

# Fire Insurance Grades and the Canadian Fire Insurance Grading Index

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# Agenda

- Origins of FUS and Fire Insurance Grades
- Classification Standard for Public Fire Protection
- Fire Insurance Grading Index
- Subscribers and Usage
- Updating a Communities Fire insurance Grades
- Questions



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# Who is Fire Underwriters Survey?



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Fire Underwriters Survey™ (FUS) is a national organization administered by OPTA Information Intelligence, formerly CGI Insurance Business Services, formerly the Insurers' Advisory Organization and Canadian Underwriters Association.



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# Mission Statement

A Service to Insurers and Municipalities

## Purpose

To provide data on public fire protection for fire insurance statistical work and underwriting purposes for subscribing insurance companies.

To advise municipalities on the improvement of their public fire protection from a fire insurance grading point of view.



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# Origins of FUS and the Fire Insurance Grades



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**New York**  
**1835**



**Chicago**  
**1871**



**Boston**  
**1872**



**Toronto**  
**1904**



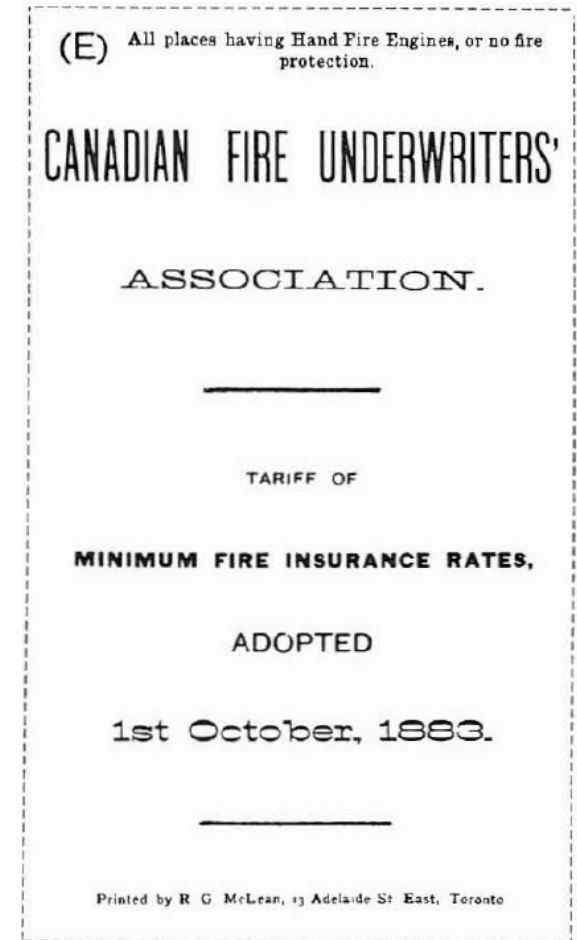
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# North American and Canadian Historical Perspective

- Fire insurance grades date back to 1866 with the National Board of Fire Underwriters
- Originally formed as the Canadian Fire Underwriters Association (CFUA) in 1883
- Large conflagration losses had significant impact on economics of insurance
- Insurers formed a group of engineers to develop a standardized index of fire insurance grades
- Insurers use grades in underwriting and determination of rates

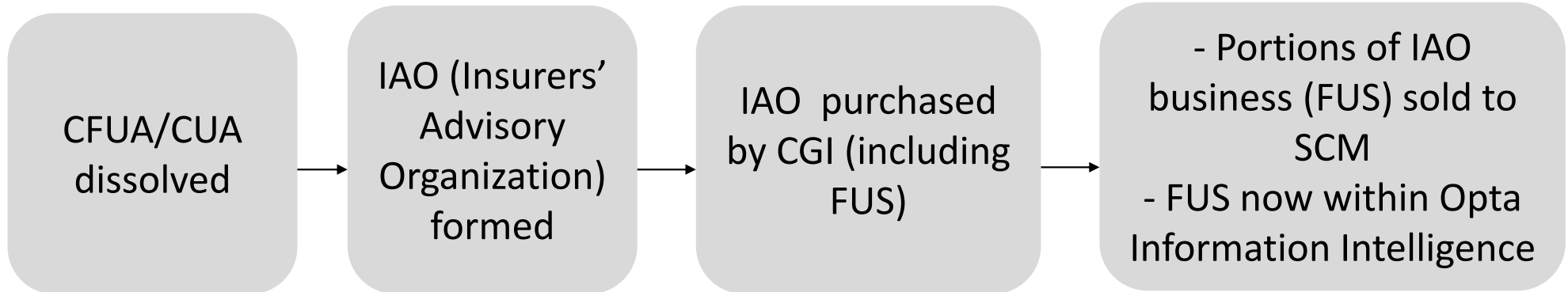


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## FUS History – 1970 and Onwards



Shift from CFUA to IAO

*"This represented a major shift. From a rigid, rule-oriented association to an organization whose primary function was to provide advice and information."*

*IAO's mandate was to provide members with benchmark rates, supporting statistical data, and other information."*

...*"The Underwriters: A Century of Service 1883 – 1983"* by Christopher Hives *University Archivist, UBC.*



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# The Rating Schedule

## Classification Standard for Public Fire Protection



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# Fire Insurance Grade Systems in Canada

## Commercial Lines:

### *Public Fire Protection Classification (PFPC)*

- ♦ Grading reflects the ability of a community to control and extinguish major fires in commercial, industrial and institutional buildings
- ♦ Grades between 1-10
- ♦ 1 being the best and 10 meaning no organized fire protection
- ♦ Total of 7,500 classifications published for communities and sub-districts in Canada

## Personal Lines:

### *Dwelling Protection Grade (DPG)*

- ♦ Grading reflects the ability of a community to control and extinguish fires in residential buildings
- ♦ Grades between 1-5
- ♦ 1 being the best and 5 meaning no organized fire protection
- ♦ Total of 11,800 grades published for communities and sub-districts in Canada



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# Fire Insurance Grade Systems in Canada

## Commercial Lines:

### *Public Fire Protection Classification (PFPC)*



## Personal Lines:

### *Dwelling Protection Grade (DPG)*



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# How is the Public Fire Protection Classification is determined?

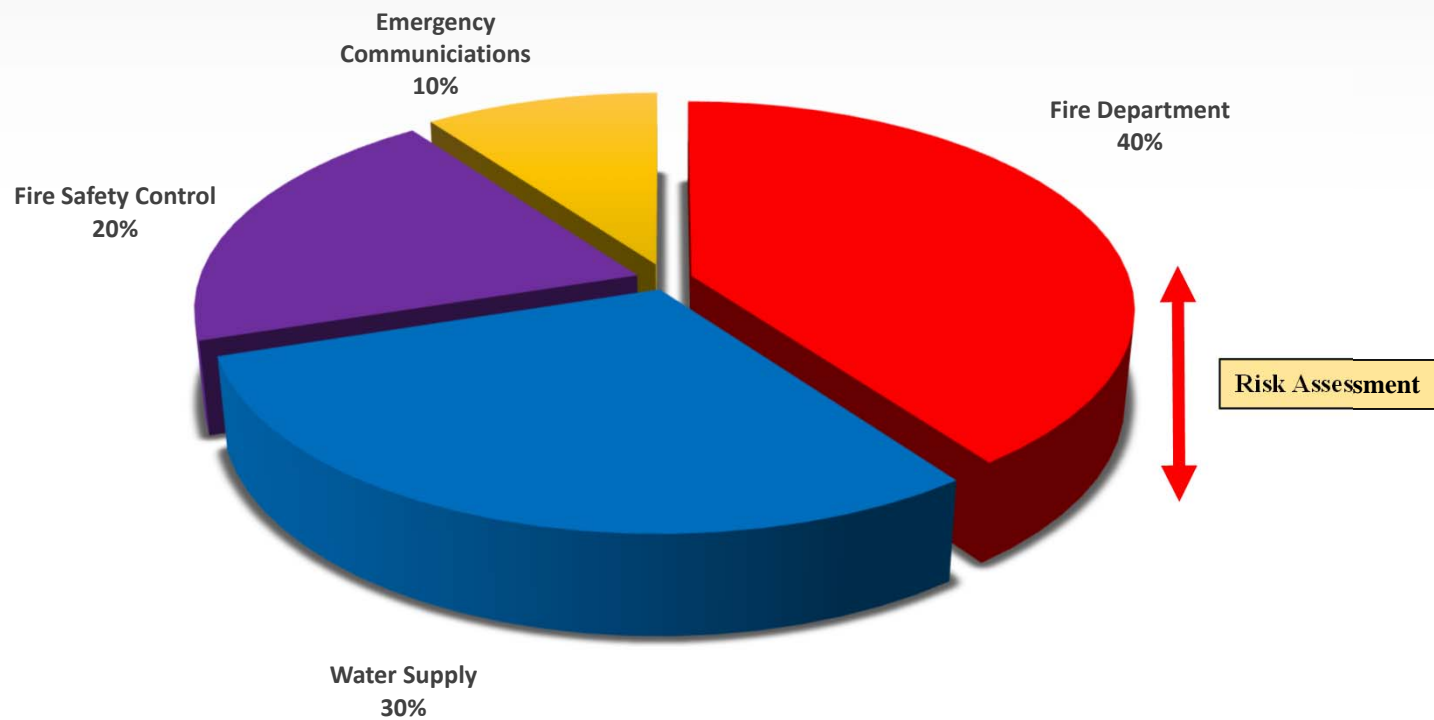
## Public Fire Protection Classification

- Risk assessment: Required Fire Flows -> Basic Fire Flow
- Comparative Analysis of over 500 variables
- Calculation of Relative Classifications of the Four Grading Area
  - Fire Department
  - Water System
  - Fire Safety Control
  - Emergency Communications
- Divergence Analysis & Special Hazards analysis
- Final Classification = PFPC



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# PFPC Breakdown



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## Brief Overview of Risk Assessment

- **Required Fire Flows** (RFF) may be described as the amount and rate of water application AND fire company response determined to confine or control the fires possible to a building or group of buildings. Measured in IGPM.
- **Basic Fire Flow** (BFF) is the fifth highest (or 95<sup>th</sup> percentile) Required Fire Flow (RFF) in the community and is used when assessing the adequacy and reliability of public fire protection in a community.
- The determination of an RFF for fire insurance grading purposes is based on the following formula below from Part 2 of the Water Supply for Public Fire Protection

$$RFF = 220C\sqrt{A}$$

Where:

C = Construction Coefficient related to the type of building construction

A = Total Effective Building Area

- Increases and/or reductions to an RFF can occur based on building specific adjustments related to the following:
  - Occupancy Contents Adjustment Factor
  - Automatic Sprinkler System
  - Exposure Adjustment Charge



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# Brief Overview of Risk Assessment



*Footprint Area: 1,310 m<sup>2</sup>*

*No. Stories: 18*

*Construction Coefficient: 0.8*

*Occupancy Contents Factor: -15%*

*Automatic Sprinkler Protection: -15%*

*Exposure Adjustment Charge: 5%*

**RFF = 2,500 IGPM**

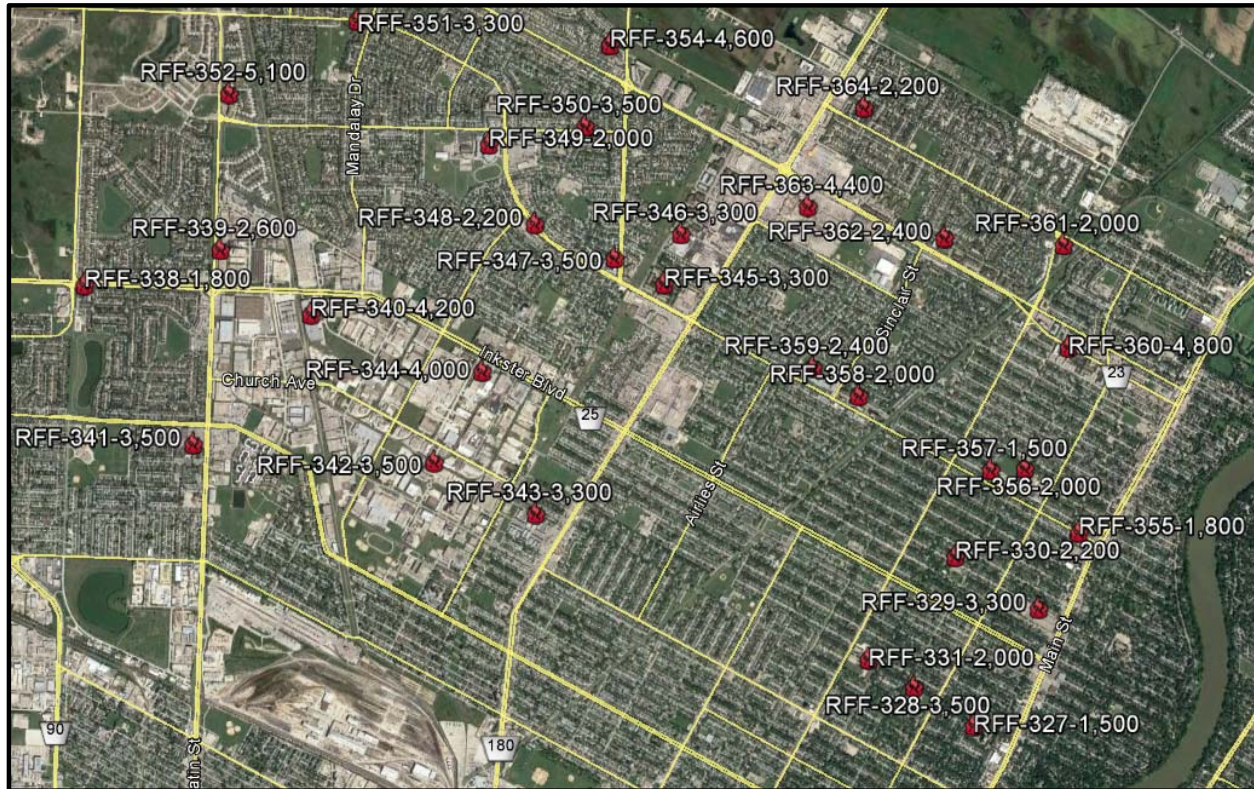


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# Brief Overview of Risk Assessment

Required Fire Flows completed within the City of Winnipeg. Flow rate in Imperial GPM.



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# Brief Overview of Risk Assessment

Manual calculations and zoning based data used to derive a risk assessment layer for a large municipality



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# Update to the Water Supply for Public Fire Protection in 2018

Items of note being updated in Part 2 of the Water Supply Guide

- Intent and purpose of Required Fire Flows for fire insurance grading purposes
- Updated terms of reference regarding Construction Coefficients and a table with recommended Construction Coefficients based on the National Building Code of Canada Subsection 3.2.2 (3.2.2.20 to 3.2.2.88)
- Updated terms of reference regarding the Occupancy Contents Adjustment Factor with tables based on the 13 Major Occupancy Classifications and example occupancies
- Expanded terms of reference for crediting Automatic Sprinkler Protection
- Expanded terms of reference for the Exposure Adjustment Charge



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# Fire Department 40%

- Fire Department Grading area includes 19 sub areas of review.
  - Fire Apparatus, companies and capacities (Engines and Ladders)
    - CAN/ULC-S515 and NFPA 1901
  - Distribution of Resources
    - FUS – Table of Effective Response, NFPA 1710, NFPA 1720
  - Available Fire Force
    - FUS – Table of Effective Response, NFPA 1710, NFPA 1720
  - Personnel training programs, qualifications, and facilities/props
    - NFPA 1001 and/or Provincial requirements, NFPA 1402, NFPA 1521,
  - Equipment quality/quantity
  - Maintenance of fire apparatus and equipment
    - NFPA 1912, NFPA 1914, NFPA 1931, NFPA 1932, NFPA 1962, NFPA 1971, NFPA 1981
  - Pre-fire planning
    - NFPA 1620
  - Administration and record keeping
    - NFPA 1500, NFPA 1710, NFPA 1720

Grading Item	Category
FD-1	Engine Service
FD-2	Ladder Truck Service
FD-3	Distribution of Companies and Type of Apparatus
FD-4	Fire Apparatus Pump Capacity
FD-5	Design, Maintenance and Condition of Apparatus
FD-6	Number of Line Officers – Fire Suppression
FD-7	Total Fire Force Available
FD-8	Engine and Ladder Company Unit Manning
FD-9	Master and Special Stream Devices
FD-10	Equipment for Pumpers and Ladder Trucks, General
FD-11	Fire Hose
FD-12	Condition of Fire Hose
FD-13	Training and Qualifications
FD-14	Response to Alarms
FD-15	Fire Ground Operations
FD-16	Special Protection Required
FD-17	Miscellaneous Factors and Conditions
FD-18	Pre-Fire Planning
FD-19	Administration



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# FUS – Table of Effective Response

RISK RATING	BUILDING DISTRICT EXAMPLES	FIRE FLOW		INITIAL RESPONSE TO ALARMS		1 <sup>st</sup> DUE	2 <sup>nd</sup> DUE	1 <sup>st</sup> DUE	TOTAL AVAILABILITY NEEDED			
		L/min X1000	Approx. Igpm Range	Engine Companies	Ladder Companies	Engine Company, Minutes	Engine Company, Minutes	Ladder Company, Minutes	Engine Companies		Ladder Companies	
									No.	Min.	No.	Min.
1 (a)	Very small buildings, widely detached buildings.	2	400	1	0	7.5	-	*9	1	7.5	*1	9
1 (b)	Scattered development (except where wood roof coverings).	3	600	1	0	6	-	*7.5	1	6	*1	7.5
2	Typical modern, 1 - 2 storey residential subdivision 3 - 6 m 10 - 20 ft. detached).	4-5	800-1,000	2	0	4	6	*6	2	6	*1	6
3 (a)	Close 3 - 4 storey residential and row housing, small mercantile and industrial.	6-9	1,200-2,000	2	1 (if required by Hazards)	3.5	5	*4	2	5	*1	4
		10-13	2,200-2,800	2		3.5	5	*4	3	6	*1	4
3 (b)	Seriously exposed tenements. Institutional. Shopping Centres Fairly large areas, fire loads, and exposures.	14-16	3,000-3,600	2	1	3.5	5	4	4	7	1	4
		17-19	3,800-4,200	2	1	3.5	5	4	5	7	**1	4
4 (a)	Large combustible institutions, commercial buildings, multi- storey and with exposures.	20-23	4,400-5,000	2	1	2.5	4	3.5	6	7.5	2	5
		24-27	5,200-60,00			2.5	4	3.5	7	7.5	2	5
4 (b)	High fire load warehouses and buildings like 4(a).	28-31	6200-6800	3	1	2.5	3.5	3.5	8	8	3	7
		32-35	7000-7600			2.5	3.5	3.5	9	8	3	7
5	Severe hazards in large area buildings usually with major exposures. Large congested frame districts.	36-38	7,800-8,400	3	3	2	3.5	2.5	10	8	4	7.5
		39-42	8,600-9,200			2	3.5	2.5	12	9	5	8
		43-46	9,400-10,000			2	3.5	2.5	14	9	6	9

# Water Supply 30%

- Water Supply grading area includes 15 sub areas of review.
  - Review of the Adequacy and Reliability of the water distribution system using the Water Supply for Public Fire Protection
    - Focus on adequacy and reliability of supply (pressure, flow and volume)
    - Redundancy of key components including sources, primary mains, pumps and reservoirs (multiple point failure analysis)
    - Conditions that can impede supply are considered
    - Back-up storage, emergency power supplies
    - Available Fire Flows compared to Required Fire Flows
    - Watermains and Hydrants
      - Main sizes and looping
      - Hydrant installation and maintenance (CAN/ULC S520, UL 246 NFPA 291, NFPA 25, and/or AWWA C502/C503)
      - Hydrant spacing & distribution (min's: 150m Commercial / 300m Personal)

Grading Item	Category
WS-1	Normal Adequacy of Supply Works
WS-2	Reliability of Sources of Supply
WS-3	Reliability of Pumping Capacity (Pumps and Drivers)
WS-4	Reliability of Power Supply
WS-5	Reliability, Condition, Arrangement, Operation, and Maintenance of System Components
WS-6	Fireflow Delivery by Mains
WS-7	Reliability of Principal Mains
WS-8	Installation of Pipes
WS-9	Arrangement of Distribution System
WS-10	Additional Factors and Conditions Relating To Supply and Distribution
WS-11	Distribution of Hydrants
WS-12	Hydrants – Size, Type, and Installation
WS-13	Hydrants – Condition and Inspection
WS-14	Other Conditions affecting Adequacy and Reliability
WS-15	Management



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# Emergency Communications 10%

- Emergency Communications grading area includes seven sub areas of review.
  - Public Safety Answering Point and/or Communications Centre Review
    - NFPA 1221
  - Staffing and Training of Telecommunicators
    - APCO, NFPA 1061
  - Operating procedures for call handling and alarm processing
    - NFPA 1221
  - Means available to the public to notify emergency responders
  - Radio communications

