



# YUKON FIRE MARSHAL'S OFFICE

## 2010 ANNUAL REPORT

Including 2007 & 2008 Yukon Fire Statistics

***Semper Paratus***

(Always Prepared)

Department of Community Services  
Protective Services Branch  
Government of Yukon

## **YUKON FIRE MARSHAL'S OFFICE**

### **MAILING ADDRESS**

Government of Yukon  
Department of Community Services  
Protective Services Division  
P.O. Box 2703 (C-20)  
Whitehorse, Yukon  
Y1A 2C6

### **LOCATION**

91790 Alaska Highway  
Protective Services Building 1402  
Whitehorse, Yukon

### **TELEPHONE**

867-667-5217  
Toll Free within Yukon 1-800-661-0408 (Extension 5217)

### **FAX**

867-667-3165

### **WEBSITE**

<http://www.community.gov.yk.ca/fireprotection/index.html>

### **PHOTO CREDITS**

Photos in this report were provided courtesy of Carmacks Volunteer Fire Department, Golden Horn Volunteer Fire Department, Watson Lake Volunteer Fire Department, Whitehorse Fire Department, Mike Marcuson and Kevin Taylor.



Community Services  
Protective Services  
Office of the Fire Marshal

March 25, 2011

The Honorable Archie Lang  
Minister of Community Services  
Yukon Legislative Assembly  
P.O. Box 2703  
Whitehorse, Yukon Y1A 2C6

Dear Mr. Lang:

The Yukon Fire Marshal's Office is pleased to submit the 2010 fire statistics report as directed by the *Fire Prevention Act*.

As you know, 2010 was a busy year for the Fire Marshal's Office. The Yukon Fire Service, my deputies and I are proud of what we have accomplished and look forward to continuing this important work in 2011.

The Fire Marshal's Office would like to take this opportunity to offer particular appreciation to the support that the Minister's Office has provided to the Yukon Fire Service.

Respectfully submitted,

Dennis Berry  
Fire Marshal / Director of Fire and Life Safety

Mike Marcuson  
Deputy Fire Marshal

Kevin Taylor  
Deputy Fire Marshal

# TABLE OF CONTENTS

TABLE OF CONTENTS .....	4
YUKON FIRE MARSHAL’S OFFICE .....	5
FMO Organizational Structure.....	6
YUKON FIRE SERVICE RESPONSES.....	7
Incident Responses.....	7
Structural Fire Department – Fire Incident Responses .....	8
Types and causes for Fire Responses (% of the 282 FIRE Responses) .....	8
Additional Responses.....	9
Types and Causes worth noting (% of 467 Additional Incident Responses) .....	9
LOSS OF LIFE AND FIRE INVESTIGATIONS .....	10
Loss of Life and Injuries .....	10
Fire Investigations .....	10
FIRE PREVENTION .....	11
Public Messaging .....	11
FIRE TRAINING & FIRE SEMINARS .....	12
Training.....	12
Seminars.....	13
Yukon Fire Marshal / Fire Chief Meeting .....	13
Yukon Fire Service Conference.....	13
Canadian Association of Fire Chiefs and Council of Canadian Fire Marshals & Fire Commissioners.....	13
FIRE MARSHAL’S OFFICE FIRE DEPARTMENTS.....	14
SUMMARY .....	15
2007 & 2008 YUKON FIRE STATISTICS .....	16
ASSOCIATION AND COMMITTEE MEMBERSHIPS.....	17
2010 YUKON FIRE DEPARTMENTS .....	18
FIRE MARSHAL’S OFFICE FIRE DEPARTMENTS.....	18
MUNICIPAL FIRE DEPARTMENTS .....	18
AIRPORT FIRE DEPARTMENTS.....	18

## YUKON FIRE MARSHAL'S OFFICE

The Fire Marshal's Office (FMO) is a branch within the Protective Services Division of the Department of Community Services. The objectives of the Fire Marshal's Office are:

**MISSION** Reduce the loss of life and property to fire and other related emergencies throughout Yukon.

**GOALS** Continuously improve life safety and fire protection through leadership, education, enforcement and program development for the people of Yukon.

