Office of the Fire Marshal
Public Safety Division

Fire Protection in the Northwest Territories

A Discussion

January 2013

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Introduction

Northern communities face challenges not shared by the majority of municipalities across Canada. A low population base and geographical isolation challenges our ability to develop and sustain quality community fire protection services, equipment, and infrastructure. The cost of creating and maintaining an effective community fire protection service in the north is high and there are few opportunities to share equipment and expertise.

In its five-year strategic plan, *A Clear Path Forward*, Municipal and Community Affairs (MACA) commits to establishing quality public programs and services to educate and improve the safety of Northwest Territories (NWT) residents. A fundamental part of this commitment is to increase the capacity of local fire departments, allowing communities to respond to emergencies in a safe, coordinated manner.

The purpose of the following document is to encourage a constructive dialogue among key stakeholders with a view to addressing community fire protection issues of common interest. It serves to identify broad gaps and deficiencies which pose risks to public safety and property; it describes the environment in which NWT community fire departments operate; it proposes common language to help focus future discussion; and it offers recommendations on what activities can address common challenges.

Creating an effective, sustainable community fire protection service is not a challenge unique to the NWT. All jurisdictions in Canada work hard to ensure residents are kept safe from the threat of fire, and each year statistics show these efforts need to be sustained. This document serves as a commitment on behalf of MACA to engage stakeholders in creating a shared vision for the development of an effective fire protection service for NWT communities. It is also an important step in developing a plan that will help ensure maximum value from available resources.

Fire Department Assessments – The Results

In 2010-2011, the Office of the Fire Marshal (OFM) worked with community government fire departments to assess the state of community fire departments and to identify opportunities for future development and enhancement of fire protection services.

The OFM, in consultation with Community Government Fire Departments, developed a detailed assessment of each community's fire department; its management, assets, operations, its service delivery and the governance elements of fire prevention and protection in that community. A sample of the fire assessment and development planning tool is attached as Appendix A.

The results of these assessments provided observations and findings as well as strategies and recommendations for change or improvements in the overall operation of participating community fire departments. MACA is using these assessments as a basis for informed discussion with Community Governments in the development and

enhancement of fire services. Twenty-eight of thirty-three NWT communities have completed an assessment.

For the purposes of this discussion, information from the assessments has been broadly compiled according to these four areas which provide a clear indication on how well the NWT is performing in the realm of community fire protection.

1. Equipment;
2. Training;
3. Governance; and
4. Operations.

Although the actual assessments are much more thorough in their analysis, the following summary offers clear evidence that significant gaps and deficiencies exist in core human resources, training, and operational areas.

1. <u>Equipment</u>

Equipment includes fire trucks (apparatus), turn out gear, and other fire related equipment, including self-contained breathing apparatus. Much equipment of this nature requires strict compliance with codes to ensure serviceability and operator safety and in many cases, a disciplined maintenance schedule.

Apparatus

Eighteen communities currently have fire apparatus still within the standard twenty year life expectancy common for such equipment. Seven communities have apparatus over the age of twenty years requiring a total of nine new individual pieces of equipment for these communities over the next five years. The larger centers requiring apparatus have planned replacement programs in place for this equipment while smaller centers generally do not.

Eighteen communities within the NWT have a regular maintenance and service plan in place for their fire apparatus.

Turn out gear

Sixteen communities (48%), require immediate replacement of fire fighter turnout gear as the existing equipment is over ten years old and not code compliant. For the most part, this is a problem much more apparent in smaller communities, however, it was noted a larger tax-based community is currently using a mix of very old, unfitted turnout gear, with limited amounts of code compliant newer gear.

Self-Contained Breathing Apparatus (SCBA) and Compressors
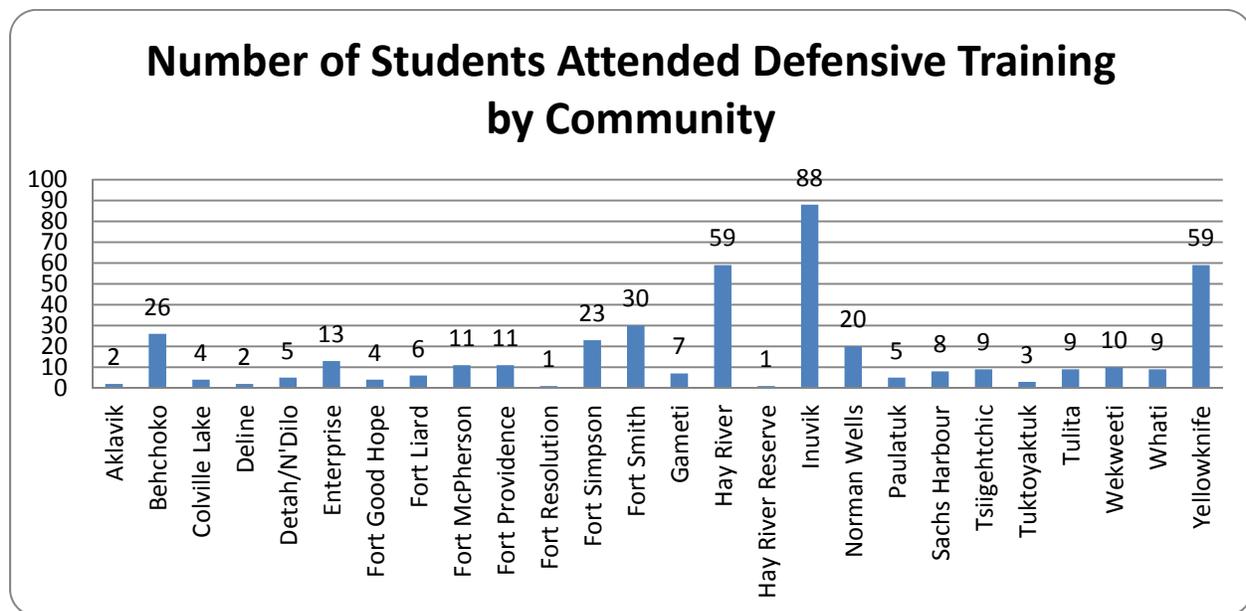
Sixteen communities (48%) have non code compliant SCBA sets. SCBA's provide a limited amount of air (approx. 20 minutes) when in use and additional tanks must be available for those individuals and their backups. Ten communities in the NWT have

non code compliant compressors which either require updating or significant servicing making those communities unable to restock their SCBA air supplies.

