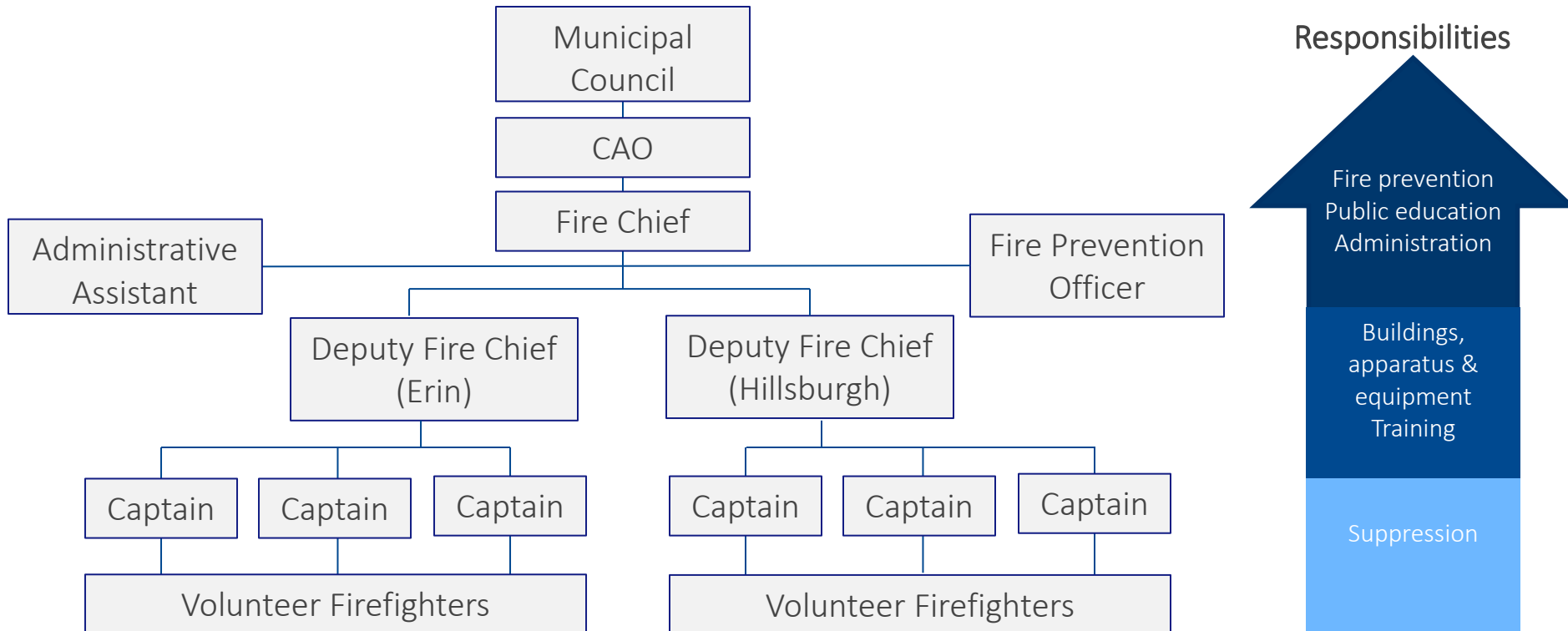
Observations and Recommendations



A. Organizational Model

Organizational Model – Staffing (1 of 4)

- The Fire Service is made up of a Chief (28 hours per week), a Fire Prevention Officer (12 hours per week), 60 volunteers and an Administrative Assistant, with time split among roads, fire and buildings.