Grading Item	Category
Comm-1	Communication Centre
Comm-2	Means for Transmitting Alarm by Public
Comm-3	Fire Department Telephone Service (Incoming from Public)
Comm-4	Means of Alarm Dispatch
Comm-5	Dispatching Service
Comm-6	Operations Radio
Comm-7	Miscellaneous Factors



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## Fire Safety Control 20%

- Fire Safety Control area includes four sub areas of review that include:
  - Public education programs/services offered to the community
    - NFPA 1730
  - Fire Prevention Inspections Frequency
    - NFPA 1730
  - Qualifications of Public Educators and Fire Inspectors
    - NFPA 1031, NFPA 1035,
  - Enforcement of the National/Provincial Building Code
  - Enforcement of the National/Provincial Fire Code
  - Electrical Code and Inspections

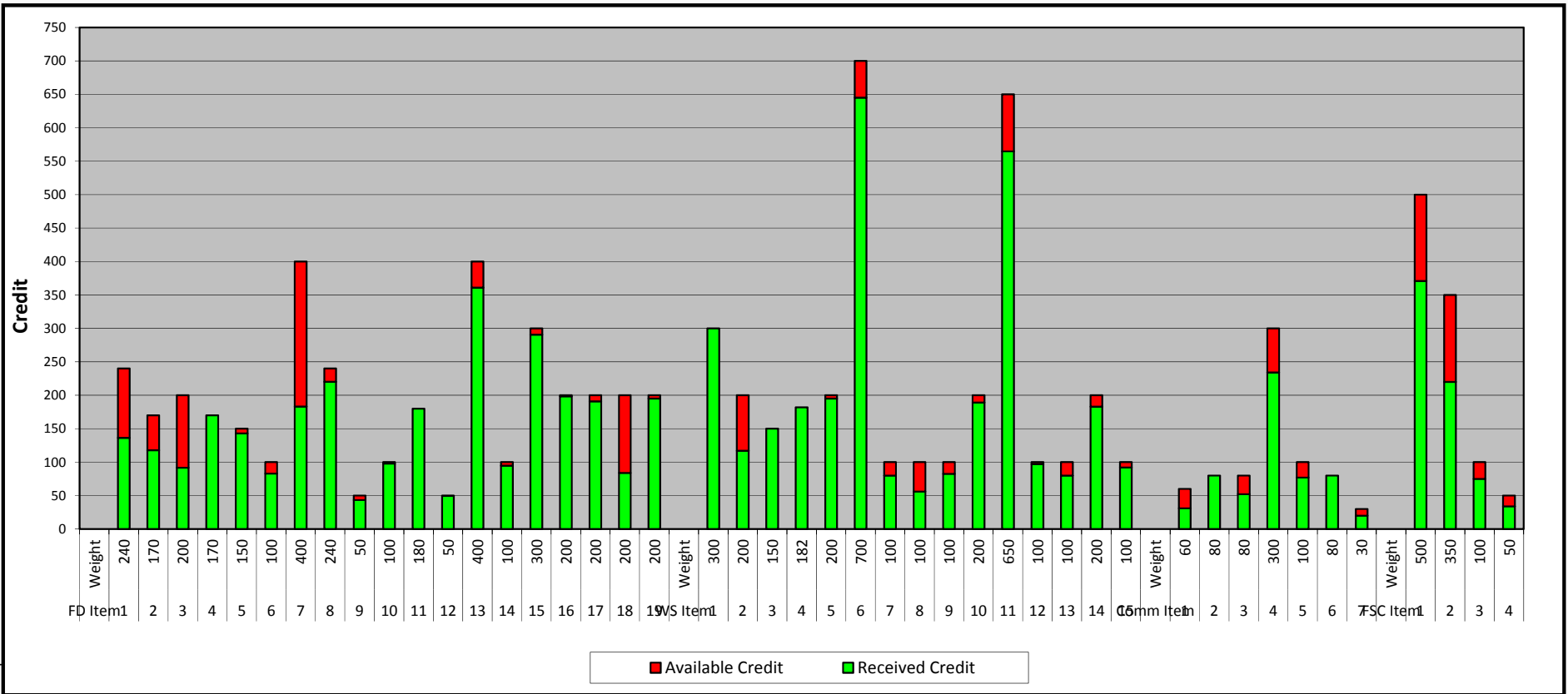
Grading Item	Category
FSC-1	General Program
FSC-2	Fire Code and Enforcement
FSC-3	Building Construction Laws and Enforcement
FSC-4	Electrical Code and Inspections



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# Public Fire Protection Classification Credit Table



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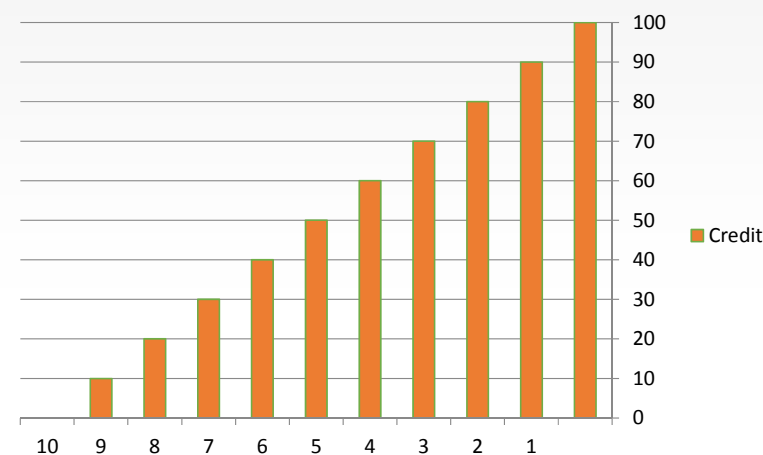
# Public Fire Protection Classification

- Risk Assessment is determined (Basic Fire Flow)
- The four gradings areas of the grading are reviewed and totalled and assigned a Relative Classification
- Divergence Analysis (between fire department and water supply) and Special Hazard Analysis is determined and subtracted from the total credit of the four grading areas
- Final credit value correlates to a designated Public Fire Protection Classification
- A Community is required to achieve a minimum of 10 points to qualify for fire insurance grading recognition



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**Credit and Relative Classification**



Overall PFPC	Per PFPC Grade
1	90.00 – 100.00
2	80.00 – 89.99
3	70.00 – 79.99
4	60.00 – 69.99
5	50.00 – 59.99
6	40.00 – 49.99
7	30.00 – 39.99
8	20.00 – 29.99
9	10.00 – 19.99
10	0.00 – 9.99

# How is the Dwelling Protection Grade is determined?

DWELLING PROTECTION GRADE	WATER WORKS SYSTEM	FIRE DEPARTMENT			ALARM NOTIFICATION
		EQUIPMENT	MEMBERSHIP	FIRE STATION	
1 Career fully protected	Water supply system designed in accordance with Fire Underwriters Survey standard "Water Supply for Public Fire Protection" with a relative classification of 5 or better	Response from within 8 km by road of a triple combination engine.	Response of 3 on-duty career members plus fire chief or other officer not required on-duty.	Provide a well-designed and located fire station to serve the department and the community, and house fire apparatus.	Provide a reliable means of receipt of alarms and the immediate notification of fire fighters required to respond to these alarms, 24 hours/day, 365 days/year.  9-1-1 or an Emergency Contact Number
2 Composite fully protected	Water supply system designed in accordance with Fire Underwriters Survey standard "Water Supply for Public Fire Protection" with a relative classification of 6 or better	Response from within 8 km by road of a triple combination engine.	Response of 1 on-duty career member and 15 trained volunteers including the fire chief		
3A Volunteer fully protected	Water supply system designed in accordance with, and meeting the minimum requirements of, Fire Underwriters Survey standard "Water Supply for Public Fire Protection"	Response from within 8 km by road of a triple combination engine.	15 trained volunteers including the fire chief		
3B	Not required	Two units required. A Triple combination engine, <u>plus</u> a mobile water supply (tender) with a combined water carrying capacity of not less than 1,500 Imp. Gallons.	15 trained volunteers including the fire chief		
4	Not required	Two units required. A Triple combination engine, <u>plus</u> a mobile water supply (tender) with a combined water carrying capacity of not less than 1,500 Imp. Gallons.	10 trained volunteers including the fire chief		
5	Unprotected communities or communities not qualifying for Grades 1, 2, 3A, 3B, or 4 above.				



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# Super Tanker Shuttle Service Accreditation

- The fire department must be able to prove through documented and standardized testing that the specified requirements of Superior Tanker Shuttle Service can be met.
- For Personal Lines insurance, the fire department must be able to deliver a flow rate of not less than 1,000 LPM (200 IGPM) within 5 minutes of arriving at the test site with the first major piece of apparatus (wheel stop).
- For Commercial Lines insurance, the fire department must be able to deliver a flow rate of not less than 2,000 LPM (400 IGPM) within 5 minutes of arriving at the test site with the first major piece of apparatus (wheel stop).
- Commercial Lines (PFPC) - 5 km in road travel distance of a fire station AND 2.5 km of an approved water supply point
- Personal Lines (DPG) - 8 km of a fire station AND 5 km of an approved water supply point



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# Example Community 1

Population 1,500 + 500 contract service area

Community 1 – PFPC 7 – DPG 3A

Contract Service Area – PFPC 9 – DPG 3B

Basic Fire Flow – **1,500 Igpm**

## Fire Department – 40%

### Relative Class - 7

- 1 fire station
- 1 engine – 625 Igpm
- 1 mobile water supply
- 1 volunteer fire chief
- 15 paid on call/volunteers
- 60% of members completed requirements for fire fighting
- Limited pre-incident plans

## Water Supply – 30%

### Relative Class - 7

- Provides 500 Igpm
- 150 mm mains and some 100 mm mains
- Limited redundancy built into water system
- Reasonable hydrant distribution and some grid looping
- No water distribution system in contract service area

## Emergency Communications – 10%

### Relative Class - 4

- on 9-1-1 and dispatched by a third party with a facility adequate for housing the dispatch equipment
- operating procedures for call handling/dispatching not defined and/or not tracked well

## Fire Safety Control – 20%

### Relative Class - 7

- Limited public education, mostly through public events in the community or fire hall tours
- No full time fire prevention inspector or life safety educator
- Inspections mostly on complaint and request basis, unless AHJ regulates specific occupancies to receive an inspection.