2. Training

MACA delivers training to community government fire departments through its School of Community Government.Training for community fire fighters serves to improve their capability, capacity, and performance. Nineteen community fire departments (57%) do not engage in regular training. The nature and scope of firefighting, along with an abundance of complicated equipment and systems, makes continuous training a critical component of successfully engaging in fire suppression activities. Larger centers generally arrange for scheduled training on a more routine basis. The gaps in training are much more apparent in smaller NWT communities. This implies volunteers for those locations are exposed to a greater risk of injury or death during the course performing their role.

The following table shows the volume of students attending defensive training by community over the past ten years.

Number of Students Attended Defensive Training by Community

Community	Students
Aklavik	2
Behchoko	26
Colville Lake	4
Deline	2
Detah/N'Dilo	5
Enterprise	13
Fort Good Hope	4
Fort Liard	6
Fort McPherson	11
Fort Providence	11
Fort Resolution	1
Fort Simpson	23
Fort Smith	30
Gameti	7
Hay River	59
Hay River Reserve	1
Inuvik	88
Norman Wells	20
Paulatuk	5
Sachs Harbour	8
Tsiigehtchic	9
Tuktoyaktuk	3
Tulita	9
Wekweeti	10
Whati	9
Yellowknife	59

As indicated, there has been a sustained effort to train local volunteers, although smaller communities remain challenged in their ability to identify candidates. Successful completion of the course materials, especially in smaller centers, also remains a significant challenge.

3. Governance

By-laws provide the legislative authority for community governments to operate and maintain a community based fire department. Fifteen communities (53%) have enacted a municipal fire service bylaw which means those which established a community fire service (47%) in the absence of a by-law are operating a fire protection service without

the statutory authority to do so. Communities with a bylaw, but are unable to deliver the service, substantial liability is assumed should that service not be made available to an appropriate level.

Funding

The assessments show that financial investments by community governments in the areas of fire suppression significantly lack as the result of competing priorities in other municipal areas. Community governments play an essential role in ensuring that a whole range of programs and services are provided to residents. Lack of adequate core infrastructure can impede a community government's ability to protect residents from the threat of fire and/or a variety of public safety threats that may exist in a community (e.g. carbon monoxide). Furthermore, the frustrations caused by shortfalls in key areas, often leads to turnover rates for volunteers that are called upon to deliver the service.

Recruitment and Retention

Twenty nine (88%) communities in the NWT do not have a formal recruitment/retention strategy. The most common strategy for recruiting new members is by word of mouth, although some communities (very few) place ads in local newspapers.

4. Operations

A Standard Operating Procedure (SOP) is a written document or instructions detailing all relevant steps and activities of a process or procedure. An SOP provides firefighters with a reference to common practices, activities, or tasks. Seven of twenty-eight communities (21%) have valid SOP's (including Municipal Taxation Authorities). Twenty four communities are operating fire departments without valid SOPs in place which means inconsistency in making decisions which can result in substantial endangerment to volunteers to fire fighters and residents. SOPs are an integral part of a community fire service operation in all jurisdictions in Canada.

Environmental Scan

To effectively engage key stakeholders on the identified challenges, it is important to establish a common understanding of the current operating environment as it relates to community fire protection. This includes a thorough understanding of whose involved, what activities are central to success, how key decisions are made, and what additional elements influence desired outcomes.

Key Stakeholders

The community fire protection system in the NWT involves a number of key players who each contribute to the effectiveness of the system in a number of unique ways. They include:

Fire Chiefs/Local Assistant to the Fire Marshal

The Fire Chief/Local Assistant is responsible for directing the activities of the Fire Department to ensure that loss of life, property or injury as a result of fire is prevented and/or minimized within the community. The Fire Chief/Local Assistant reports to Council through the Senior Administrative Officer.

The Fire Chief/Local Assistant is the sole authority and command at the scene of a fire. The Fire Chief/Local Assistant is responsible for:

- Directing volunteer fire fighters and ensuring fire fighters have adequate training;
- Ensuring fire fighting equipment is monitored on a regular basis and is in good working order;
- Developing policies and procedures concerning fire-fighting in accordance with the municipal bylaw, federal and territorial legislation and policies and in accordance with the Office of the Fire Marshal; and
- Maintaining records on incidence of fire, injuries and loss of property, monitoring the fire fighting budget, and implementing fire prevention education and awareness programs.

The Fire Chief/Local Assistant and the SAO work closely to build a good working relationship in order to effectively manage new and ongoing issues and day-to-day operational activities. It is important for the SAO to have a firm understanding of the fire department and its operations as the SAO is the alternate for the Fire Chief/Local Assistant should he/she be absent.

The Fire Chief/Local Assistant should attend monthly Council meetings and be prepared to advise Council on the current activities and status of the fire department. The Fire Chief/Local Assistant should ensure that the SAO is informed of and approves all staff changes to ensure that personnel records are up-to-date. It is important to maintain current records in the event of a chronic illness due to firefighting or an injury on the fire scene.

MACA has developed a handbook, for the purposes of assisting community government fire departments in their operations, entitled the *Fire Prevention Handbook.* The handbook is available on MACA's website.

Northwest Territories Fire Chiefs Association

The purpose of the NWT Fire Chiefs Association is to further the advancement of emergency services in the NWT (fire suppression, pre-hospital care, dangerous goods and rescues) and provides a valuable forum for the exchange of ideas on questions of safety related to life and property, and to represent members in matters of territorial legislation related to emergency services and the NWT. The Association represents the majority of NWT fire departments and also works closely with the Office of the Fire Marshal and MACA's School of Community Government on matters relating to training and capacity building.

Senior Administrative Officers (SAO's) and Councils

The Senior Administrative Officer (SAO) and the Council of the community government play an important role in a community's fire protection and prevention. The SAO and the Council work in partnership with the community's Fire Chief/Local Assistant, Fire department and the Office of the Fire Marshal. The Council of the community government, with support from the SAO, is responsible for:

- Adopting a fire protection bylaw that states the levels of fire services (i.e. fire response, dangerous goods response) that are available, the cost of the services and the protection area covered by the community's fire department;
- Setting the budget for the community fire department based on levels of fire service provided; and
- Planning and budgeting for major expenditures such as fire halls and replacing fire apparatuses.

The SAO, Council and the Fire Chief/Local Assistant are encouraged to meet regularly to discuss the activities and status of the community's fire department. These meetings are an opportunity to learn what the fire department is currently engaged in and to plan for the future.