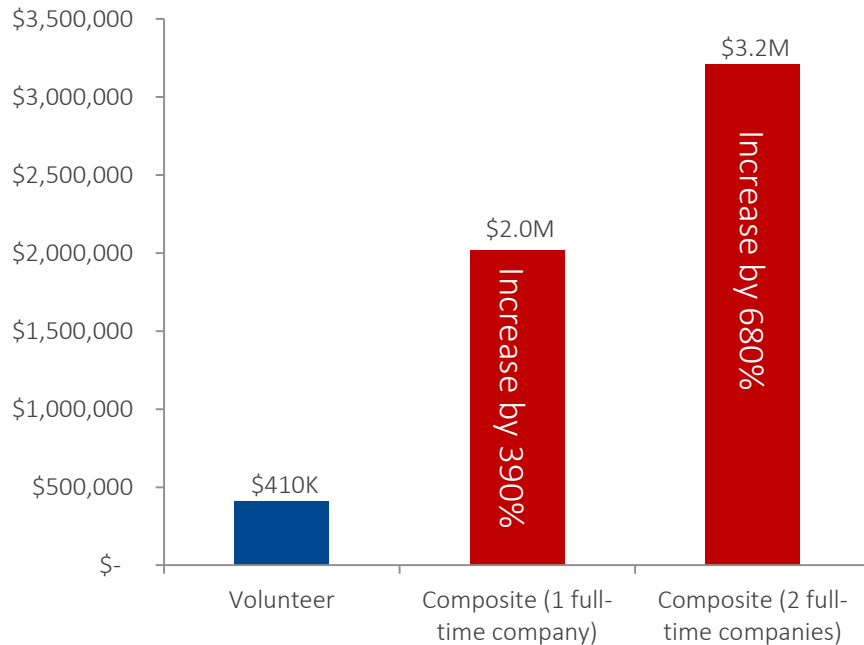
Organizational Model – Staffing (2 of 4)

- Both stations have a good mix of volunteers, including a number with current and past experience as full-time firefighters, complemented with a corps of other well-trained volunteers (some with specialized skills) that are readily available to the community.
- All volunteers are trained in: HazMat (hazardous materials), water rescue, ice rescue, fire suppression, auto extrication, and emergency medical responses.
- Unlike some other fire services on the fringes of urban areas, the Town’s corps of volunteer firefighters has experienced relatively low turnover and a consistently high rate of response.
- A by-product of a healthy and successful volunteer force is good turnout and low turnover. The Erin Fire Service is currently succeeding on both counts. However, if a municipal fire department reaches the point where it cannot rely on the volunteers, at all times to manage basic responses, then it is faced with the challenge of migrating to a so-called “composite” fire service over time.
- One measure of fire response rates is the National Fire Protection Association (NFPA) standard, which specifies a minimum deployment of 6 staff within 14 minutes for a town with Erin’s population density. Another measure, suggested by the Ontario Fire Marshal’s Office, is to field at least 10 firefighters to an incident within ten minutes of the call for assistance. Of course, there are no mandatory regulations and these are but two measures, and the cost of meeting such a standard should properly compete with other public safety budget priorities.
 - At this time, the Town does not summarize and analyze its response times. **It is recommended that the Fire Service establish a benchmark set of response criteria and begin a computer-based tracking practices.**

Organizational Model – Staffing (3 of 4)

- Introducing full-time firefighters into a volunteer force has implications for both the performance of the volunteers and the cost to the taxpayer.

Salaries, Wages & Benefits Costs



- Because of the platoon system, staffing a pumper with a crew of four full-time firefighters on a 24/7, 365 days-per-year basis, would require each post to be filled by a factor of 3.51 firefighters per position.
- By way of illustration, to staff one fire vehicle with four firefighters, on an around-the-clock basis in each Fire Hall, would require the Town to hire 28 full-time firefighters ($4 \times 3.51 \times 2 = 28$), at annual cost exceeding \$100,000 per firefighter (using the reported 2014 salaries of City of Guelph firefighters as a guide).
- Staffing two fire vehicles on a 24/7 basis would add an additional \$2.8 million in payroll costs alone to the Erin Fire Services current \$816,000 annual gross operating budget.
- It is clearly to the Town's financial advantage to do whatever it can to keep the volunteer firefighter model working well as long as possible, and to avoid a premature move to a composite fire force.

Organizational Model – Staffing (4 of 4)

- It is recommended that the Town take all reasonable measures to ensure that the volunteer fire service is supported in discharging its responsibilities, and to avoid migrating to a composite force with full-time firefighters.
- It is recommended that the Town undertake measures to support the volunteer base and reduce the demand for a composite force to In order to maintain the viability of the volunteer system.