The FMO has a very diverse portfolio that ranges from the administration and enforcement of legislation to fire ground operations and investigations Yukon wide. This includes administration of the *Fire Prevention Act*, *National Fire Code*, *Gasoline Handling Act* and administration of permits and inspections for above and below ground storage tanks for petroleum products pursuant to the *Storage Tank Regulations (Environmental Protection Act)*.

The FMO operates 17 fire departments in Yukon unincorporated communities. OH&S legislation has presented new challenges to the fire service and the FMO is working diligently with the fire chiefs to ensure compliance.

In order to ensure firefighter safety at FMO fire departments, the FMO manages all firefighter training, the development and implementation of fire department policy and administrative oversight, and undertakes operation and maintenance for all fire halls, firefighting vehicles and equipment. With over 225 firefighters and over 48 emergency vehicles, the fire departments under the direction of the FMO collectively rank as one of the largest volunteer fire departments in Canada.

It is important to note that the FMO relies on the assistance and support of the fire chiefs in meeting its mandate. The value of the fire service to communities is not only in the protection fire fighters provide to lives and property but in the pride they take in fulfilling that role. In addition, properly-equipped and trained fire departments have a noticeable economic affect on communities by reducing the rates levied by insurance providers for Yukon home and business owners.

The FMO continues to leverage the efficiencies that have come with the being part of Protective Services. From interface fire agreements with Wildland Fire Management to first response assistance with Emergency Medical Services and Search and Rescue, Yukon is receiving more coordinated, effective and efficient emergency response than ever before.

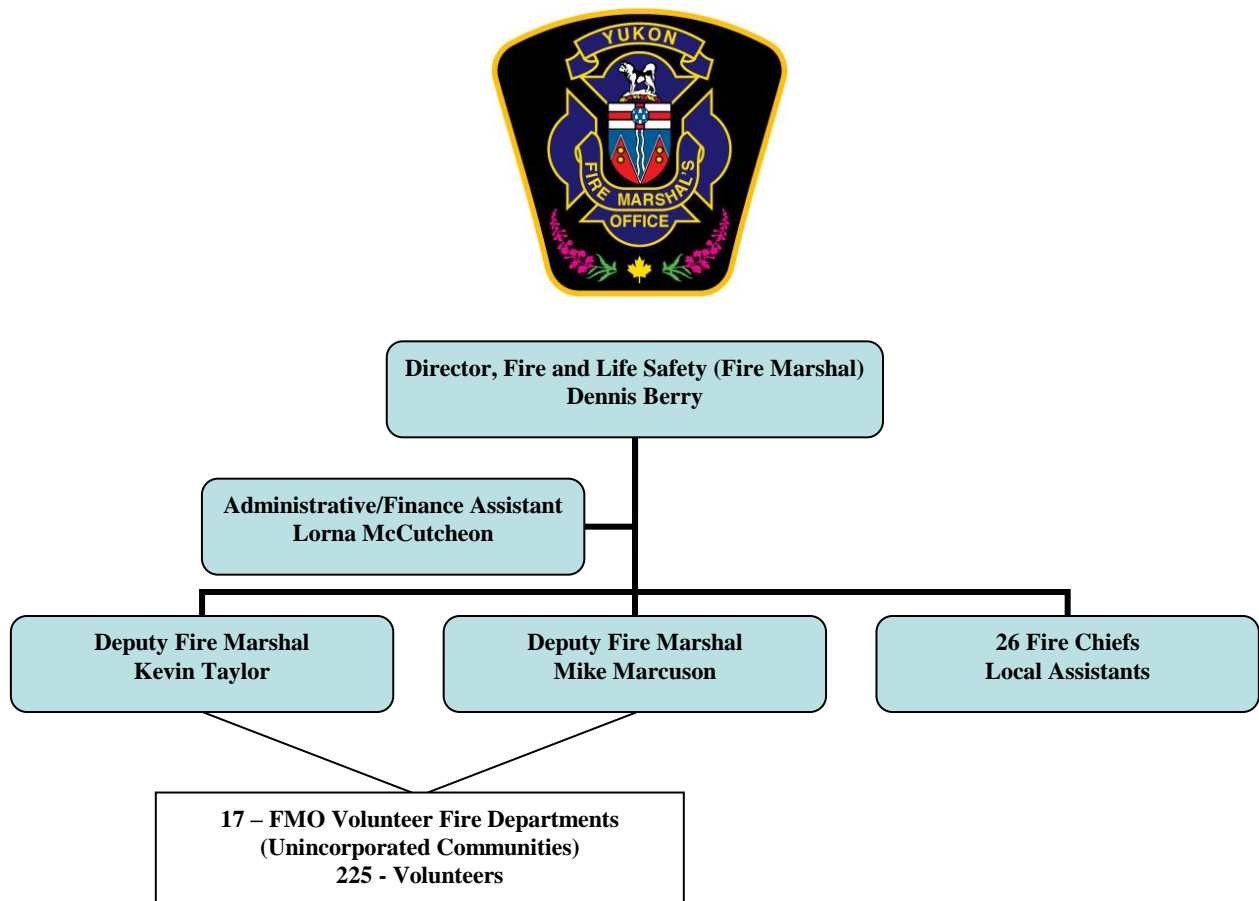
The Yukon Fire Service has a number of mutual aid agreements in place with municipalities and the adjoining departments in unincorporated communities. These agreements allow fire departments to support each other in emergency situations. In addition, the level of protection within and around Yukon communities has increased through the establishment of agreements with volunteer fire departments for

