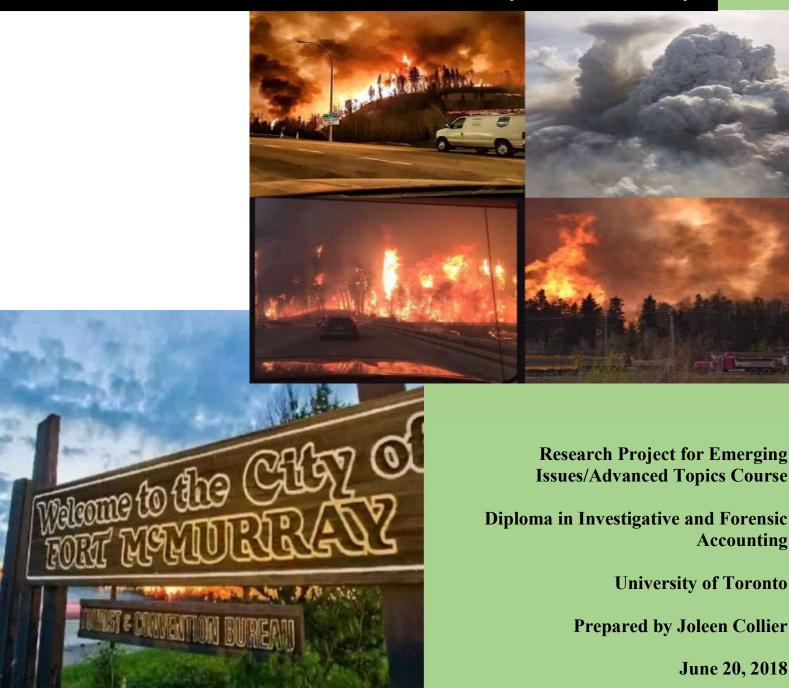
Natural Disaster Loss Quantification; A Fort McMurray Case Study



For Prof. Leonard Brooks

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I would also like to acknowledge all the first responders, the wildfire suppression teams, and the tens of thousands of individuals and businesses across Canada whom were involved in the response and recovery of Fort McMurray.

Objectives and Circumstances of the Research Paper

Objectives

This research report was required for the Diploma in Investigative and Forensic Accounting Program Class 2018, out of the University of Toronto, Graduate Studies. This topic was chosen to be able to give a firsthand look into the processes, losses, and misconceptions that can take place surrounding insurance and costs of a natural disaster. With further knowledge, some may be able to take steps to better insure themselves, mitigate their losses, and to have a better idea of what could financially happen following a natural disaster.

Motivation: Firsthand Experience

When the 2016 wildfire hit Fort McMurray, I experienced the evacuation, re-entry, rebuild, and recovery first-hand. I have experienced an evacuation claim and smoke damages quantification of my home, as well as continuing to work on the Fort McMurray Wildfire Recovery Task Force overseeing the Provincial Disaster Recovery Program submission costs and reporting. I have lived through the destruction and rebuild of the town that I resided for the preceding five years, seeing friends and family being affected by the wildfire, businesses closing indefinitely or not reopening until years after the wildfire incident, and the Municipality not having adequate insurance on various capital assets. I believe my experiences will shed a light on various financial risks and results associated with natural disasters.

Background

Canadian History

A natural disaster is;

"A major adverse event resulting from natural processes of the earth; such as a hurricane, tornado, flood, volcanic eruption, earthquakes, tsunamis, land slides, drought, wildfires, and other geological processes. A natural disaster can cause loss of life or property damage in its wake, the severity of which depends on the affected populations resilience, or ability to recover."

Canada is no stranger when it comes to natural disasters. According to Catastrophe Indices and Quantification, April 2018 marked the month that Canada exceeded 100 catastrophes over the span of a decade. It is becoming increasingly common for Canadian annual insured losses to exceed \$1 billion as severe weather events become more frequent.²

- From May 14 to 16, 2011, destructive wildfires consumed Slave Lake, Alberta. Insured damage caused by the fires amounted to more than \$780 million, making this the second-costliest insured disaster in Canadian history at the time. The wildfire destroyed 374 properties, and damaging another 52, which amounted to 33% of the entire town. ³
- On August 21, 2011, a violent storm and tornado devastated Goderich, Ontario, causing \$130 million in overall damages and \$75 million in insured damages.⁴