1. Measures to Support the Volunteer Base

- Reviewing the level of life insurance provided to firefighters, with a view to increasing it
- Expanding the Erin Station to allow turn-out gear to be stored in a better, more climate-controlled fashion, as it is in the Hillsburgh Station
- Supporting recognition programs for the volunteer firefighters
- Simplifying the processes for volunteer fire-fighters to account for their time and expenses for tax and accounting purposes
- Continuing to welcome new members recruited to the volunteer force, reflecting the diversity of the community
- Supporting the efforts of the fire service to collect/provide dress uniforms for each member of the force

2. Measures to Reduce the Demand for a Composite Model

- Expanding fire prevention services to regular and commercial inspections
- Progressively increase the Chief's hours to ensure that each call is met with a first responder
- Increasing the administrative support, including adopting computer-based reporting practices to identify and address areas for improvement
- Continuing to ensure that all volunteers are well trained in the areas of greatest demand, particularly emergency medical services

Organizational Model –Stations

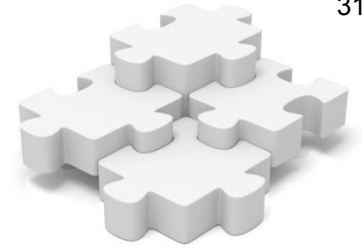
- One of the features of the Erin Fire Service is that it has two stations, Erin Station #10 and the newer Hillsburgh Station #50. It is not uncommon following a municipal amalgamation to look at consolidations and existing station locations, to identify opportunities for synergies and centralization and optimal location for response.
- If Erin had full-time firefighters and no existing fire stations, it might consider a single station, located in the geographic centre of the municipality. In that scenario, there might also be some savings in not duplicating fire apparatus, or more ability to buy specialized equipment. However, as we explain, the advantages of keeping two volunteer fire companies viable and effective overwhelm any other considerations. **On balance, it is recommended that the Town maintain the two fire stations, until the day comes when they must be replaced due to age.**

Organizational Model – Internal Communications

- An understandable consequence of having no full-time staff in a volunteer fire department is that routine business-related communications can be inconsistent. Especially at the level of CAO, Fire Chief and Deputy Fire Chief, there should be continuing formal and informal efforts to share plans, proposals and details of Council deliberations, and to solicit input.
- It is recommended that the Fire Chief, the Deputy Fire Chief and the volunteer companies undertake measures to increase the regularity of briefings among in the two stations on initiatives within the Fire Service and by Town Council and management.

Organizational Model – Administration

- Among a range of other tasks, the two Deputy Chiefs are responsible for preparing activity reports and timesheets for their companies, before passing them along to Town staff for final processing and data entry.
- Much of the Town’s reporting from the Fire Halls to the Town office is done manually on paper. These traditional practices are out-dated in a digital age. Paper-based reporting results in duplicated processes. It also results, as we discovered in this review, in a lack of readily accessible data to help the Fire Service prepare reports or to analyze its performance, both against recognized standards (Fire Marshal’s Office, National Fire Prevention Association (NFPA) codes, other fire departments, etc.) and to aid Town Council and the Fire Chief in their decision-making.
- With the expanded workload in the public works area, the model of sharing administrative support with the Fire Service may be reaching its practical limits.
- **It is recommended that a dedicated administrative position be added to the Fire Service** to lessen the administrative burden on the Fire Chief and the Deputy Chiefs at the two stations. Such support should also be used to put in place more contemporary computer-enabled reporting practices and analysis to improve decision-making. Current and projected workload would appear to justify a dedicated administrative position for the fire department.

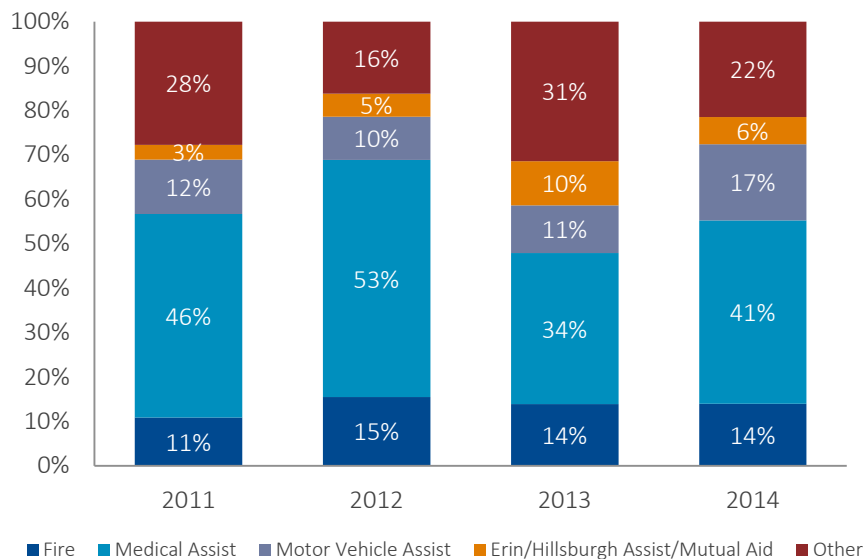


B. Operational Model

Operational Model – Emergency Response (1 of 3)