Office of the Fire Marshal (OFM)

The purpose of the OFM is to protect the public from loss of life and property as a result of fire. The OFM has direct contact with fire departments and the public across the NWT.

The OFM plays a regulatory role by enforcing the *Fire Prevention Act* and its associated regulations, namely, the *Fire Prevention Regulations*, *Fireworks Regulations*, and *Propane Cylinder Storage Regulations*. The OFM works closely with Assistant Fire Marshal's (AFM's) in each regional office who delivers many of the same services on behalf of the Fire Marshal's office and plays a direct role in the administration of the *Act and Regulations* at a regional level. In most cases, the AFM's will be the point of contact for the community fire department and MACA.

The OFM also has a developmental role to fulfill and works together with administrative staff and technical personnel to:

- Provide assistance and direction to the public, fire departments, government agencies and industry on fire safety matters;
- Coordinate territorial-wide programs including upgrading fire safety in homes and fire education in schools;
- Distribute fire prevention and protection information through public meetings, newspaper articles, radio and TV;
- Establish standards and aids in the training of fire departments;
- Investigate conditions under which fires may occur;
- Carry out fire and arson investigations; and

- Collect and distribute information about fires in the NWT.

In addition to these responsibilities, the Fire Marshal advises and makes recommendations to the Minister of MACA with respect to:

- The establishment of fire departments, the necessary organization and equipment of fire departments, and the establishment of training programs for fire fighters;
- Provision of adequate water supplies for fire-fighting purposes; and
- The enactment and enforcement by municipalities of by-laws for the prevention and suppression of fire and the safeguarding of persons and property in the event of fire or the alarm of fire.

Volunteers

A volunteer firefighter is a local resident who freely offers his/her services to the community to assist in firefighting duties because the community does not warrant a full-time fire brigade. These individuals play an essential role in protecting residents and are a very integral part of ensuring the public safety of their communities.

Fire departments in the NWT are largely composed of volunteers, with only Yellowknife employing full-time fire fighters, and only Yellowknife, Hay River, and Inuvik employing a full-time fire chief. It is estimated that approximately 340 volunteer firefighters support the NWT's community fire service which is an average of 10.3 per community, well below the national average of 28. In contrast, approximately 85,000 volunteer firefighters comprise 3000 volunteer fire departments across Canada[1] .

Many communities in the NWT experience difficulty in the recruitment of volunteers. Although reasons vary, a significant factor is the training which requires individuals to take time away from home and work for even the basic level.

Recruitment, Retention, Recognition

A significant challenge for communities in the NWT is the recruitment and retention of volunteer fire fighters. Without sufficient numbers of trained volunteers, local fire chiefs are unable to respond to local emergencies which reduce their ability to deliver fire protection services expected by residents.

Most communities in the NWT have a very small population which is called upon to participate in many different volunteer roles. This makes it challenging to ensure a sustained commitment to fire training and prevention activities. In 2009, MACA held a Volunteer Summit which provided an opportunity for volunteers to express their needs, concerns, and ideas surrounding the voluntary sector. In the Summit's final report, the following observations were made in the areas of volunteer recruitment, coordination, recognition, and training:

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[1] Canada Revenue Agency, Government of Canada, 2011

- Organizations are too busy and do not have enough people to coordinate and manage their volunteers efficiently and effectively. A lack of management ends up costing organizations more money and a loss of volunteers. People are more willing to volunteer when there is good management.

- Volunteer recruitment can be a challenge in the NWT. Currently, volunteers are recruiting other volunteers by inviting family members and friends to events, but to increase the volume of available volunteers, other modes of recruitment need to be identified. As a Territory, we need to raise the percentage of volunteers as a whole, and not just the amount of time an individual volunteers.

- Although volunteers are being offered various training opportunities – including First Aid/CPR; Pleasure Craft Operators Card (PCOC); and program management – there is still a need to offer more training. Smaller communities, in particular, are in need of more training opportunities, and financial support for such opportunities needs to be made available.

- Although volunteers are being recognized, there is the feeling that we are focusing too much on super volunteers and not praising regular volunteers enough. Volunteers that put in a few hours tend to be "unsung heroes" and still need to be thanked for the little things they do.

Finally, the Fire Service Merit Awards are presented annually to acknowledge and recognize the important contributions made by firefighters and community fire departments through the NWT Fire Service Awards Program. The Program includes both length of service awards for individual firefighters and fire service merit awards for individual firefighters and communities.

Community Government Funding

The *Cities, Towns and Villages Act, Hamlet Act, Charter Communities Act* and *Tlicho Community Government Act* all require municipal governments to prepare and adopt a budget on an annual basis. The budget process includes two components. One involves the routine maintenance and operations of the municipality (the operating budget) and the other deals with capital planning (the capital budget). Development of a municipal budget serves a community in several ways:

- A budget identifies priorities as determined by council;
- A budget is a tool to communicate those priorities to the public and to staff; and
- A budget assists with determining whether existing financial resources are sufficient to meet municipal spending needs.

Community governments receive funding each year from the GNWT for operations and maintenance which is used for general program and service delivery including, but not limited to, the provision of administration staff and support, the operations and maintenance costs for community government buildings, and program support in areas such as public safety, recreation, works, and governance. In addition, community

governments receive annual funding for infrastructure which is used to construct new infrastructure, or to undertake repairs/retrofits to infrastructure already constructed.

Budgets are set yearly by community government councils and the process varies on a community by community basis. Some community governments engage in extensive consultations with residents while others develop a budget in-house which is presented and discussed at a council meeting.

A significant challenge fire departments face during budget deliberations is defining the fire service in terms of quantitative and qualitative value. Suppression is one of the most costly services in the fire department, and when the alarm sounds, they need to be ready to respond. Suppression consumes, in most cases, the vast majority of fire department budgets, yet may make up only ten percent of what the fire department does. While the cost is high for suppression, the value may be high as well if the community is unwilling to absorb the expense of losses that occur. However, if the loss is acceptable, then the value of suppression services to the community may be deemed less valuable.

Fire Chiefs/Local Assistants in small communities typically do not have spending authority or may only have a small spending authority. In these situations, expenditures and requests for expenditures are brought to the SAO for approval. When preparing a request for expenditures, the Fire Chief/Local Assistant should ensure that adequate information is provided to clearly indicate why the expense is necessary for the fire department.