² (Catastrophe Indices and Quantification, 2018)

¹ (Buakao, 2014)

³ (Government of Canada, 2017)

⁴ (Government of Canada, 2017)

- ➤ In the days leading up to June 19, 2013, Southern Alberta experienced heavy rainfall that triggered catastrophic flooding described by the provincial government as the worst in Alberta's history. Total damage exceeded \$1.7 billion and made the 2013 Alberta floods the costliest disaster in Canadian history at that time.⁵
- April 2018 brought Ontario an intense ice storm, bringing strong winds, flooding, heavy snow, and ice build-up. The majority of claims occurred in Ontario and has reported more than 15,000 insurance claims including 1,800 car collisions due to the storm. The ice storm resulted in more than \$190 Million in insured damages.⁶
- Approximately 4,000 earthquakes are recorded in Canada each year; most are small. However, there is at least a 30 per cent chance that an earthquake strong enough to cause significant damage to 1 and 2-storey buildings will strike south-western British Columbia in the next 50 years.⁷



⁵ https://en.wikipedia.org/wiki/2013_Alberta_floods

⁶ (Government of Canada, 2017)

⁷ (Contant, 2018)

Fort McMurray, Alberta

On May 1st, 2016 a 'human caused' wildfire began south west of the northern Alberta town of Fort McMurray, following weeks of record high temperatures and very little rain. The wildfire, MWF-09⁸, started near the Horse River and therefore was named the 2016 Horse River Fire. The fire would quickly be dubbed "The Beast" by those fighting it as well as residents and media. On May 1, a State of Local Emergency was declared and the Regional Emergency Operations Centre (REOC) was activated. On May 2, the Horse River Fire had reached approximately 862 hectares. By mid-day May 3rd, the wildfire had grown at unanticipated rates, causing its own interior weather pattern and ultimately breaching the city limits. The force of the wildfire enabled it to jump the very large Athabasca River which is over a kilometer wide, more than 10 football fields in length. The sheer magnitude and force of the wildfire caused the largest evacuation in Alberta history of the 88,000 residents of Fort McMurray and much of the surrounding areas within the Regional Municipality of Wood Buffalo. 10

The Horse River Fire was not deemed to be fully extinguished until August 3, 2017, sixteen months later, and after burning 589 hectares. ¹¹ The wildfire is thought to be the costliest insured natural disaster in Canadian History, with an estimated insured loss around \$3.58 billion. ¹²

The losses suffered by such a large-scale emergency could be felt from the individual home owner or renter, to local and corporate business owners, all the way to the various municipal, provincial, and federal levels. Each form of loss was unique to the circumstances, insurance

⁹ (NOR-EX Engineering, 2016)

^{8 (}NOR-EX Engineering, 2016)

¹⁰ (NOR-EX Engineering, 2016)

¹¹ (NOR-EX Engineering, 2016)

¹² (Insurance Bureau of Canada, 2017)

policies and coverages, and yet they had many of the same clauses held within. Through this case study we will be following the story of the Fort McMurray natural disaster to give an idea of the processes taken and various losses suffered through the evacuation, re-entry and clean up, damages and loss quantifications, business interruption, macro loss quantifications, and lessons that can be learned from the Fort McMurray Wildfire.

Initial Loss Occurrence – Mass Evacuation



Mass Evacuation Circumstances

The evacuation of the town was staggered; some areas had hours of notice, while others had their homes and businesses on fire before the first evacuation order was called at 14:00.¹³ As of 18:20 on May 3, all of Fort McMurray was under a mandatory evacuation notice¹⁴. By

12:30 on May 4, Premier Rachel Notley was reporting over 1,600 structures had burned, and would continue on to 2,400.¹⁵ Following an audit of the surrounding circumstances of the wildfire and evacuation, it was determined that a disconnect between information sources occurred.¹⁶ While the Province was responsible for wildland management, the Municipality's fire fighters were responsible for fire within the city limits.

¹³ (MNP LLP, 2017)

¹⁴ (MNP LLP, 2017)

¹⁵ (Edmonton Journal, 2016)

¹⁶ (MNP LLP, 2017)

Due to the logistics of the town and many of the town's residents working at one of the various oil sites on the outskirts of town, this left their personal property vulnerable as many could not get home between the voluntary evacuation and mandatory evacuation orders. Since they could not get to their home, they were forced to evacuate the town with all they had on their backs, leaving all their personal possessions to the mercy of "The Beast".