- As noted earlier, as a practical matter of call volume and incidents, the job of fire departments to protection of life and property has changed, moving away from fire calls. The real business of fire departments is now largely elsewhere. Statistics show that in Erin, as in most other municipalities, medical emergencies, motor vehicle crashes, and other extrication and rescue incidents are much more frequent and have greater day-to-day impact on the community. With the advent of more severe weather incidents, major emergencies today are just as likely to be natural disasters as structural fires.

Frequency of Emergency Call Type



- Reflecting these changing safety patterns, the Town has ensured that firefighters are all trained and equipped to deal with CPR and defibrillation. This training is very useful, although it does not reflect advanced life safety certification, such as that held by EMS staff.
- Likewise, many traffic accidents do not require a fire department response. In fact, fire response poses its own risks, in terms of firefighter safety, risk of further traffic incidents, and more protracted road closures.

Operational Model – Emergency Response (2 of 3)

- Looking to the future, the Town is appropriately adjusting its emergency response services to reflect the growing importance (and demands) of “non fire” emergencies, such as medical emergencies and motor vehicle crashes.
- As noted earlier, emergency calls feature tiered-response, under which fire, ambulance and police are routinely dispatched to respond to calls for emergency assistance. These changes also have implications for the selection and equipping of “fire” vehicles.
- The important roles of the County and the OPP should not be neglected in this discussion. If medical emergencies are proving to be the largest and fastest growing range of life-safety risks facing Erin residents, the case could be made for more rapid ambulance and paramedic response as an alternative to expenditures for these purposes in the fire service.
- The Town has accommodated emergency medical services (ambulance and paramedics) within Hillsburgh Fire Station #50. This action yields a number of benefits, ranging from closer emergency coordination to a shorter EMS response time to many Town residences.
- In consultation with local police (OPP) and ambulance services (EMS), the Fire Chief and Town officials, **it is recommended that the Town explore practical ways in which “tiered response” is used when it is needed** (erring on the side of caution), but not used where it is likely unnecessary, or places unnecessary burden of call-frequency and incident-risk on volunteers.

Operational Model – Emergency Response (3 of 3)

- Since engaging the current Fire Chief on a near full-time (28 hours) basis, the Fire Chief has seen it as his responsibility to respond to all significant emergency calls. To this end, Council has provided the Fire Chief with the exclusive use of an emergency response vehicle. To the extent that the Fire Chief arrives at an incident scene ahead of a volunteer company and its vehicles, he is in a position to evaluate the risks, the logistics and the fire ground deployment. It is equally important, however, for the Deputy Chiefs to play a leadership role at individual incidents in terms of directing fire crews and the use of equipment on site.
- It is recommended that, the Town look into increasing the Fire Chief's hours, eventually transitioning the position into full-time, as the population grows and the volume of calls increases.

Operational Model – Station Operations (1 of 2)

- Erin's two fire halls, Station #10 and Station #50, received an average of 215 and 140 calls per year, respectively, between 2011 and 2014.
 - These call volumes are standard among comparable jurisdictions, with the expectation that each station should be able to accommodate upwards of 150 calls per year.
- Subject to a more detailed analysis, it would appear that emergency response turn-out and timing remains strong for both stations at all times of year during all hour increments.
- During the consultations, some people questioned whether it was worthwhile to have two stations, stating that the consolidation of equipment and the reduction in operational overhead costs would save money.
- However on balance, we recommend maintaining the two distinct stations.