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## Example Community 2

Population 10,000 + contract service area 3,000

PFPC 5 – DPG 1 at career station and DPG 3A at volunteer stations

Contract Service Area – PFPC 9 – DPG 3B(S) (Superior Tanker Shuttle Service Accredited)

Basic Fire Flow – **3,500 Igpm**

### Fire Department – 40% Relative Class - 6

- 3 fire stations
- 3 engines – 1,000 Igpm
- 1 quint
- 2 mobile water supply
- 1 career chief
- 2 career deputy chief
- 20 career fire fighters
  - 3-4 on per shift
  - Career trained to NFPA Lvl 2
- 40 paid on call/volunteers across 3 stations
- 1 fire prevention inspector

### Water Supply – 30% Relative Class - 3

- Provides 1,000-1,500 Igpm
- Moderately gridded community
- Some levels of redundancy built into water system
- Reasonable hydrant distribution for most of the community
- No water distribution system in contract service area, but FD has STSS

### Emergency Communications – 10% Relative Class - 2

- on 9-1-1 and dispatched by a third party compliant with most of NFPA 1221 for the dispatch facility
- Third party meeting 70% when measured against NFPA 1221 operating procedures

### Fire Safety Control – 20% Relative Class - 5

- Fire hall tours and some education programs provided to the community
- Inspection frequency developed and meeting 50% of Inspections each year.



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# Example Community 3

Population 250,000

PFPC 2 – DPG 1

Basic Fire Flow – **5,000 Igpm**

## Fire Department – 40% Relative Class - 3

- 10 fire stations
- 10 engines – 1,000 Igpm
- 1 reserve engine
- 3 aerial ladders/quints
- 1 career fire chief
- 4 career deputy fire chiefs
- 200 career firefighters
  - 4 on duty per shift
  - trained to NFPA 1001 Lvl 2
- 3 life safety educators
- 5 fire prevention inspectors
  - NFPA 1031 and 1035

## Water Supply – 30% Relative Class - 2

- Provides 1,500 Igpm or more from all hydrants
- Multiple layers of redundancy built into the water system to ensure fire flows are met
- Well gridded and looped distribution system
- Excellent hydrant distribution

## Emergency Communications – 10% Relative Class - 1

- On 9-1-1 and dispatched by a have one primary dispatch facility and a secondary facility compliant with NFPA 1221
- Call handling and dispatching procedures meet or exceed NFPA 1221
- Call handling and dispatching timeframes reviewed monthly

## Fire Safety Control – 20% Relative Class - 2

- Basic and targeted life safety programs developed for areas of the community
- Inspection frequency of Major Occupancies defined
  - Low risk once a year
  - Mid to High Risk 3 to 6 months
  - Meeting compliance 85% each year
  - Fire fighting crews assist with low risk inspections
- Building Department and Fire Department work together reviewing new buildings



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# Breakdown of Manitoba Fire Insurance Grades by Population

	0-1,000		1,001-2,500		2,501 to 15,000	
	DPG	PFPC	DPG	PFPC	DPG	PFPC
Rural Municipality	3A, 3B, 4	8,9	3A, 3B, 4	8,9	3A, 3B, 4	7,8,9
Village	3A, 3B, 4	8,9	3A, 3B, 4	8,9	-	-
Town	3A or 4	7,8,9	3A	7,8,9	3A	6, 7

	5,000 to 10,000		10,001 to 50,000		50,001 and up	
	DPG	PFPC	DPG	PFPC	DPG	PFPC
City	3A	5,6	1, 3A	4,5	1	2



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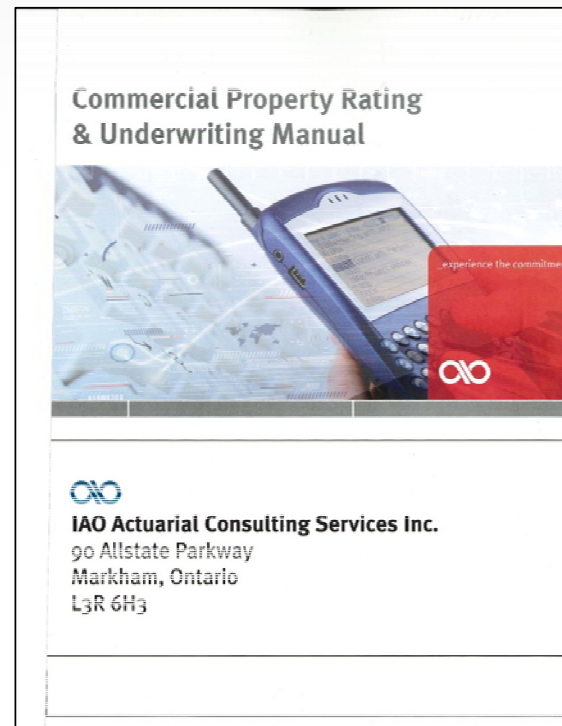
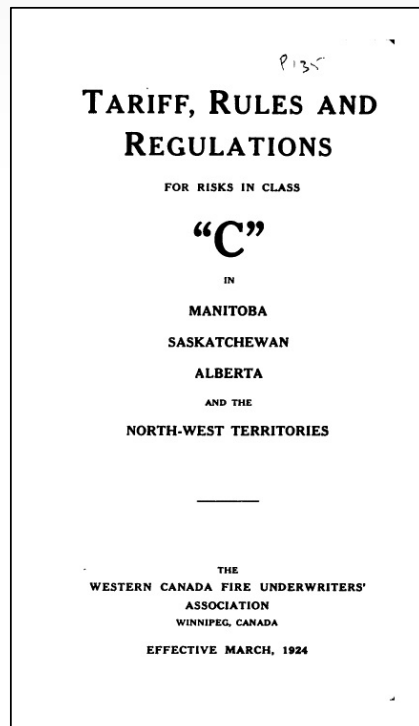


# How Subscribing Underwriters Use and Access the Canadian Fire Insurance Grading Index



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# Fire Insurance Grading Index – Historical Manuals



	CLSP Territory	NS	AS	Prot. Class	AR Territory
Hagerborg W.W.D.	08	5	9	9	2
Hagerborg L.R. #1	08	5	9	9	2
Hallmoon Bay F.P.A. - H.P.A.	06	4	8	7	3
- Rest	06	5	9	9	2
Halfway River	08	5	9	10	2
Hanney					
- see Maple Ridge					
Hanwood L.D.					
- see Nanaimo					
Harrison Hot Springs - H.P.A.	06	5	9	8	3
- Rest	06	5	9	9	3
Harrison Mills					
- see North Fraser F.P.A.					
Harrop					
- see Balfour-Harrop F.P.A.					
Haute Island					
- see North Fraser F.P.A.					
Hawking Lake F.P.A.	08	5	9	10	2
Hazelton	08	5	9	8	2
Hedley L.D.	05	5	9	10	3
Hedley Creek					
- see Kamloops					
Hemlock Valley F.P.A.	06	5	9	10	2
Heriot Bay					
- see South Okanagan F.P.D.					
Hidden Valley					
- see Cranbrook F.P.A.					
Highlands F.P.A.	05	5	9	9	2
- see Cranbrook F.P.A.					
Hilliers					
- see Coombs-Hilliers F.P.A.					
Hixon F.P.A.	08	5	9	10	2
Holberg-Raynor Campsite	05	5	9	9	2
Holberg-San Jose - C.F.B.	05	5	9	10	2
Honeymoon Bay L.D.	05	5	9	9	2
Hoppe - H.P.A.	06	4	8	7	2
- Rest	06	5	9	10P	2
Hopkins Landing					
- see Gibsons					
Horsby Island	05	5	9	9	2
Horse Lake					
- see Lone Butte-Horse Lake F.P.A.					
Horseshoe Bay	08	5	9	9	2
- see West Vancouver District					
Hosmer F.P.A.	06	5	9	10	3
Houston District	08	4	8	7	2
Hudson's Hope District - H.P.A.	06	4	8	7	2
- Rest	08	5	9	9	2

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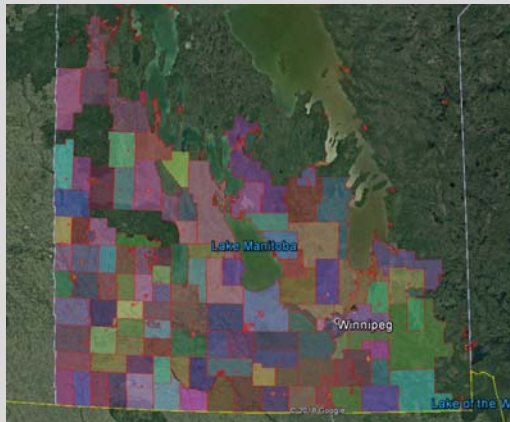
- Knowing which Fire Protection Area a property lies in
- Knowing the distance to the responding fire hall
- Knowing which water system a hydrant is connected to
- Insurers categorizing Fire Insurance Grades by postal code
- Choosing the correct Fire Insurance Grade



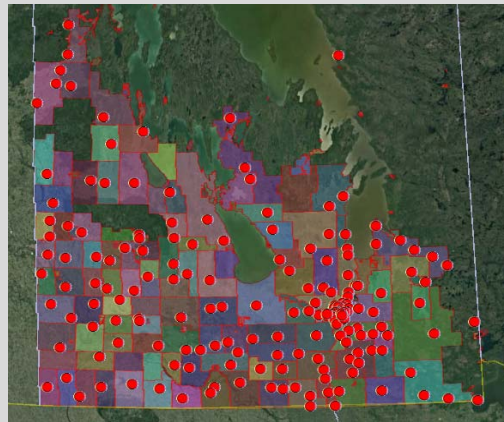
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# Fire Insurance Grading Index – GIS based system Since 2010