Insurance

The Northern Communities Insurance Program (NCIP) was founded in 1978 by the NWTAC to provide insurance services to members. In 2003, NCIP formed a self-insurance program (NORCIX) in order to stabilize the cost of insurance. The program resulted in favorable insurance rates and a good claims history which has helped keep rates relatively stable and low. In early 2009, program authorities decided to actively work with members to prevent insurance losses. The Loss Prevention Insurance Program provides member communities with financial incentives to help protect community property. In 2008 and 2009, insurance program members shared nearly $1.1 million as the result of those efforts. The program has 24 members, including 23 NWT Community Governments and the NWTAC.

In Canada, the insurance industry uses an independent organization called the Insurers Advisory Organization to assign classifications (a class) to communities to help establish insurance rates. These classes are based on a variety of factors including a community's ability to protect buildings and residents from the threat of fire. Unfortunately, 27 out of 33 NWT communities are considered unprotected for commercial risks, and 19 are considered totally unprotected from a residential perspective.

Strategic investment in fire protection combined with careful community planning typically results in the best possible class calculation for the degree of investment in fire protection. As the class in a community improves, so does the access to the insurance market. This has a significant impact for business owners and residents and can be an attractive feature of a community with respect to economic development.

For residents and businesses in communities with a poor class, it can be difficult to acquire insurance. In some cases, insurance may have to be acquired through multiple providers as insurer capacities for the area prevent them from insuring the entire risk value. The following insurance rates were acquired from AVIVA Canada Inc. for three different classes on a $400,000 home owner's policy:

Class 1 (Protected) $1,287
Class 2 (Semi-protected) $2,008
Class 3 (Unprotected) $2,740

Communities can improve their fire insurance class in one of two ways:

1. Reduce risk; and/or
2. Increase capacity of fire protection services.

Training

Fire training for NWT communities is available through the School of Community Government (SCG) by request. Travel support is available through the SCG for training hosted outside of the firefighter's home community. Training available from the SCG includes:

o   NWT Defensive Fire Fighter Course;
o   NWT Offensive I, II and III Fire Fighter Course;
o   Wild land/ Urban Interface Fire-Fighter Training;
o   Fire Fighter Training Modules (Advanced);
o   Fire Fighter Officer Training Modules;
o   1041 Level 1 Part I (Instructor Practical Skills Course);
o   1041 Level 1 Part II (Instructor Theoretical Skills Course);
o   1041 Level 1 Part III (Instructor/Evaluator Course);
o   Instructor Workshop; and
o   Council Orientation to Fire Protection

The objective of the fire fighter training is to establish a minimum fire department capacity for each community. Available training balances the specific needs of individual communities and a coordinated multi-year, progressive, community based plan is the goal in meeting this objective through the community fire assessments and development plans. Training programs are customized to NWT needs, and all lead towards National Fire Protection Association (NFPA) Certification. The NWT has broken down the requirements for certification into three forty hour courses and one twenty-four hour course, Defensive Fire Fighter, and three levels of Offensive Firefighter. Each

course progresses the firefighter from the most basic required knowledge of ensuring a fire does not spread to adjacent buildings to advanced interior attack.

Courses are arranged in partnership between sponsoring communities and MACA on a request basis. Territorial and regional training events are also scheduled through MACA and are publicized through an annual program calendar.

The NWTAC has consistently called for the GNWT to support fire fighter training in communities and has passed resolutions to this effect.

Data Collection

For local fire chief's to be successful in their jobs, they must make compelling presentations to mayors, chiefs, and councils to explain their department's needs and successfully compete for scarce resources. The key to making effective arguments for these resources is good data. Fire Departments in the NWT collect hundreds of pieces of data and information annually and need to convert this data to useful information. This will help evaluate performance of a fire department and assist in helping a fire chief make good decisions in a variety of areas.

At present, MACA utilizes the *Fire Department Manager* (FDM) Database which is used to compile and report on fire related issues in the NWT. With the exception of the OFM, and the occasional community government fire department user, the tool is greatly underutilized, despite its obvious value for community fire departments. With information summarized from the FDM, communities, MACA, and the GNWT are much better equipped to develop programming and tools with which to support community fire protection. Unfortunately, the system's current usage has not evolved to a point where this data could be used as a basis for analytical purposes.

Accountability Framework

In funding agreements provided to community governments in 2012, specific reporting requirements were included to help MACA support the implementation of an Accountability Framework (the Framework).

The Framework was implemented to acknowledge a shared responsibility between MACA and community governments to manage public funds. The goal is to help communities by clearly articulating the levels of support and advice they can expect from MACA during the course of their normal business as well as knowing when and how MACA will engage and support communities when they face challenges. The framework is also a valuable communications tool between the two levels of government (municipal and territorial) as well as communications tool between community governments and their residents. MACA will begin implementing the Framework in late 2012 and initial reporting by communities governments will likely start in 2013.

Should indicators show poor performance or a need to consider alternative measures to help improve in some areas, including fire protection, MACA will work with community governments to develop a suitable plan. This work will also compliment future fire assessment and development planning.

Indicators relating to fire protection in the Framework will consider the following factors:

- A bylaw or Band Council Resolution exists accurately defining the level of service;
- A bylaw or resolution recognizing the level/types of hazards in the community;
- A sufficient number of trained fire-fighters on the fire brigade;
- Personal protective equipment is sufficient for the level of response prescribed in the bylaw;
- A fire department which trains regularly and accurately records training activities;
- A program is in place to certify skills of fire-fighters;
- Equipment is maintained and records are kept (vehicles, SCBA, Turnout gear, and tools);
- Standard Operating Procedures are in place and followed for operations;
- The fire hall is organized, tidy and ready for response;
- The Fire Chief regularly communicates with SAO/Council; and
- Hydrant flow data is available and sufficient (where applicable).

Legislative Changes - Workers Safety and Compensation Commission

The Workers Safety and Compensation Commission (WSCC) are currently developing specific requirements related to fire protection services. These regulations will have a direct impact on community government fire departments as they will apply to many fire department activities. These changes are expected to come into effect in 2013-2014. A summary of these specific standards include:

- Response and training guidelines;
- Standard codes of practice;
- Emergency response plans;
- Adequate training to ensure response plans are carried out by competently trained volunteers or employees;
- Requirements to secure vehicles and equipment;
- Vehicle maintenance and inspection records;
- Specific provisions for transporting fire fighters;
- Minimum standards relating to personal protection equipment;
- Specific standards for interior fire fighting teams with requirements such as having a rapid intervention team on standby, personal alert safety system for fire fighters, etc..., and
- Any additional requirements that may have an ancillary application (i.e. Additional requirements for departments engaged in high angle rescues, etc.)