Operational Model – Station Operations (2 of 2)

- It seems likely that a consolidation of the two volunteer fire companies into one would result in a reduction of the number of volunteers.
 - In practical terms, to have a single company of 60 volunteers would produce a level of turn-out of volunteers that likely exceeds the requirements, but it would also produce a volume of call-outs that would be nearly double that experienced by the two individual companies today, and many of the calls would inevitably be farther away from one central station than they are from the individual existing stations.
 - In combination, these factors would likely undermine both the turnout levels and the response times for the volunteer fire service in Erin.
 - It also seems possible that a larger, amalgamated volunteer fire force might lose some of the local community esprit-de-corps that is such an important feature of successful community volunteer fire companies.
- For these reasons, we believe that operationally, any savings or efficiencies that might be obtained through consolidation of the two fire halls, their equipment and their volunteer fire companies, are not worth putting at risk the successful operation of the two existing volunteer companies. In light of the fact that it does not appear to be possible from an operational stand point, we did not look into the financial side.
- Without summarized and accessible data regarding response times, we were not able to comment on the potential coverage feasibility of one station.

Operational Model – Volunteer Model

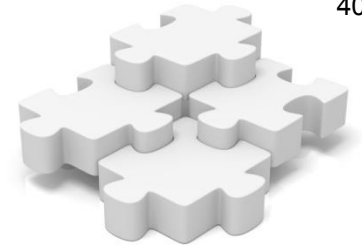
- There are a number of practical measures that can sustain and motivate volunteer fire service companies. The longer that volunteer companies continue to maintain good rates of turnout to both training and incidents, and low rates of turnover in personnel, the longer the Town can rely on good fire suppression and emergency response from the volunteer companies. As noted earlier, at the point where the volunteer model begins to weaken and the Town is pushed in the direction of a composite force, the cost to municipal taxpayers will rise dramatically.
- All practical measures should be taken, in the effort to build esprit-de-corps and to keep the volunteer fire companies motivated and effective.
 - Some such measures are identified on page 27, as part of Recommendation 3.

Operational Model – Fire Inspection (1 of 2)

- The nature of emergency response is changing across Ontario, in urban, suburban and rural settings. Large structure fires, industrial explosions and hazardous emissions may continue to represent the greatest single-incident threats to people and property. However, fire codes, building codes, and other regulations, along with fire prevention, lessen the frequency and extent of these risks.
- The focus of volunteer fire departments is understandably on fire suppression. However, fire prevention and fire-safety inspection are equally important.
- While fire risks in residential and farm premises may have declined over time, there remain significant fire and environmental risks from industrial, institutional and agri-business uses.
- Many municipalities undertake fire inspections of various classes of major non-residential facilities, and some charge fees for that service (although the fees typically do not reflect the all-in cost of the staff doing the inspection). Inspections of major facilities serve a variety of purposes: they protect those working or housed within these facilities, as well as the owners of those facilities; they allow firefighters to reduce and to anticipate risks in the event they are called to a fire; and, they help to avoid loss of employers and taxes due to major fires.

Operational Model – Fire Inspection (2 of 2)

- The residents and businesses in Erin are served by a combination of local and county-level fire inspection, prevention, and building plan examination.
- Because of limitations in time and resources, the Town does relatively little to assist its non-residential property owners to ensure their fire and emergency preparedness. Some municipalities have decided that this is an important area of activity, to the point where they require periodic inspections and provide them on a partial cost-recovery basis by charging inspection fees. The same rationale underlies the practice of supervising major controlled burns by agricultural, forestry or industrial property owners, as part of the process of issuing ‘burn’ permits.
- **It is recommended that the Fire Service institute regular inspections of major industrial, institutional and other structures** to ensure that fire and environmental hazards are identified and managed, and that emergency preparedness plans are in place and practiced periodically. There are provisions for charging modest fees for various classes of compulsory and voluntary inspections, but even in the absence of a fee, such inspections are worthwhile.



C. Equipment Mix

Equipment Mix – Capital Plan

- As of the Town's most recent capital plan, equipment acquisitions and the improvements of Station #10 are in the pipeline.
- It is important to consider how to balancing the Town's capital funding priorities when thinking about updating the Fire Services' equipment mix.