Map Fire Protection Areas



Map Fire Halls



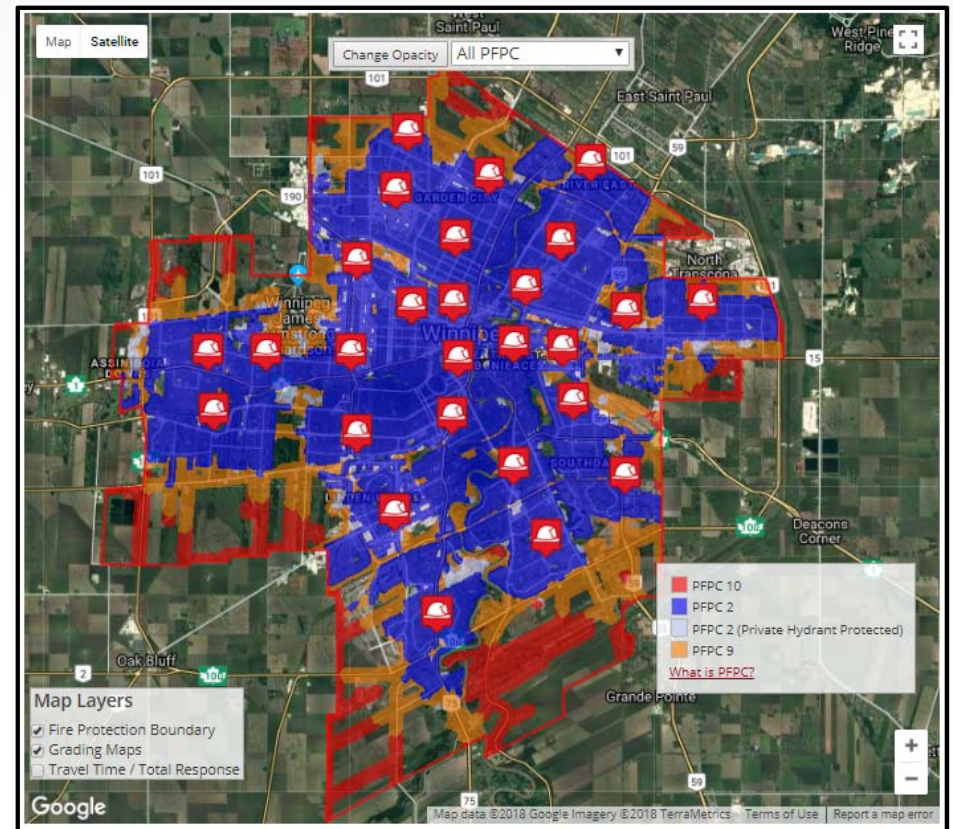
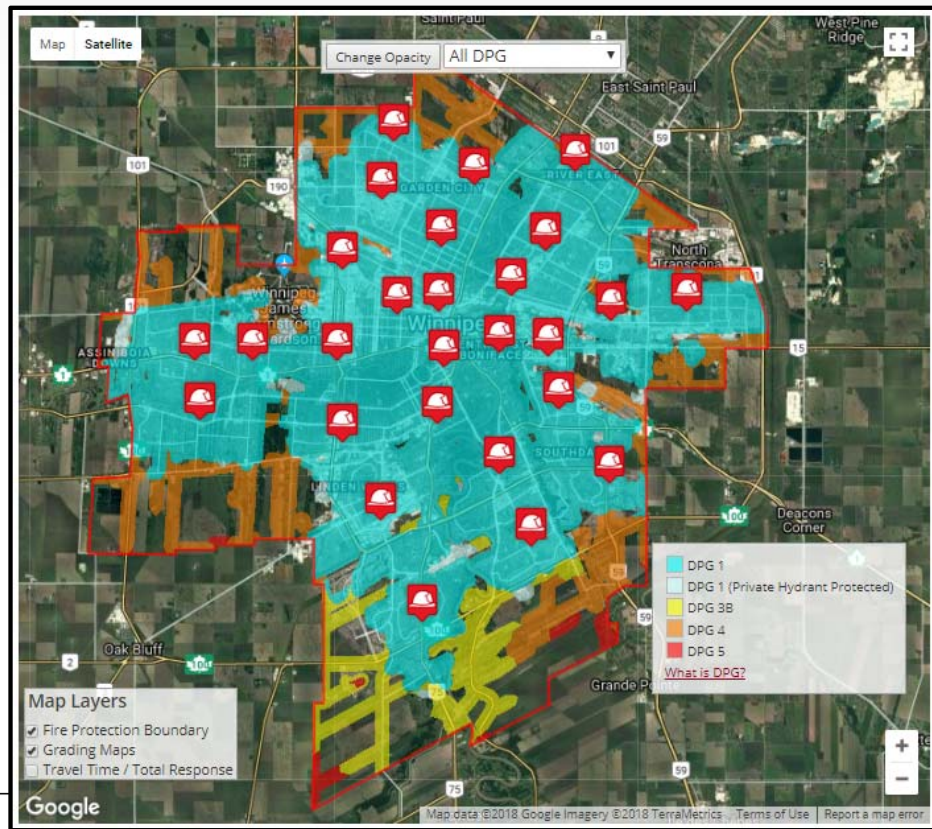
Map Hydrants and Water Systems



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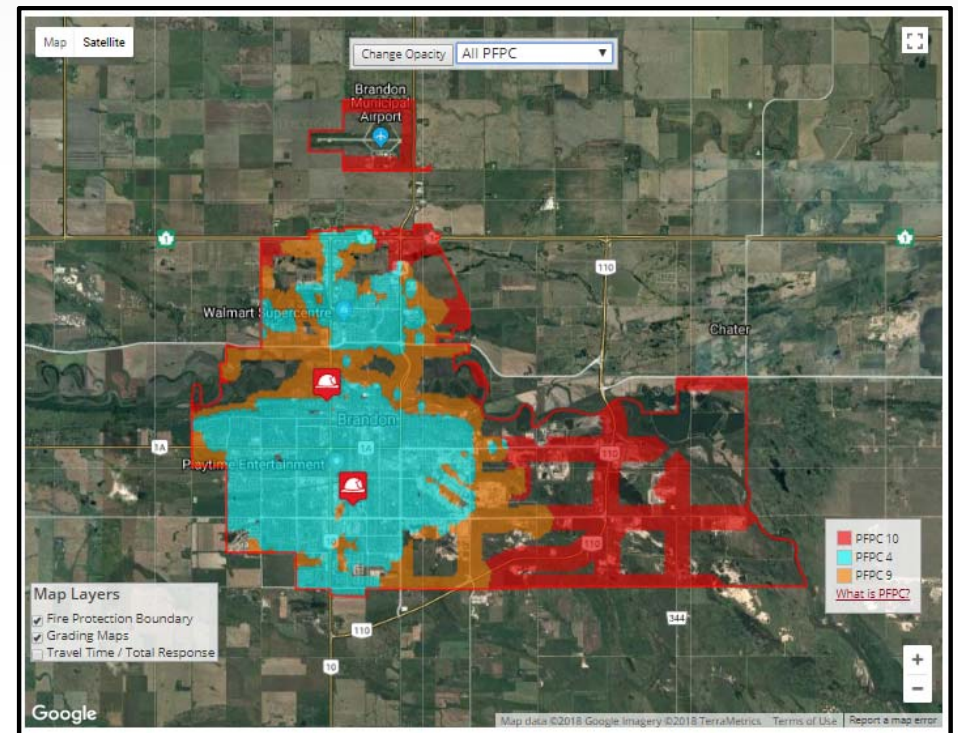
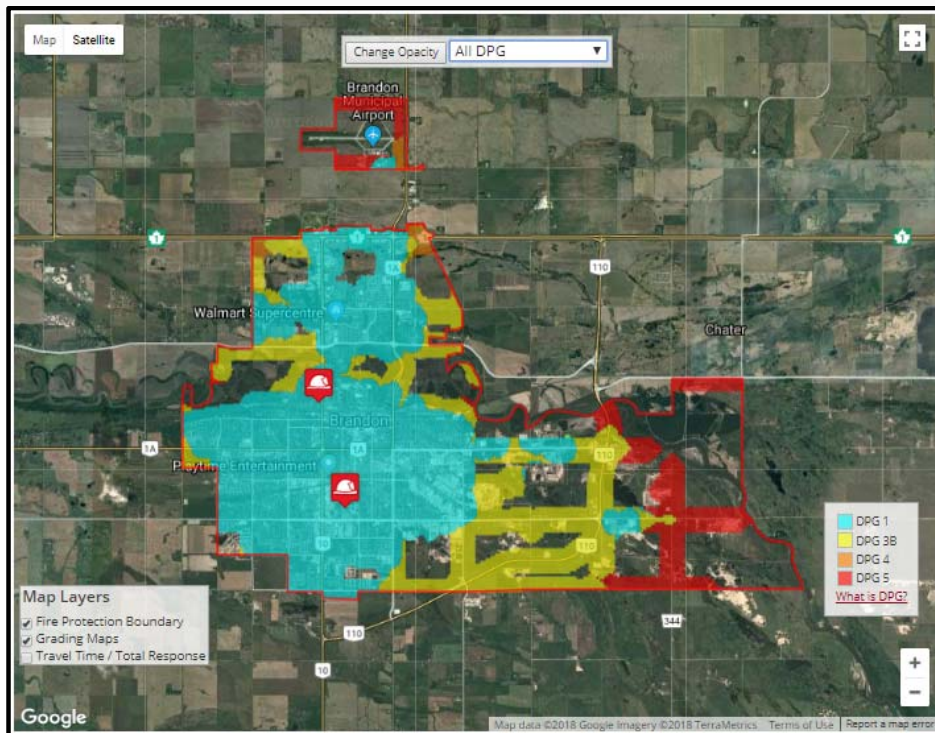
# Fire Insurance Grading Application Map – City of Winnipeg