wildland and urban interface firefighting, the allocation of additional equipment, and cross-training between wildland firefighters and volunteer structural firefighters.

The benefit of this type of co-operation has proved its worth in a number of large fires that occurred in 2010, including the BC fire that threatened Watson Lake in August. Greater cooperation builds enhanced response capabilities and more successful outcomes for fire service clients.

### ***FMO Organizational Structure***

The organizational structure of the Fire Marshal's Office is established under the *Fire Prevention Act*. The FMO consists of the Fire Marshal, two Deputy Fire Marshals and one Finance Administration professional. Reporting to the FMO are 17 volunteer Fire Chiefs. The Fire Marshal's Office is organized as shown in the following chart:



## YUKON FIRE SERVICE RESPONSES

Yukon fire departments respond to a number of different types of incidents. These incidents are broken down into “Incident Situations” (also referred to as emergencies, codes, runs, calls, call-outs or responses) from the Canadian Code Structure on Fire Loss Statistics created by the Council of Canadian Fire Marshals and Fire Commissioners.

There are nine different Incident Situations. These are further broken down by codes. The nine Incident Situations and codes are as follows.

INCIDENT SITUATIONS	CODES
FIRE	10s
EXPLOSION OR RUPTURE	20s
RESCUE / MOTOR VEHICLE ACCIDENT	30s
PUBLIC HAZARD	40s
GAS LEAK	50s
PUBLIC SERVICE	60s
ALARM NO FIRE / NO MALICIOUS INTENT	70s
FALSE ALARM / MISCHIEF	80s
INCIDENT SITUATION UNCLASSIFIED	90s

### *Incident Responses*

For the year 2010, the Yukon Fire Service responded to 837 Incident Situations. The Yukon Fire Service consists of the following agencies:

- 23 active structural fire departments (FMO and municipal)
- Erik Nielson Whitehorse International Airport Fire Department
- Wildland Fire Management (WFM)

Of these 837\* responses, 370 (44%) were Fire Incident Situations that included all of the above agencies. The Fire Codes for these include:

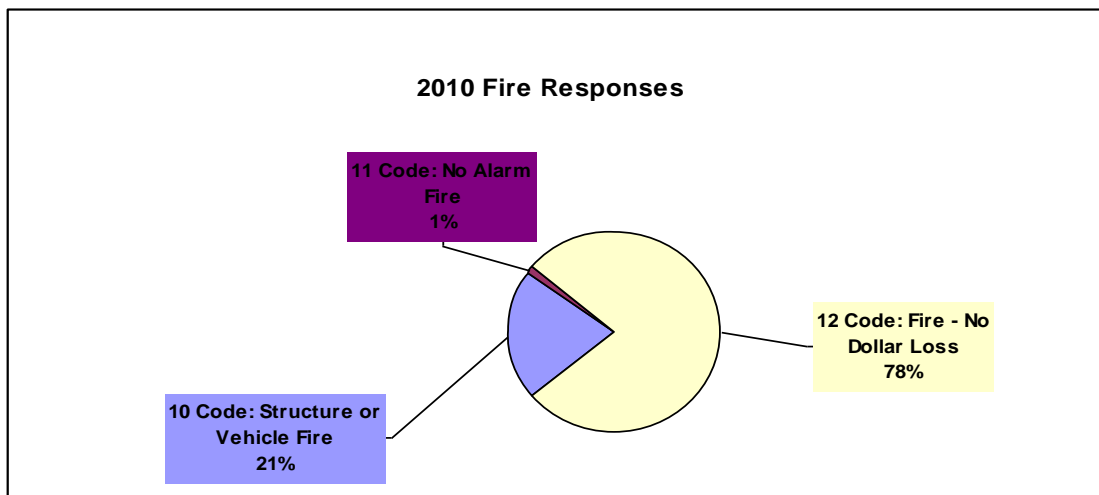
- **10 Code – FIRE**  
(Structure and/or vehicle fire)
- **11 Code – NO ALARM FIRE**  
(Fire department was notified after the fire)
- **12 Code – FIRE – NO DOLLAR LOSS**  
(Includes chimney, wood stove, rubbish, or grass fires)

*\* Note: WFM suppressed 43 forest fires and monitored an additional 45.*

## Structural Fire Department – Fire Incident Responses

The 23 structural fire departments (includes municipal and FMO fire departments) responded 282 times to the Fire Incident Situations during 2010\*.

### Percentage of Codes – 282 Fire Responses



\* 2010 statistics are calculated on Incident Reports available to the Fire Marshal's Office at the time this report was produced. Statistics would be expected to increase correspondingly with increased reporting.

### Types and causes for Fire Responses (% of the 282 FIRE Responses)

- Brush Fires / Campfire / Burning Permits / Urban Interface 45%
- Woodstove / Chimney Fires or Related 15%
- Mischief / Set (e.g. dumpster) 12%
- Vehicle Fires 9%
- Electrical (e.g. overloaded circuits, appliances) 9%
- Cooking 9%
- Space Heaters 0%
- Candles 0%
- Miscellaneous / Unknown Causes 1%



## ***Additional Responses***

The 23 structural fire departments responded to an additional 467 Incident Situations during 2010.

### **Percentage of Codes – 467 Additional Incident Situations**

- 20 Codes - EXPLOSION OR RUPTURE 0%
- 30 Codes - RESCUE / MOTOR VEHICLE ACCIDENT 20%
- 40 Codes - PUBLIC HAZARD 2%
- 50 Codes - GAS LEAK 4%
- 60 Codes - PUBLIC SERVICE 8%
- 70 Codes - ALARM NO FIRE / NO MALICIOUS INTENT 51%
- 80 Codes - FALSE ALARM / MISCHIEF 15%
- 90 Codes - INCIDENT SITUATION UNCLASSIFIED 0%