<i>Orange = project from Asset Management Plan</i>											
<i>Red = project from Development Charges Study</i>											
FIRE - Draft > Nov 3, 2015											
Project Description	2015 Capital	5 YEAR CAPITAL PLAN					Supplementary Years				
	BUDGET	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Hillsburgh Firehall 50 - Generator	\$ 35,000										
Rescue ATV + trailer & equipment	\$ 35,000										
Breathing Apparatus, 32 sets & 100 bottles	\$ 240,000										
Portable pumps x 2 - including accessories	\$ 10,400										
Portable Signs x 2	\$ 10,000										
Solar Panel Project - Station 10	\$ 30,000										
Custom Pumper Rescue Truck	\$ 264,000	\$ 357,000									
Radio System upgrade, similar to County's 400MHz		\$ 40,000									
Erin Firehall 10 - expansion		\$ 180,000									
Replace T57 (1990 Intl Tanker) with Pumper / Tanker		\$ 264,000	\$ 196,000								
Replace T58 (94 Frtl Tanker) with Pumper / Tanker			\$ 264,000	\$ 196,000							
Erin Firehall 10 - apparatus floor Ventilation			\$ 85,000								
Pumper/Rescue 4x4 pickup -replace R15(92 GM Van)					\$ 122,000						
Pumper/Rescue 4x4 pickup -replace R55(94 Frtl Van)						\$ 125,000					
Erin Firehall 10 - overhead doors						\$ 21,374					
Erin Firehall 10 - doors & windows						\$ 14,758					
Erin Firehall 10 - exterior cladding						\$ 12,791					
Hillsburgh Firehall 50 - interior paint								\$ 26,095			
Erin Firehall 10 - ceramic tile flooring											\$ 30,660
Erin Firehall 10 - millwork allowance											\$ 10,609
Fire Dept - Totals by Year	\$ 624,400	\$ 841,000	\$ 545,000	\$ 196,000	\$ 122,000	\$ 173,923	\$ -	\$ 26,095	\$ -	\$ 41,269	\$ 2,569,687

Equipment Mix – Transportation Equipment (1 of 3)

- The Fire Service operates with the following vehicles:

Station	Year	Vehicle	Historical Cost
Erin	1985	Fire Pumper (Chevrolet)	\$190,161
Erin	1992	Rescue Van (GMC)	\$184,617
Erin	2003	Fire Pumper (Freightliner)	\$288,238
Erin	2008	Fire Tanker (Freightliner)	\$369,126
Hillsburgh	1990	Fire Tanker (International)	\$210,770
Hillsburgh	1994	Rescue Van (Freightliner)	\$187,769
Hillsburgh	1994	Fire Tanker (Freightliner)	\$225,323
Hillsburgh	2000	Fire Pumper (Freightliner)	\$267,273
Hillsburgh	2012	Pumper/Rescue Truck (Spartan)	\$408,700
Mobile	2013	Pickup Truck (Ford)	\$36,185

Equipment Mix – Transportation Equipment (2 of 3)

	Pumper	Tanker	Rescue Van	Pickup Truck
Erin	2	1	1	-
Hillsburgh	2	2	1	-
Mobile	-	-	-	1
Total	4	3	2	1

- As was reported to Council last year, the age of pumper #P11 at the Erin Station has exceeded the maximum prescribed by the insurance grading recognition system. Being dependent on a vehicle over the recommended age could have had the effect of increasing residential and commercial fire insurance premiums over time. However, with Council's recent plan to include replacing the tanker in its capital budget, this cost will be addressed.
- In making its decision about the new tanker, and the related decision about the new pumper, there remain decisions for Council and management about the design (and cost) of both vehicles. The insurance industry appears to be primarily concerned about the availability of a more contemporary vehicle with standard performance capacity. But that decision does not require that the replacement vehicles contain any additional or supplementary capacity or features. Given their use, it is important that these vehicles be fully functional, but there is no requirement for them to be outfitted with the full range of expensive options that suppliers may offer or fire personnel might prefer.

Equipment Mix – Transportation Equipment (3 of 3)

- Because much of the Town's equipment is relatively lightly used, it is recommended that the Town conduct additional studies on it to determine its useful lifespan within its context.
- Additionally, the Town last commissioned a Fire Underwriters Review in 2001. It is recommended that the Town commission another review to determine fire insurance grades, with the acquisition of new equipment, in order to ensure that residents and businesses benefit from better ratings when purchasing fire insurance.
- Over the long-term, as the Town grows, it would be worthwhile to acquire a tanker with larger carrying capacities in order to offer improved coverage for rural fires.
- The decision to provide the Fire Chief with an Emergency Response vehicle was a sound decision, as it now allows him to reach the incident site promptly and in many cases in advance of the fire apparatus and crews, on those occasions when he is in a position to respond.
 - This permits site-assessment and deployment to be undertaken in a more timely fashion.