The proposed changes to the WSCC regulations will have a significant impact on changes to current community fire services, development of future community fire service programs, and future training offered through MACA.

Community Fire Service Response Capabilities

Establishing an accepted standard for service delivery offers important benefits to the territorial fire service, including a solid foundation upon which to develop and deliver an effective community fire service and an opportunity to share and enhance existing practices. Accepted standards also play an important role in assisting community governments in allocating resources for their fire service, creating training plans, maintaining equipment and communications, and improving efficiency.

To this end, MACA is proposing common language which describes service response capabilities that will help clarify what communities should aim for in developing an ideal fire service. It is also proposed that these service levels be supported by principles similar to the following:

Community fire departments in the NWT should:

1. ***Prevent the outbreak of fires and achieve fire-safety awareness throughout the community.***

2. ***Ensure the enforcement of codes on fire and life safety for the prevention and control of structural fires.***

3. ***Maintain a response capability that is safe and effective.***

4. ***Protect residents' life safety and property against the dangers of fire and other emergencies that may occur in the response area.***

The following are three fire service response capability levels that NWT communities may strive for:

- **Defensive**. The community fire department is able to provide min. 5-6 trained volunteers, have at least a triple combination pumper, water trucks able to supply the min. 100 gallons per minute (gpm) flow rates and have specialized equipment such as SCBA. As well, a majority of first responders will have the necessary training for defensive fire operations.

- **Advanced**. These community fire departments are able to provide min. 10-12 trained volunteers, have at least a triple combination pumper, water trucks able to supply the min. 420 gpm flow rates and have specialized equipment such as SCBA. As well, a majority of first responders will have the necessary training for defensive fire operations and command staff will have command training. With suitable training, these departments may also operate in vehicle rescue situations or other forms of specialized rescue.

- **Offensive**. These community fire departments are able to provide min. 10-12 trained volunteers, have at least a triple combination pumper with backup and support vehicles, water trucks able to supply the min. 850 gpm flow rates for full offensive operations and have specialized equipment such as SCBA. As well, a majority of first responders will have the necessary training for defensive and offensive fire operations and command staff will have command training. With suitable training, these departments may also operate in vehicle rescue situations or other forms of specialized rescue.

Recommendations

The following recommendations are based on the preceding review. Their purpose is to address service gaps and deficiencies identified through the fire assessments, with a view to improving the effectiveness of community fire protection services and reducing the vulnerability of residents to the threat of fire. They will also serve to improve collaboration between key partners and ensure that value from available financial and human resources is maximized.

It is envisioned that once finalized, these recommendations will form the basis of a Fire Protection Strategy that will guide the work of MACA and NWTFCA over the next several years.

Equipment

- Develop minimum equipment lists identifying what is needed for each potential level of operation in consultation with community fire departments.

- Provide community government fire departments with apparatus specifications to ensure purchases meet current code requirements.

- Provide assistance with the design of maintenance programs to assist the community government and fire department in maintaining existing equipment.

Training

- Establish and support a network of volunteer trainers to support communities in need.

- Implement a system to track, maintain, and evaluate training participation which will assist in coordinating continuing education for fire fighters.

- Create a Fire Training Program Advisory Committee, including key stakeholders, to provide advice in the application of professional/occupational competency standards, programming, and the development of training resources and

materials. The Committee would also contribute to regular program assessments, evaluations and reviews.

- Clarify and educate local assistants on their roles/responsibilities under the *Fire Prevention Act* for fire inspections and fire investigations and offer training in those areas.

Governance

- Develop additional material for council orientations to create awareness of the challenges influencing community fire departments.

- Work with stakeholders to clarify roles and responsibilities for all activates involving fire department operations outside municipal boundaries.

- Work with the NWTFCA and community governments to review and update the Fire Department Assessment and Development Plan tool for future use.

- Organize regional workshops to build knowledge and capacity among local assistants and Senior Administrative staff.

- Work with key stakeholders and local assistants to build knowledge and implement strategies with which to recruit, manage, reward, and retain volunteer fire fighters.

- Enhance reporting abilities of the OFM by allowing web access for the entry of fire reports over the internet and an online tool for the issuance of Fireworks permits.

Operations

- Develop a template of standard operating procedures which community governments can adapt for their own needs.

Fire Prevention

- Develop an effective territorial-wide fire prevention campaign for delivery during National Fire Prevention Week and include separate campaigns relating to smoke alarms and seasonal messaging for programs such as checking/cleaning chimneys, heating appliance maintenance, heating oil storage tank maintenance, and fire-smarting your property.

- Publish a quarterly newsletter aimed at local fire chief's containing useful information about fire prevention activities, helpful advice, and capacity building opportunities. The publication would be co-authored by MACA and the NWTFCA.

- Implement a plan review awareness campaign for the construction industry.

- Work with Environment and Natural Resource to help educate community fire protection officials on Fire Smart principles and develop plans with which to protect communities and residents against the threat of wildfires.

Next Steps

Your views are important to help validate and shape the Department's strategic direction in the area of community fire protection over the next several years. More specifically, we want your thoughts about the proposed recommendations and any additional ideas about activities or tools that may help improve fire protection in your community.

MACA is soliciting comments concerning this important topic until February 15, 2013, after which time, key partners will work together to finalize and implement a long-term strategy involving key initiatives. For Local Fire Chiefs, please direct your comments and questions to MACA Assistant Fire Marshals:

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For Senior Administration Officers and Band Managers, please direct your comments and questions to MACA Regional Superintendents:

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Name of Community

Fire Department Assessment

And

Development Plan

Prepared jointly by *(list names):*

Fire Chief & Senior Administrative Officer - Community

Assistant Fire Marshal & Regional Superintendent - MACA

Date

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Executive Summary

Purpose of the Report

The purpose of this report is to provide leaders in the community a timely assessment of the capabilities of their fire department and to collaboratively develop a development plan into the future.

This report details the study of fire protection services in *community,* NWT. The report provides a thorough and detailed assessment of the fire department, its management, assets, operations, its service delivery, and the governance elements of fire prevention and protection in the community. The report provides observations and findings, as well as strategies and recommendations for change or improvements in the overall operation of the Fire Department.