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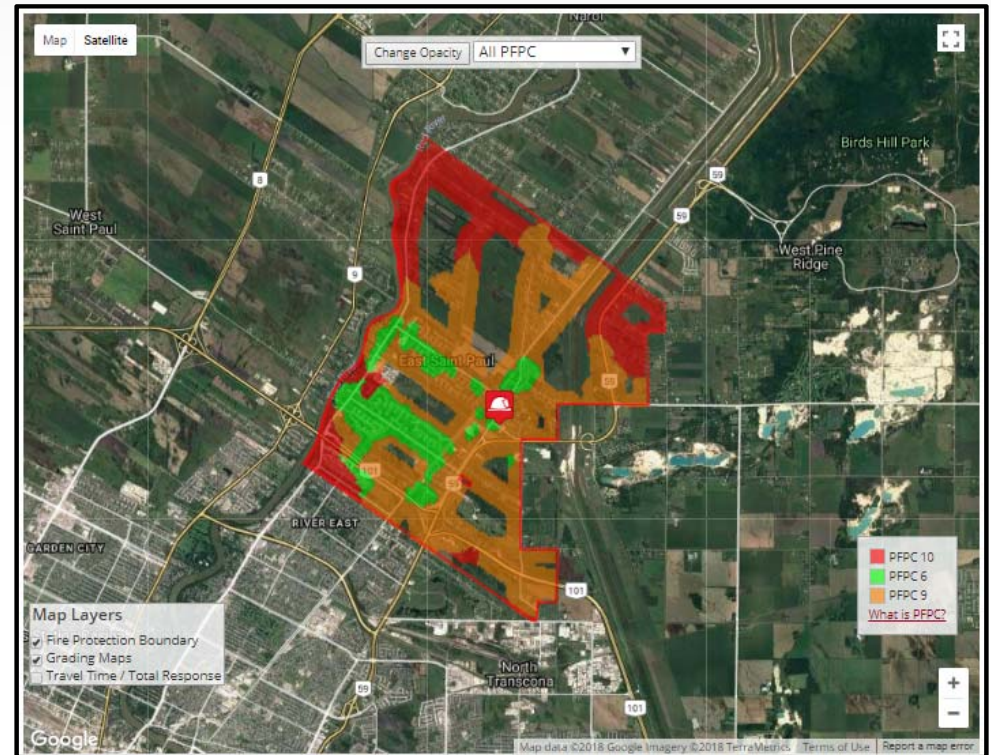
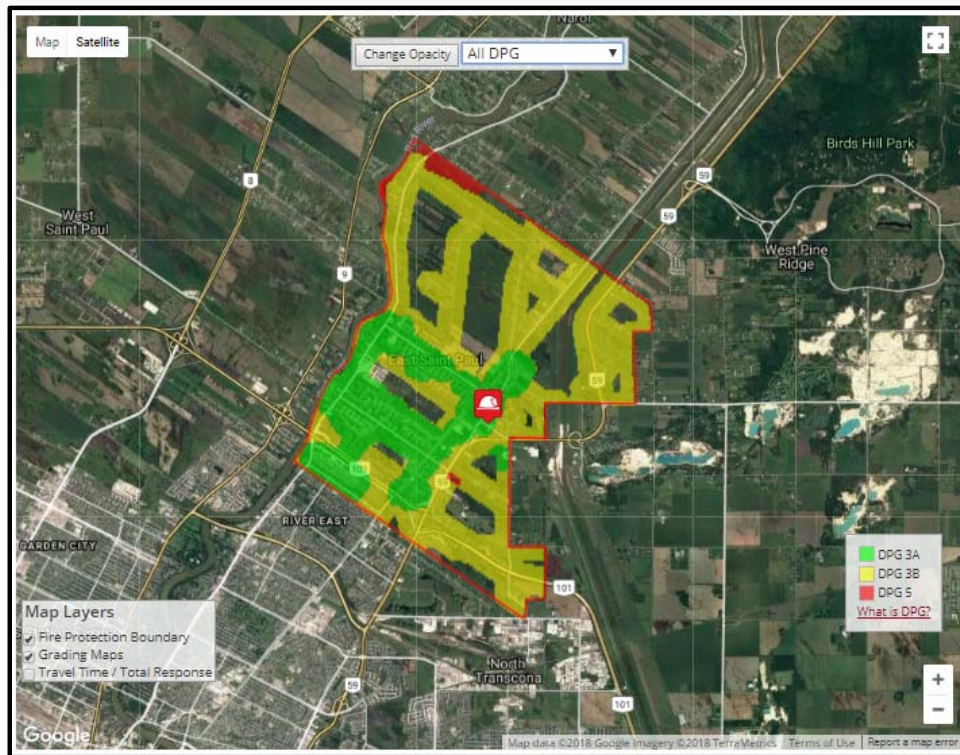
# Fire Insurance Grading Application Map – City of Brandon



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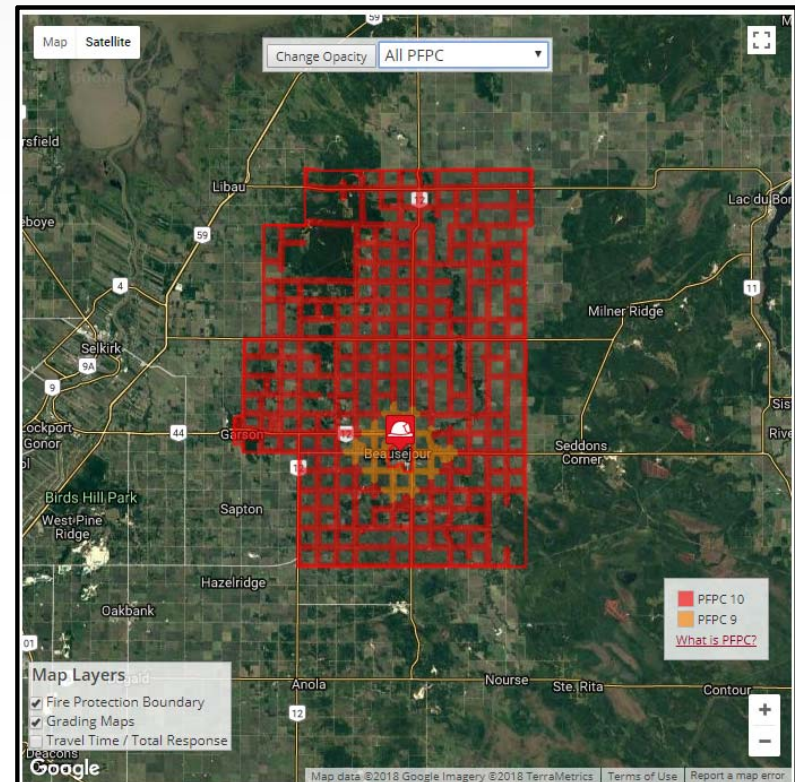
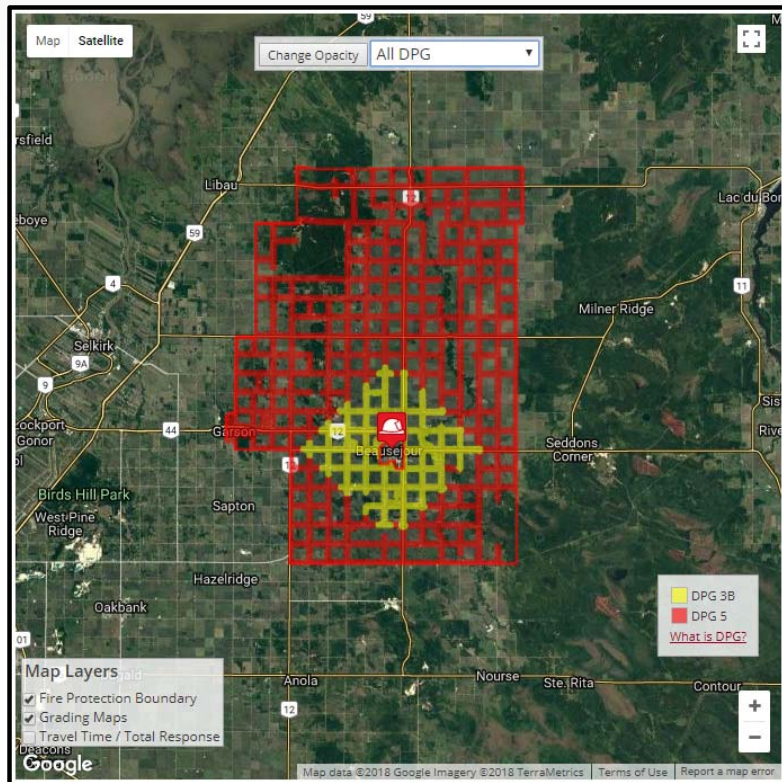
# Fire Insurance Grading Application Map – RM of East St. Paul



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# Fire Insurance Grading Application Map – RM of Brokenhead



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# Online Canadian Fire Insurance Grading Index

**Fire Underwriters Survey**  **Search**

Welcome to the Canadian Fire Insurance Grading Index search page.

FUS has enabled three search features for fire insurance grade information across Canada.

**1. Search by address:** Begin entering your address into the box below, then select an address from the list of possibles displayed.

\_\_\_\_\_ Or \_\_\_\_\_

**2. Search By Postal Code:** Begin by entering a postal code and then select an exact address using the lists provided.

**Postal code:**

\_\_\_\_\_ Or \_\_\_\_\_

**3. Search By Community Name:** Used to determine applicable fire insurance grades for the community/municipal/regional area the risk is located in.

☒ **contains word** ☐ **begins with**

☐ **Beta test Community Search**

**Place name:**



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# Canadian Fire Insurance Grading Index – Address Search Result

**Fire Underwriters Survey** **Commercial Protection Details**

Toggle debug info

1405 ST MATTHEWS AVE is located within the City of WINNIPEG. The responding fire hall is Winnipeg - F.S. #11 located in the Winnipeg, City of Fire Protection Area.

Public Fire Protection Classification (PFPC) 2 is applicable in this area.

Applying the following RiskSCOR adjustments	
Description	Action
2 or more public hydrants within 150 m	No adjustment
The responding fire hall is within 2.5 km	No adjustment

Adjusted Risk Specific Commercial Property Response (RiskSCOR) is 2.

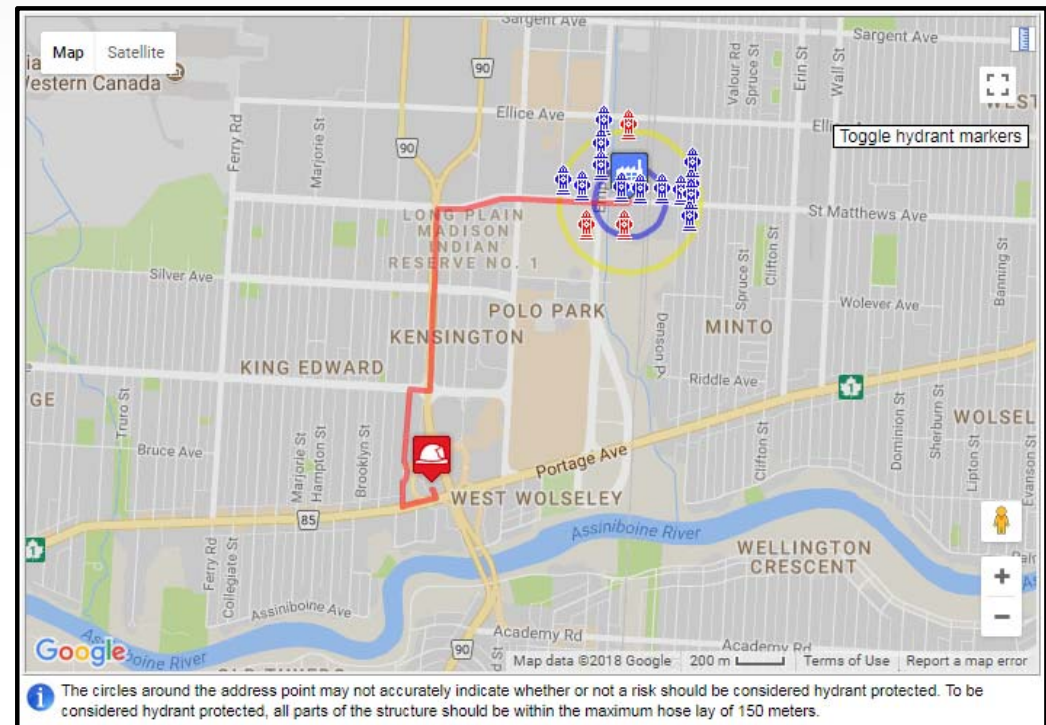
Inquire about this result

**Protection Details for 1405 ST MATTHEWS AVE**

Fire Protection Area	Winnipeg, City of
Firehall	Winnipeg - F.S. #11
Territory Code	21
Responding firehall road distance (km)	1.9 km
Firehall address	1705 Portage Avenue
Pumper flow credited per fire station (minimum) (Imperial gal/min)	1580
Water tanker capacity on trucks credited per fire station (minimum) (Imperial gal)	0
Number of full-time fire fighters or equivalent credited per fire station	7.4
Number of volunteer fire fighters credited per fire station	0
Number of recognized public hydrants within ( 150 / 300 ) meters	( 3 / 13 )
Number of recognized private hydrants within ( 150 / 300 ) meters	( 0 / 3 )
Grade Date	2017-09-19