### **Types and Causes worth noting (% of 467 Additional Incident Responses)**

- Alarm Systems and/or Detector Activated 50%
- Motor Vehicle Accidents 20%
- Rescue and/or Assist 7%
- Miscellaneous / Mischief 7%
- Spills 4%
- Haze / Unknown Smoke 2%
- Unknown Odor 4%
- Situation Not Found 4%
- Broken Water Pipes 2%



## LOSS OF LIFE AND FIRE INVESTIGATIONS

### *Loss of Life and Injuries*

During 2010, fire potentially claimed the life of one person; this is still under RCMP and Yukon Coroner Service investigation. The victim was an adult male. He died in a residential fire that occurred in Whitehorse. This is down from three fire deaths reported in 2009.

There were no injuries as a result of fires reported to the FMO in 2010. This is down from five injuries reported in 2009.

### *Fire Investigations*

In 2010, the FMO was requested to assist Yukon Fire Chiefs and the RCMP on 15 occasions to carry out 'fire cause determination' scene examinations. This is up from nine in 2009.



## FIRE PREVENTION

During 2010, the FMO carried out 74 Fire and Life Safety Inspections on various occupancies throughout Yukon. This is up from 38 in 2009.

In addition to conducting a number of fire drills in Yukon schools, the FMO annually works with the Association of Yukon Fire Chiefs to promote public fire safety education in schools and at public venues.

Fire prevention messaging is done throughout the course of the year using a Fire Safety Calendar that was created by Yukon volunteer fire department members. This Fire Safety Calendar contains safety topics for each month. These are then posted at community halls, schools or fire halls. The FMO also participated in two international safety events: FIRE / EMS Safety and Health & Safety Week in June and the Fire Prevention Week in October. These events are held territory wide.



The FMO is responsible for administering the Yukon's *Storage Tank Regulations* (Petroleum) pursuant to the *Environmental Protection Act*. During 2010, there were 75 residential storage tank inspections, up from 72 in 2009. There were 35 commercial storage tank permits issued, down from 44 in 2009. Each tank installation requires a minimum of two visits before operation permits may be issued. The FMO is expecting that more robust exploration and mining activity will increase the number of permits being issued. To increase client service, FMO has digitized all tank and permitting applications and placed them on its website.

### ***Public Messaging***

The FMO is always looking to expand fire prevention messaging into the public consciousness. Social media provides the FMO a great opportunity to connect with Yukon residents over issues that affect them personally. The FMO has embraced Facebook as this particular method of public messaging and continues to update its web presence.

## **FIRE TRAINING & FIRE SEMINARS**

### ***Training***

The FMO develops, delivers and maintains a nationally recognized firefighter training program utilizing the National Fire Protection Association (NFPA) Standard 1001. This is the standard for professional fire fighter qualifications.

This curriculum is delivered to each of the active volunteer departments under the direction of FMO and to municipal fire departments when requested. Every fire department within Yukon is required to meet the FMO training standards as a minimum and must train at least twice a month.

During 2010, there were 36 FMO facilitated firefighter training sessions; these are in addition to regular training sessions that occur twice a month. The 36 training sessions included instruction in the three fire fighter levels (Fire Fighter Basic, Fire Fighter Advanced, and Fire Fighter Level 1). These sessions also included specialized training in first aid, emergency scene traffic control and vehicle extrication.

The number of volunteer firefighters receiving training certification continues to increase and this is enhancing the level of competency of the Yukon Fire Service.



## **Seminars**

### **Yukon Fire Marshal / Fire Chief Meeting**

The Yukon Fire Marshal and Fire Chief Meeting occurs every January in Whitehorse. This meeting is specifically held to assist Yukon fire chiefs with fire department administration and safety in operations. This meeting is critical to the purpose of ensuring that municipal departments and FMO volunteer chiefs have the opportunity to discuss operational issues and concerns. Attendance at the 2010 conference was high, with 21 out of 26 Yukon Fire Chiefs attending. Stakeholder participation was also high, with 31 other delegates from other emergency agencies such as EMO and WFM attending.