The MACA Regional Office wishes to thank the staff and elected officials of the *community* and the *community* volunteer fire department for the excellent cooperation we received. All involved were candid in their comments ad provided a large amount of information and data in a short amount of time.

Methodology

The approach used by MACA is performing the evaluation included utilization and analysis of statistics, review of documents, interviews with key staff and various agency representatives, and direct observation of facilities and apparatus. Information was collected on a variety of topics of importance on providing quality fire services.

The information was used to develop specific recommendations for the *community* fire department. The recommendations represent opportunities to improve the quality of service provided to the community.

Background Information

This report includes a detailed review of the *community* Fire Department and its various programs. The department assessment is arranged by the seven survey objectives shown below:

- Community Baseline and Organizational Review

- Management Components
- Staffing
- Capital Assets: facilities, apparatus, and equipment
- Service Delivery and Performance
- Training Program
- Fire Prevention and Education

The criteria used to evaluate the department have been developed over many years and are used across many jurisdictions. These criteria include relevant National Fire Protection Association (NFPA) standards, national accreditation criteria, health and safety requirements, federal and territorial mandates relative to fire protection, and generally accepted practices within the fire service.

Each survey objective provides the reader with general information about that element, as well as specific observations and analysis of any significant issues or conditions that is pertinent. Observations are supported by data collected as part of the survey and interview process.

Finally, specific recommendations are included to resolve identified issues and concerns or to take advantage of opportunities that may exist.

This product is a baseline document that is intended to be reviewed on a yearly basis in order to establish progress and continuing future needs.

Summary of Significant Recommendations

The study resulted in __*a number*__ specific recommendations for improvement. The most significant recommendations developed as a result of this study are listed below. A list of all recommendations and details on how to move forward with these recommendations are contained in the annexes at the end of the report.

Ensure these are the critical immediate actions necessary to start the development plan.

Completed following the detailed assessment (should be the general summary such as: develop a community recruiting program (set a target number); budget for the replacement of ???? in the next fiscal year; allocate funding to increase the capability of the Fire Chief through formal training; and more

Community Fire Department Assessment

Objective One – Community Baseline and Organizational Overview

Insert a brief community profile (demographics/population – anything that may directly influence a fire department)

The *community* Fire Services area is based upon the community boundaries and may respond to incidents beyond its boundaries. The *community* Fire Department is *volunteer-based/other* and is funded by the community. The Fired Chief reports to _____.

The Department began fire services in _____ and has operated _____

The *community* Fire Department provides fire services to a population of _____. The services are provided from _____ facility(s) maintaining _____vehicles.

There are ___#___ volunteer fire fighters as of *date.* The Department has a Fire Chief, _____name_____ . The department consists of all volunteer fire fighters; therefore, staffing response is dictated on who is the community at any given time. Does the fire department maintain an on call list to ensure an adequate response?

The department provides a variety of services including, fire suppression, public fire safety education, fire inspections, _____.

Call receipt and dispatch services are conducted by _____ .

Responsibilities and Lines of Authority

The *community* Fire Department is established under by-law _____ . The by-law provides the following authorities *list the tasks which the department is authorized and expected*

Note: the By-Law is attached

Further responsibilities of the Local Assistant are identified within the Fire Prevention Act.

Comments/Recommendations

Foundational Policy

Fire departments that operate efficiently are typically governed by clear policies that provide the basis for effective organizational culture. These policies set the boundaries for both expected, and acceptable behaviour, while not discouraging creativity and self-motivation.

A comprehensive set of departmental operating rules and guidelines should contain at least two primary sections. The following format is suggested.

- **Administrative Rules** – This section would contain all of the rules that personnel in the organization are required to comply with at all times. Administrative Rules, by definition, require certain actions or behaviours in all situations. The Council should adopt or approve the Administrative Rules with a review by the Office of the Fire Marshal to ensure compliance with accepted fire service practices. Administrative Rules should contain sections which address:

• Public records access and retention	• Harassment and discrimination
• Contracting and purchasing authority	• Personnel appointment and promotion
• Safety and loss prevention	• Disciplinary and grievance procedures
• Respiratory protection program	• Uniforms and personal appearance
• Hazard communication program	• Other personnel management issues

- **Standard Operating Procedure (SOP)** – This section should contain "street-level" operational standards of practice for personnel of the department. SOPs are different from Administrative rule in that variances are allowed in unique or unusual circumstances where strict application of the SOP would be less effective. The document should provide for a program of regular, systematic updating to assure it remains current, practical and relevant. SOPs should be developed, approved by the SAO, and enforced under the direction of the Fire Chief.

The *community* Fire Department has _____ documents. *Describe what they have.*

What kind of shape are they in? Are they utilized, Are they approved by Council, have they been reviewed by the OFM?

Comments/Recommendations

Organizational Structure

A well-designed organizational structure should reflect the efficient assignment of responsibility and authority, allowing the organization to accomplish effectiveness by maximizing distribution of workload. The lines on an organization chart simply clarify accountability, coordination and supervision. Thorough job descriptions should provide the details of each position and ensure that each individual' specific role is clear and centred on the overall mission of the organization.

Describe the current structure and the strengths and weakness of it – in detail. This should be discussed openly with the fire chief and potentially with the SAO

Comments/Recommendations

Maintenance of History

Appropriate records of all corporate or municipal meetings are maintained in accordance with the laws of the NWT governing various types of public meetings and decision involving public funds. Additionally it is important to maintain a history of the department in order to assist with future decision making.

Does the department have historical records of the department? If so what kind of information do they keep?

An annual report is a solid communications tool to share the efforts and activities of the department with the public. It is also vital in communicating to the department's jurisdictional

authority in order to ensure their continued support. An annual report should include activities and information from the previous calendar year:

- Brief history of the department
- Summary of events and activities during the report year
- Description of major incidents handled by the department
- Descriptions of new or improved services and programs
- List of people who served with the department during the year
- Awards received by the department or individuals
- Financial summary
- Statistical analysis, if applicable

Comment/Recommendations (are there any identifiable trends?)

Finance and Budget

Financial oversight of the *community* Fire Department is the responsibility of the community. Day-to-day financial oversight responsibility rests with _____ . *any other pertinent information?*

Is the budget appropriate to support the activities and legal responsibilities of the fire department? *Yes/No*

Comment/Recommendations

Capital Improvement Planning

A comprehensive capital improvement and replacement program is important to the long-term financial stability of any fire department. Such programs provide systematic development and renewal of physical assets and rolling stock of the department.