**Earthquake Codes for 1405 ST MATTHEWS AVE**

System	Zone	Descriptor
CRESTA Accumulation Zone	14	Manitoba



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# Canadian Fire Insurance Grading Index – Address Search Result

**Fire Underwriters Survey**  Dwelling Protection Details

[Toggle debug info](#)

Harvest Way, East Saint Paul, MB, Canada is located within the Rural Municipality of EAST ST. PAUL. The responding fire hall is East St. Paul F.S. located in the East St. Paul, Rural municipality of Fire Protection Area.

Dwelling Protection Grade (DPG) 3A (Volunteer, Fully Protected) should be applied.

[Inquire about this result](#) 

**Protection Grades for Harvest Way, East Saint Paul, MB, Canada**

Hydrant Protected Area

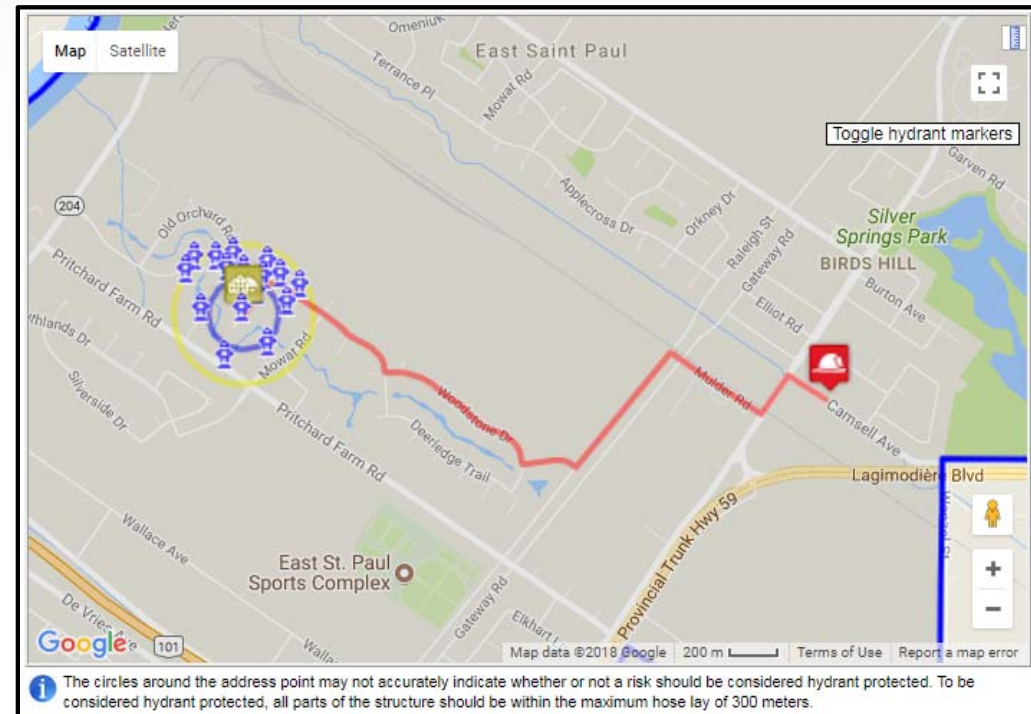
3A

**Protection Details for Harvest Way, East Saint Paul, MB, Canada**

Fire Protection Area	East St. Paul, Rural municipality of
Firehall	East St. Paul F.S.
Territory Code	30
Responding firehall road distance (km)	4.1 km
Firehall address	2127 Camsell Ave, East St. Paul, MB R2E 1G2
Pumper flow credited per fire station (minimum) (Imperial gal/min)	4225
Water tanker capacity on trucks credited per fire station (minimum) (Imperial gal)	6000
Number of full-time fire fighters or equivalent credited per fire station	0
Number of volunteer fire fighters credited per fire station	35
Number of recognized public hydrants within ( 150 / 300 ) meters	( 4 / 16 )
Number of recognized private hydrants within ( 150 / 300 ) meters	( 0 / 0 )
Grade Date	2017-04-13

**Earthquake Codes for Harvest Way, East Saint Paul, MB, Canada**

System	Zone	Descriptor
CRESTA Accumulation Zone	14	Manitoba



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## Commercial Lines – Public Fire Protection Classification

Fire Underwriters Survey Public Fire Protection Classifications	System Used by Many Insurance Companies "3 tier" system	Insurance Companies typically refer to these grade as
1	Table I	Protected
2		
3		
4		
5	Table II	Semi-Protected
6		
7		
8	Table III	Limited-Protection or Unprotected
9		
10		Unprotected



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## Personal Lines – Dwelling Protection Grade

Fire Underwriters Survey Dwelling Protection Grades	System Used by Many Insurance Companies “3 tier” system	Insurance Companies typically refer to this grade as
1	Table I	Fully Protected, Career
2	Table I	Fully Protected, Composite
3A	Table I	Fully Protected, Volunteer
3B <sup>1</sup>	Table II	Semi-Protected, Career or Volunteer (Shuttle)
4	Table II or III	Limited-Protection, Career or Volunteer
5	Table III	Unprotected

Note 1 – Fire Departments that shuttle water using mobile water supply apparatus may approach FUS to become Superior Tanker Shuttle Service Accredited



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# Subscribers and Usage



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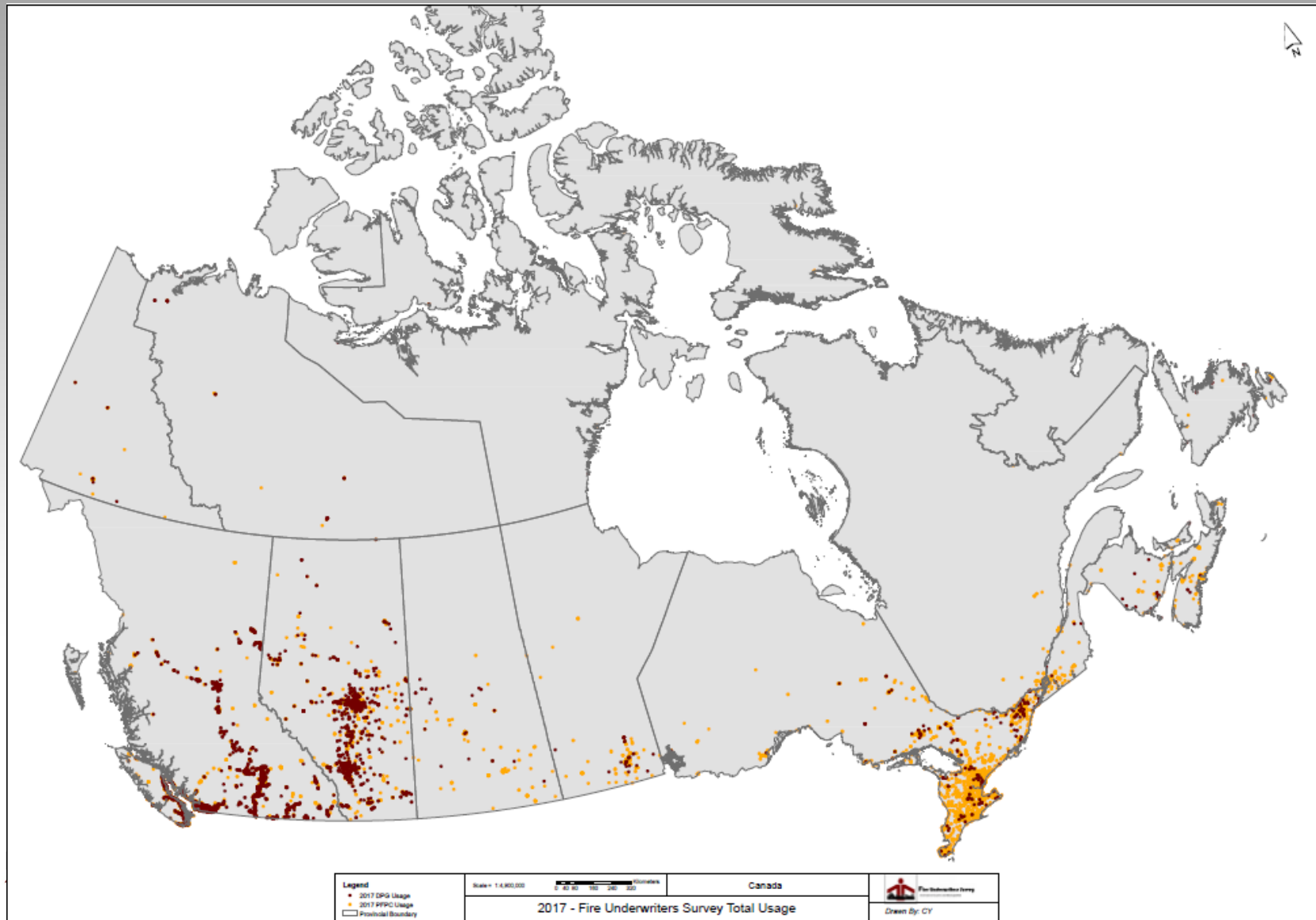