### **Yukon Fire Service Conference**

The Yukon Fire Service Conference is a three-day training and meeting seminar held every August. The 2010 conference took place in Dawson City and was hosted by both the City of Dawson Municipal Fire Department and the Association of Yukon Fire Chiefs. In addition to municipal departments, 12 FMO fire departments were represented by their chiefs or officers. This conference is used to increase fire department proficiency by focusing on emerging trends and best practices in fire operations and administration. The FMO is a proud supporter of this event.

### **Canadian Association of Fire Chiefs and Council of Canadian Fire Marshals & Fire Commissioners**

The FMO represented Yukon at the 2010 annual meeting of Canadian Fire Chiefs and Fire Commissioners. This year's meeting was held in St. John NB. It is critical that Yukon continue to represent its views at national meetings since national regulations and standards that impact the Yukon are passed at these meetings.

## FIRE MARSHAL'S OFFICE FIRE DEPARTMENTS

The Fire Marshal's Office operates 17 fire departments in Yukon unincorporated communities.

FMO manages all firefighter training, the development and implementation of fire department policy and administrative oversight, and operation and maintenance for all fire halls, firefighting vehicles and equipment. It is important to note that while the FMO is responsible for the safe and effective management of FMO fire departments, it is the local community that is responsible for providing volunteer fire department members. Without strong community participation in the recruitment process, local fire departments will struggle to attract dedicated members.

Fire Operations	Statistics	
<b>FMO Fire Departments in 2010</b>	Beaver Creek Burwash Landing Carcross Destruction Bay Golden Horn Hootalinqua Ibex Valley Keno City Klondike Valley	Marsh Lake Mendenhall Mt. Lorne Old Crow Pelly Crossing Ross River Tagish Upper Liard
<b>Fire Hall O&amp;M</b>	<b>17 Fire Halls</b> (including all operating and maintenance costs, electricity, phone, heating fuels, water delivery, water testing, repairs, etc.)	
<b>Number of Firefighters</b>	<b>225 Firefighters</b> and associated Personal Protective Equipment.	
<b>Administration Staff</b>	<b>4 full time staff</b> dedicated to administration, investigation, training and prevention (including director)	
<b>Apparatus (pumpers, pumper tankers, assorted small trucks)</b>	<b>48</b>	
<b>Assorted firefighting Equipment</b>	<b>510 regulated pieces of fire equipment</b> (equipment that requires annual certification or maintenance to meet OH&S and NFPA regulations)	

## **SUMMARY**

The 2010 FMO Final Report provides detailed information about fires and incident responses across Yukon. This document is key to identifying trends and allows the Yukon fire service the opportunity to enhance fire and life safety across the Yukon.

Fire prevention and life safety starts in the home. It is refreshing to note that 2010 saw fewer fire deaths and injuries than 2009. With this in mind, every Yukon resident must remain vigilant about their own personal fire safety.

The Yukon Fire Service has undergone significant changes and challenges in 2010. Increasing awareness to complex workplace safety regulations combined with growing public expectations regarding emergency response continues to place greater demand on the fire service to operate safely and effectively, while at the same time meeting community needs. Volunteer recruitment continues to be a challenge for most rural fire departments. While the FMO can provide leadership and coordination of fire activities, only strong community support and “buy-in” can staff fire departments with adequate volunteers.

Changing public attitudes towards what their local fire department can or should provide include road rescue, medical first response, hazmat response and numerous other types of incidents where the expertise of our local firefighters to manage emergency situations is required.

It is important to note that, while the pace of change has increased, the dedication of Yukon firefighters has increased correspondingly. The men and women who make up the Yukon Fire Service are proud of their work and continue to meet the expectations set by their communities.