Is there a capital improvement plan for the department? If so, does it meet the future needs of the department?

Comments/Recommendations

Objective Two – Management Component

As with most emergency services, the *community* Fire Department faces challenges to organizational growth and management. In addition to the operational challenges of emergency response, the management of the business of a fire department always presents unique issues involving the administration of financial resources, the setting of goals and objectives, internal and external communications, information management, and security. This section of the report examines the department's efforts in this area and preparation for the future health of the organization.

Mission, Vision, Strategic Planning, Goals and Objectives

The process of strategic planning involves clarifying an organization's mission, articulating its vision for the future, and specifying the values within which it will conduct itself.

Has the department developed a strategic plan or is there reference to the fire department in the community strategic plans?

Comment/Recommendations

NOTE:

What is the availability of **SOPs, Rules, Regulations, and Policies?**

What is missing?

Comments/Recommendations

Critical Issues

It is extremely important that there be a clear understanding of critical issues facing the department. Without such an understanding, leadership cannot be prepared to face the issues.

The critical issues within the *community* Fire Department, identified by both the drafters of this report and the members of the Fire department are: *(list only the key issues that are preventing the department from moving ahead)*

1.

2.

3. *(may be more)*

Internal and External Communications

Quality communications is an important, achievable goal for any organization, but one that always seems to be most elusive. *Is there a system in place where the members of the department are able to be heard and involved? If so, how does it work? How does the Chief keep the fire fighters informed*

How does the department communicate with its jurisdictional authority, its clients?

Comments/Recommendations

Document Control and Security

Records management is a critical function to any organization. A variety of uses are made of written records and, their integrity must be protected. Public entities are subject to the scrutiny of their constituents and therefore the integrity of records must be maintained. There are requirements for the maintenance of records for WSCC as well. Document control and security should be in line with accepted protocol within the community.

How are department records stored? (personnel, maintenance, financial, other)

Is there an up-to-date inventory? Is there a process to keep it current?

Is there petty cash, if so how are the records controlled? Credit cards?

Comments/Recommendations

Reporting and Records

The Office of the Fire Marshal utilizes the Fire Department Management (FDM) system software to record and track information. This is not available to all local fire departments at this time.

How does the department report fires? (mechanism, timeliness, forms?) Is there a formal releasing protocol? Describe the local process.

Comments/Recommendations

Objective Three – Staffing

Fire departments must provide adequate staffing in order to meet safety standards and to meet the expectations of their constituents.

What is the necessary staffing level for this department to meet its response expectations? What are the historical staffing levels? Where is the department is now; numbers, training, leadership, qualifications?

Recruiting and Retention

Is there a recruiting and retention strategy? Has it achieved its objective?

Comments/Recommendations

Critical Tasks and Staffing Performance

Tasks that must be performed at a fire can be broken down into three key components: life safety, fire flow, and salvage and overhaul. Life safety tasks are based on the number of building occupants, and their location, status, and ability to take self-preservation action. Life safety-related tasks involve the search, rescue, and evacuation of victims. The fire flow component involves delivering sufficient water to extinguish the fire and create an environment within the building that allows entry by firefighters. Salvage and Overhaul ensures the fire is extinguished and the building is tenable to occupants or not.

The number and types of tasks needing simultaneous action will dictate the minimum number of firefighters required to combat different types of fires. Tasks include:

• Command	• Water Supply
• Scene safety	• Pump Operations
• Search and rescue	• Ventilation
• Fire attack	• Back-up/rapid intervention

Discuss the department's capability to conduct the tasks above; identify what tasks they are capable of conducting, and what tasks they are working toward establishing capability in.

Do they meet the minimum task capability needed in their jurisdiction?

Comments/Recommendations

Incident Staffing Performance

Is the department able to respond with enough trained staff to meet their minimum need as identified in their fire bylaw at all times? If not, describe the situation.

Comments/Recommendations

Basic Personnel Management

The people in an organization are its most valuable resource. Careful attention must be paid to managing that resource to achieve maximum productivity of the organization and maximum satisfaction for the individual. A safe working environment, fair treatment, and recognition for a job well done are key components of employment, membership, and job satisfaction.

Policies and procedures, guidelines, and general orders, in regards to maintenance of personnel records, promotional processes, and disciplinary policies based on firm enabling documents promote an efficient and effective personnel management of a fire department.

How are personnel managed?

Comments/Recommendations

Disciplinary Processes

Is a process identified and in place?

Comments/Recommendations

Competency Testing Processes

Once achieving skill standards, individuals should be evaluated periodically to ensure their continued ability to perform their duties safely and efficiently.

Is there a system in place?

Comments/Recommendations

Objective Four – Capital Assets and Resources

Fire Station

Describe to facility. Is it suitable for its use? Identify any deficiencies.

inventory

Comments/Recommendations

Apparatus

Describe the apparatus (suitability, age, maintenance/serviceability, special training needs, etc)

Availability of technicians for service – implications

Note: Are there service records?

Inventory on board

Comments/Recommendations (replacement plan)

Support and Small Equipment

A small equipment replacement plan should include a schedule of equipment covered, estimated life expectance, and replacement cost.

Describe what they have and if they have a plan

Describe how they get replacement equipment if it is not a formal long-term replacement plan.

Comments/Recommendations

Self Contained Breathing Apparatus (SCBA)

SCBA must be in serviceable condition in order for a fire fighter to be safe.

Describe the condition of the SCBA. Does each fire fighter have their own equipment?

Is there a maintenance program in place? Is there a replacement plan?

inventory

Comments/Recommendations

Turnout Gear

The most valuable asset of a department is its people. Turnout gear must be serviceable in order for a fire fighter to be safe.

Describe the condition of the Turnout. Does each fire fighter have their own equipment?

Is there a maintenance program in place (cleaning, repairs)? Is there a replacement plan?

NOTE: *Does the turnout gear meet code?*

inventory

Comments/Recommendations

Objective Five - Service Delivery and Performance

The section includes issues such as response timings, demand analysis, dynamics of fire in buildings (relating to the community's common structural and material aspects, specific structures that require planning in advance.