Equipment Mix – Communications Equipment

- One of the most important aspects of fire suppression and emergency response is effective communications, both from call-for-service to deploying at the scene, and during incidents, the ability to communicate effectively among fire personnel. In both situations, lives depend on effective communication.
- When the review began, the Fire Service was served by a communications system that experienced weak signals in some parts of the municipality.
- The radio system serving firefighters engaged in incidents also had limitations, in its ability to communicate among firefighters. Upgrades to the system were being tested when the consultants visited the fire stations, and have since received funding.
- Staff of the Town and the County have developed and recommended to Town Council a more robust and effective radio communications system to serve the Erin Fire Service, and indeed, fire services across the County.
- Town Council has recognized the importance of resolving these weaknesses in emergency communications and has supported the new system financially in the 2016 budget.
- The new radio system should alleviate the communications issues previously identified by the consultants and fire personnel, improving both the safety environment for firefighters and the effectiveness of their response to calls for assistance by residents, motorists and businesses.



Appendices

Statement of Due Diligence

The recommendations contained within this report used interviews, appropriate research and analysis within the scope of the engagement. It was further supported by relevant experience on the part of the StrategyCorp team in working with municipalities and other governments.

StrategyCorp's recommendations are informed opinions on these topics, but any final decisions properly rest with elected representatives and management. The Town should conduct its own due diligence and verification in order to ensure optimal outcomes, both in adopting and in implementing any of the following recommendations.

- *It should be noted that this organizational and operational overview of the Fire Service addresses the main issues in the state and performance of the Fire Service. However, it is not an in-depth analysis: it does not examine in detail such things the physical condition of individual fire apparatus, nor did it have available data on the response rates of the individual Stations by time of day or season or type of incident. As a result, it is a comprehensive overview of the Fire Service, but it does not examine the full range of issues, nor did it require the production of data and analysis that would need to be assembled by the Town to undertake a fire-station location analysis or a fire insurance underwriters' review.*

Acknowledgements

StrategyCorp wishes to acknowledge and thank Mayor Al Alls and the Members of Town Council, and Chief Administrative Officer / Town Manager Kathryn Ironmonger, for entrusting this important and interesting assignment to StrategyCorp. Without their ongoing support and willingness to participate where requested, the Study's results would not have been as successful.

StrategyCorp also wishes to acknowledge the important role played by Fire Chief Dan Callaghan, Deputy Chief Jim Peavoy, Deputy Chief Ken Keeler and the members of the Erin Fire Service, in finding ways to improve further the important community services provided by the Erin Fire Service.

Finally, StrategyCorp acknowledges the advice and documentation collected for our use by the management and staff of the Town, including Shelley Ballantyne and Sharon Marshall.

People Consulted

Mayor

Al Alls, Mayor

Administration

Kathryn Ironmonger, Town Manager/CAO

Treasury

Sharon Marshall, Director of Finance

Fire & Emergency Services

Dan Callaghan, Fire Chief

Jim Peavoy, Deputy Fire Chief

Ken Keeler, Deputy Fire Chief

Station #10 fire company members (Erin Village)

Station #50 fire company members (Hillsburgh)

Shelley Ballantyne, Roads, Fire and Building Administrative Assistant

Documents Reviewed

Strategic Plan

- *2015-2020 Corporate Strategic Plan*. Town of Erin. The Human Factor Management Consulting & Staff Development Services.

Fire Service Standards

- *Fire Service Performance Measures*. Jennifer D. Flynn. National Fire Protection Association, 2009.
- *Public Fire Safety Guidelines: Staffing Single Family Dwellings*. Office of the Fire Marshal and Emergency Management. Ministry of Community Safety and Correctional Services, 2012.
- *Methodologies for Determining Staffing Requirements*. Budget & Legislative Analyst. City & County of San Francisco, 2001.
- Numerous websites from individual municipalities, municipal associations and fire-service organizations (Stratford, Middlesex, Halifax, Sidney, South Frontenac)



Toronto Office

145 King Street East,
2nd Floor, Toronto, ON
M5C 2Y7

(T) 416-864-7112

(F) 416-864-7117

Ottawa Office

100 rue Queen Street
Suite 550
Ottawa, ON
K1P 1J9

(T) 613-231-2630

(F) 613-231-4113

Public Affairs / Management Consulting / Communications

strategycorp.com