As the Yukon Fire Service enters 2011, we take this time to reflect on the past year, but also look forward to the new. Together, let us continue to improve life safety and fire protection for the people of Yukon.

## 2007 & 2008 YUKON FIRE STATISTICS

The Minister of Community Services has asked that the FMO table the 2007 and 2008 fire statistics along with the 2010 report. Please find the fire reporting statistics detailed below.

<b>Category</b>	<b>2007</b>	<b>2008</b>
<b>Total Fire Responses</b>	213*	229*
<b>Loss of Life</b>	0 deaths	2 fire deaths were reported in Ross River ( one adult male and one adult female)
<b>Fire related injuries</b>	0	0
<b>Fire &amp; Life Safety Inspections</b>	47	39
<b>Fire Investigations</b>	3	4
<b>Fire Prevention Events</b>	<ul style="list-style-type: none"> <li>• Yukon-wide FIRE / EMS Safety and Health &amp; Safety Week in June</li> <li>• Yukon-wide Fire Prevention Week in October</li> <li>• Yukon-wide Fire Safety Calendar</li> </ul>	<ul style="list-style-type: none"> <li>• Yukon-wide FIRE / EMS Safety and Health &amp; Safety Week in June</li> <li>• Yukon-wide Fire Prevention Week in October</li> <li>• Yukon-wide Fire Safety Calendar</li> </ul>
<b>Additional Facilitated Fire Trainings</b>	38	51
<b>Residential Fuel Tank Inspections / Permits</b>	121	82
<b>Commercial Fuel Storage Permits</b>	71	91

*\* 2007 and 2008 statistics are calculated on Incident Reports available to the Fire Marshal's Office at the time this report was produced. Statistics would be expected to increase correspondingly with increased reporting.*

## **ASSOCIATION AND COMMITTEE MEMBERSHIPS**

**Council of Canadian Fire Marshals and Fire Commissioners**

**International Fire Marshals Association**

**Canadian Association of Fire Investigators**

**International Association of Fire Investigators**

**International Association of Fire Service Instructors**

**National Association of Fire Trainers**

**National Fire Protection Association**

**Canadian National Fire and Life Safety Educator's Committee**

**Underwriters Laboratories of Canada - Advisory Council**

**Canadian Standards Association – Advisory Council**

**National Research Council of Canada**

**Canadian Association of Fire Chiefs**

**International Association of Fire Chiefs**

**Association of Yukon Fire Chiefs**

## 2010 YUKON FIRE DEPARTMENTS

### *FIRE MARSHAL'S OFFICE FIRE DEPARTMENTS*

- Beaver Creek Volunteer Fire Department
- Burwash Landing Volunteer Fire Department
- Carcross Volunteer Fire Department
- Destruction Bay Volunteer Fire Department \*
- Golden Horn Volunteer Fire Department
- Hootalinqua Volunteer Fire Department
- Ibex Valley Volunteer Fire Department
- Keno City Volunteer Fire Department
- Klondike Valley Volunteer Fire Department
- Marsh Lake Volunteer Fire Rescue
- Mendenhall Volunteer Fire Department
- Mount Lorne Volunteer Fire Department
- Old Crow Volunteer Fire Department \*
- Pelly Crossing Volunteer Fire Department
- Ross River Volunteer Fire Department
- Tagish Volunteer Fire Department
- Upper Liard Volunteer Fire Department +

\* Denotes fire departments not active in 2010

+ Active as of June 2010

### *MUNICIPAL FIRE DEPARTMENTS*

- Carmacks Volunteer Fire Department
- Dawson City Volunteer Fire Department
- Faro Volunteer Fire Department
- Haines Junction Volunteer Fire Department
- Mayo Volunteer Fire Department
- Teslin Volunteer Fire Department
- Watson Lake Volunteer Fire Department
- Whitehorse Fire Department

### *AIRPORT FIRE DEPARTMENTS*

- Erik Nielson Whitehorse International Airport Fire Department