What is the availability of fire fighters? (weekly or seasonable cycles when volunteers are simply not available in the community due to mine work or hunting season, etc)

There are six steps that are referred to as the "reflex time continuum". These are:

1. Detection. The detection of a fire may occur immediately if someone happens to be present or if an automatic system is functioning. Otherwise, detection may be delayed, sometimes for a considerable period.
2. Report. Today most fires are reported by telephone to the local emergency number. Call takers must quickly elicit accurate information about the nature and location of the fire from persons who are apt to be excited. A citizen well trained in hot report emergencies can reduce the time required for this phase.
3. Dispatch. The dispatcher must identify the need for dispatching the department and the immediate details of where and what. If possible, the dispatcher should continue to update information about the emergency while the department responds.
4. Turnout. Fire fighter must don firefighting equipment, assemble on the response vehicle, and begin travel to the fire. Good training and proper fire station design can minimize the time required for this step.
5. Response. This is potentially the longest phase of the continuum. The distance between the fire station and the location of the emergency influences reflex time the most. The quality and connectivity of streets, traffic, driver training, geography and environmental conditions are also a factor.
6. Set up. Last, once firefighters arrive on the scene of a fire emergency, fire apparatus are positioned, hose lines stretched out, additional equipment assembled, and certain preliminary tasks are performed (such as rescue) before suppression is commenced.

Describe their overall status across the continuum to meet these objectives

Comment/Recommendations

People, Tools, and Time

Time matters a great deal in the achievement of an effective outcome; the true test of performance is the time it takes to deliver sufficient personnel to initiate application of water on the fire. This is the measure of how quickly and effectively a fire department responds.

Fire Departments should have clearly defined goals for response. Such goals will contribute to the number of trained volunteers are necessary to ensure a response at any hour and at any time of year.

Are there any historical records related to response times? Does the department have any response goals set, if so do they have a plan to meet them?

Comment/Recommendations

Objective Six – Training Programs

Providing quality and safe fire services requires a well-trained response force. Today' fire service consists of creating, promoting and delivering training to members. The Office of the Fire Marshal (OFM), along with the School of Community Government offer accredited training on an as needed basis to firefighters across the NWT. The OFM, through its network of Regional Assistant Fire Marshals (AFM), provides direct assistance to fire departments in all aspects of training and management of community fire departments.

General Training Competencies

Has the community taken advantage of the assistance available from the AFM in the past three years?

Has the community assisted volunteers to prepare for and to attend accredited firefighter training? How many trained fire fighters are there?

Has the department identified how many individuals need to be qualified in specific areas of expertise?

Is there a development plan for volunteer firefighters?

Does the department conduct operations utilizing the Incident Command System?

Is the Fire Chief qualified? If needed, is there a developmental plan in place?

Comment/Recommendations

Training Facilities

Is there a training facility available in the community? If so, describe its capability. If not, how does the fire department conduct training?

Comment/Recommendations

Training Staff

Developing qualified instructors resident with a fire department is critical to developing and maintaining an effective fire service.

Is there anyone qualified to deliver firefighter training in the community? If so specify what training they are able to deliver? How often does the department train?

Is there a plan to develop a trainer?

Comment/Recommendations

Ongoing Skills Maintenance Training

Personnel must routinely be provided with refresher training and continuing education to avoid degradation of skills and to maintain their certifications (special qualifications). Additionally, training and education must be provided to ensure that firefighters have been provided with the most up-to-date safety information and the most current fire fighting techniques. Additionally, the changing landscape of the department's jurisdiction demands that fire fighters be aware of changing and emerging local hazards.

Is there a skills maintenance program in place, is there a plan to continuously monitor the jurisdiction?

Comment/Recommendations

Entry Level Training

Is there a methodology to prepare new recruits for their initial qualification training?

Comment/Recommendations

Career Development Training

Is there a career development plan in place for each fire fighter, including the Chief?

Comment/Recommendations

Training Program Planning

A training program plan encompassing both individual and collective training should include:

- Identification of performance standards for all personnel
- Provisions for periodic review of individual and company level performance
- Scheduled training to prevent skills degradation
- Schedule skills improvement training
- Comprehensive training objectives for each training session presented

- Process for evaluating the amount of learning that occurred

Is there an overall plan?

Comment/Recommendations

Training Records and Reports

NOTE: *How are training records kept? What training records are kept? Is someone responsible to keep them?*

Comment/Recommendations

Objective Seven – Fire Prevention and Education

Aggressive risk management programs, through active fire prevention efforts, are a fire department's best opportunity to minimize the losses and human trauma associated with fire.

A fire department should actively promote fire resistive construction, built-in early warning and fire suppression systems, and an educated public trained to minimize risk to fire.

A department should conduct a risk assessment of its jurisdictional area of responsibility noting particularly the following concerns:

- The communities fire suppression capability
- The communities fire protection system
- The community at risk, what strategies to consider
- Fire Department's capability of meeting the community needs with its current situation

While responses will always be a key function of the fire service, there should also be a focus on prevention of emergencies. Preventing fires and injury is the most effective means of preventing harm in future; **public education and prevention are of greater importance to fire suppression** in the role of the fire service in the community.

Does the department have a Fire Prevention Program? If so, describe it.

Comment/Recommendations

Code Enforcement/Fire Inspections

The importance of effective code enforcement cannot be overemphasized. The applicable codes dealing with fire prevention while containing many regulations for new construction, is primarily a maintenance effort. This means that the code is intended to set standards for maintaining a building's fire and life safety features, such as access to exits, detection and suppression systems, compartmentalization, and smoke removal systems. It is also ensure that the building is kept free from hazards and conditions that might lead to the ignition of a fire or increase fire spread.

Without an effective program for regular formal fire inspections and code enforcement, hazardous conditions go unnoticed and uncorrected.

Does the department have a schedule of local fire prevention inspections? If yes, does it meet with existing requirements? If no, do they conduct any inspections, do they have the authority to conduct inspections?

NOTE: *What type of report do they provide? If there is no report, then it must be considered that there was no inspection.*

Comment/Recommendations

Public Safety Education

Fire safety education is the greatest opportunity to influence human behaviour that often results in positive behaviour. It is an area that should be emphasized by an active fire prevention program. The most receptive audience to the fire safety message is children.

Does the department conduct any public education programs? Describe.

Comment/Recommendations

Fire Investigations

Does the department have a qualified fire investigator? Does the frequency of investigation justify a trained investigator?

If yes, is there a plan to train someone?

Comment/Recommendations

Annexes

Annex A: Objective One

Annex B: Objective Two

Annex C: Objective Three

Annex D: Objective Four

Annex E: Objective Five

Annex F: Objective Six

Annex G: Objective Seven