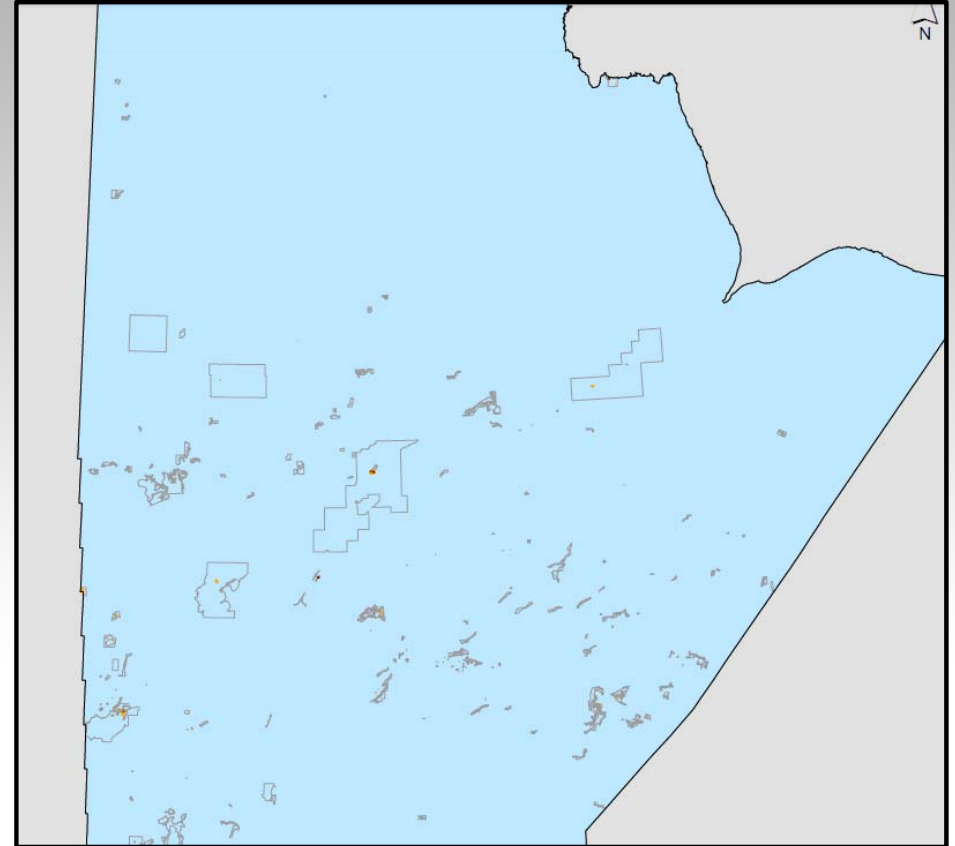
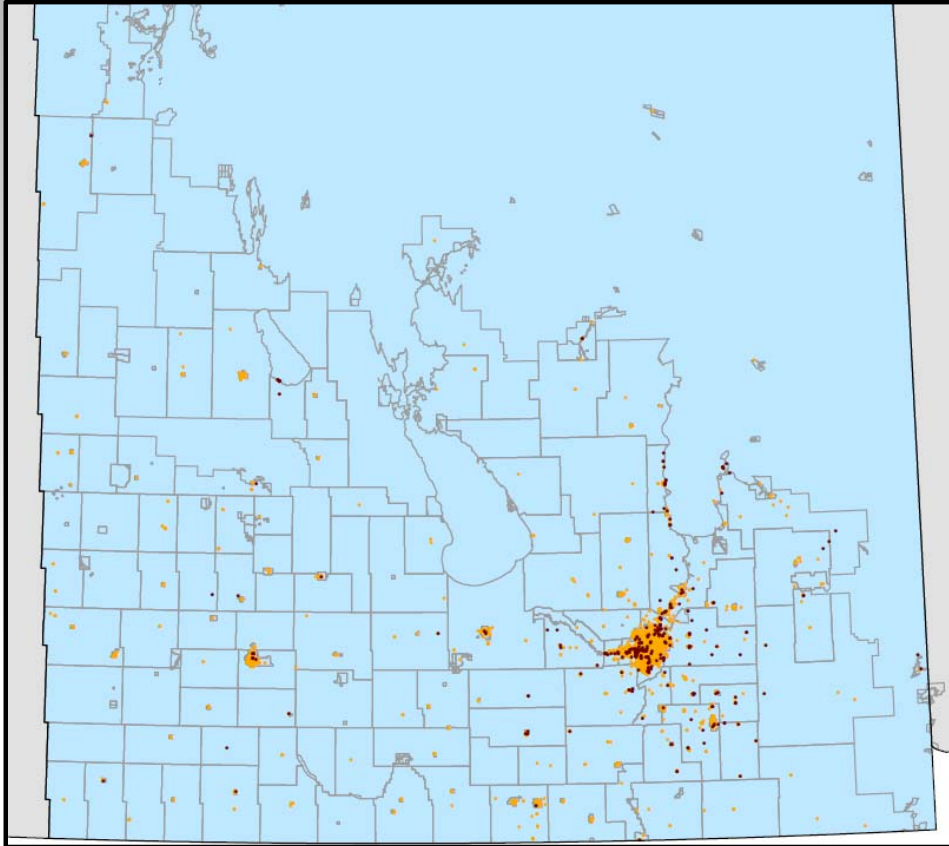
# Subscribers to FUS

- AIG Insurance Company of Canada
- Alberta Motor Association
- Allianz Global Risks
- AMSC Insurance Services Ltd.
- Arch Insurance Company
- Aviva Canada
- BCAA
- Belair Direct
- Berkley Canada
- CAA Insurance Company
- La Capitale General Insurance Inc.
- Chubb
- Continental Casualty Company (CNA)
- Desjardins General Insurance Group
- Ecclesiastical Insurance
- Echelon Insurance
- Economical Insurance
- Everest Insurance Company of Canada
- Federated Insurance
- Gore Mutual Insurance Company
- Great American Insurance
- GROUPASSUR
- Hannover Re
- Hartford Fire Insurance
- Heartland Farm Mutual
- H. W. Hollinger (Canada) Inc.
- iA Auto and Home Insurance
- Intact Insurance
- Johnson Inc.
- Lussier Dale Parizeau
- Markel Canada
- Mutual Fire Insurance Company of British Columbia/Square One Insurance Service
- Mutuelle des municipalités du Québec
- Mutuelle d'assurance en Église
- Totten Group/National Brokerage Services
- Northbridge Insurance
- Ontario Mutual Insurance Association
- Optimum General
- Peace Hills General Insurance Company
- Personal Insurance
- Pistagnesi Doyon
- Premier Canada Assurance
- QBE Canada
- RSA Canada
- SGI Canada
- Sovereign General
- Starr Technical Risks Canada Inc.
- State Farm Insurance / Certas
- TD Insurance
- Temple Insurance Company
- The Guarantee
- Tokyo Marine and Fire Insurance
- Trans Canada Insurance Marketing/Profescau
- Travelers Canada
- Trisura Guarantee Insurance
- Unica Insurance
- L'Unique
- Wawanesa Insurance
- Westland Insurance
- Wynward Insurance Group
- XL Catlin
- Zurich Insurance



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# **Municipal Building Officials Municipal Fire Officials**

## **How does FUS aid in their Respective Jobs?**



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FUS does not directly aid in the duties of a Building Officials or Fire Officials as FUS is an assessor of public protection for the subscribing insurance industry

FUS will provide assistance and guidance to Building Officials and Fire Officials on matters related to a municipality and their fire insurance grades:

- Required Fire Flows Assistance
- Crediting of Fire Safety Control specifically Fire Prevention Inspection and Educational programs



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# What a Building Official and Fire Official within a Municipality can do to Control their Risk Assessment

- For example, combustible 3 storey multi-family residential building non-sprinklered
- Responding fire department has one engine, 10 volunteers and water supply providing 600 lpgm
- Can control the Required Fire Flow and Basic Fire Flow set in a municipality by doing one or more of the following:
  - Install automatic sprinkler protection
  - Reduce the area of the building
  - Sub-divide the building area with a firewall
  - Change the construction from combustible to non-combustible or limit the amount of combustible construction



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# Importance of a Municipality Keeping Data up to Date With FUS



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## Importance of Keeping FUS Data Up to Date

- Subscribing underwriters have accurate information for underwriting and rate setting purposes in municipalities
- Constituents are properly insured when the insurance industry has accurate and up to date information on the level of public fire protection available
- Constituents in a municipality continue to receive insurance rate reductions based on the investments made into public fire protection



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# Public Fire Protection Incentive Cycle

## Insurance Industry

- Reduced Insurance Rates for having Public Fire Protection
- Encourage and offer incentives toward further investment into Public Fire Protection through lower insurance rate

## Municipality

- Creates/Provides Public Fire Protection Services
- Make Improvements or Maintains a Consistent Level of Public Fire Protection

## Insured/Property Owner

- Receives Insurance Savings based on Public Fire Protection available
- Invest into Public Fire Protection (taxes/charitable donations)
- Continue investment into Public Fire Protection for continued savings and/or additional savings



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## If a Municipality chooses Not to keep its Data Up to Date

- FUS cannot recommend to the subscribing insurance industry to offer rate reductions if the level of public fire protection is not adequate
- If FUS is unaware of areas that may be below the minimum requirements, FUS will be unable to develop a plan alongside a municipality to maintain fire insurance grading recognition
- If improvements occur and are not reported to FUS for review FUS will not be able to grant credit to determine if a better fire insurance grade is warranted to be published in the Canadian Fire Insurance Grading Index



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# Process Involved in Updating a Municipalities Fire Insurance Grades



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## Process for Updating a Municipalities Fire Insurance Grades

- A municipality at any time can contact a FUS office and request their current fire insurance grade information. Typically through the CAO or Fire Chief or other municipal representative
- A FUS representative will provide a letter indicating the current grades in both systems and when they were last updated
- Forms will be attached to begin the update process
  - Fire Station Form, Community Update form, Water Supply Form
- There is also no fee involved with keeping information up to date with FUS



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**Thank You**

**Any questions?**



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1-800-665-5661

### Ontario Branch

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OPTA Information Intelligence  
Fire Underwriters Survey  
600-175 Commerce Valley Dr. W.  
Markham, ON. L3T 7P6  
1-800-268-8080

### Quebec Branch

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OPTA Information Intelligence  
Fire Underwriters Survey  
255, boul. Cremazie E, 2nd Floor  
Montreal, QC. H2M 1M2  
1-800-263-5361

### Atlantic Canada Branch

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OPTA Information Intelligence  
Fire Underwriters Survey  
238 Brownlow Ave, Suite 300  
Dartmouth, NS. B3B 1Y2  
1-877-634-8564

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