Another logistical issue with the evacuation was that the closest town with a gas station is



Wandering River, 200km south of town. Once the evacuation was called there was a 'run' at all gas stations, many people were unable to fill their tanks with enough gas to reach wandering river. This meant many people had to abandon their vehicles and belongings on the side of highway 63, as far away from the wildfire as possible.

Mass Evacuation Clause

Most property insurance policies should contain coverage that aids the policy holder in the event of a mass evacuation. Mass evacuation coverage is for cases where there is a civil order to evacuate for a reason that is covered under the policy, in this case it would be for fire. The following clause would come into effect under a mass evacuation for State Farm Insurance

provider; note that the maximum benefit period written on the coverage summary for this insurer ranged from 14 to 30 days.

"When a civil authority prohibits access to the premises or orders the premises to be evacuated as a direct result of an event occurring off the premises and caused by an insured peril. Payment will be made, per event, for the maximum benefit period which is written on the Coverage Summary. This period will not be interrupted by the expiration of your insurance policy.¹⁷

The actual coverage is usually a pre-determined dollar amount, and it goes into effect from the evacuation date. Coverage could range from \$500 in some tenant insurance policies up to \$5,000+ in more substantial home insurance policies, averaging around \$2,500 for most home policies. The intent of the coverage is to ensure that the policy holder is financially protected from an increase in any reasonable short-term expenses directly related to the evacuation. Each insurance policy can vary in details and coverage in the case of a mass evacuation and should be reviewed by the policy holder prior to an event occurring.

Although \$5,000 may seem like a large sum of money, consider the following hypothetical example of the minimum base expenses for a family of 4 who was evacuated for the entire month to Edmonton;

One Month Evacuation - Family of 4	
31 days stay at a hotel (\$100/day)	\$ 3,100.00
31 days meals at restaurants (\$100/day)	3,100.00
Temporary Clothing (\$200/person)	800.00
Toiletries (\$25/person)	100.00
Pet Boarding (\$35/day)	1,085.00
Fuel during evacuation and during month in Edmonton	\$ 600.00
Minimum Evacuation Costs	\$8,785.00

¹⁷ (State Farm Insurance, 2018)

Some policies did allow small amounts for entertainment, which is necessary for mental health after a large event such as a natural disaster.

Mass Evacuation Allowed Expenses

Some additional living expenses (ALE) that may be covered in a mass evacuation include, but are not limited to;

- Accommodation, this does not include staying with friends or family members unless the insurance providers offer a daily per diem for accommodation.
- Food, over and above usual costs. This means that you are expected to buy groceries to feed yourself and your family, which are the usual costs. However, the incremental costs of having to eat out in restaurants rather than purchasing groceries at home can be claimed. Many individuals were warned that this is not a vacation, so luxury items like caviar and escargot are not considered to be regular food items.
- Emergency clothing and toiletries if you were not able to take these items during the evacuation. Although many people were able to get home to pack for the evacuation, the intense pressure resulted in people unintentionally packing "cheese slices" or other unnecessary items over essential items like clothing, socks, and even underwear.
- Boarding of pets
- > Fuel receipts incurred as part of the evacuation.
- > Other types of transportation costs such as flying or rental cars, could be reviewed on a case by case basis by the individual adjuster. Many individuals initially evacuated to the

Edmonton area but then continued to stay with friends or family in other areas of Canada. Some insurers may provide travel coverage to Edmonton but not the continuation.

Mass Evacuation Dis-Allowed Expenses

Some common expenses that may not be covered in a mass evacuation include, but are not limited to;

- Regular expenses that would have normally been incurred (mortgage, vehicle, and loan payments). Although most banks and financers granted a deferral of payments during the evacuation period, and potentially longer depending on the circumstances.
- > Income replacement
- ➤ Alcohol and cigarettes
- ➤ Costs of other people not insured by your policy
- Replacement of damaged or lost items (this is handled under the contents insurance)
- > Jewellery, electronics, luxury or similar items that are not short-term expenses directly related to the evacuation.

Vehicle Insurance

Tens of thousands of vehicles were either left within Fort McMurray city limits, on the side of Highway 63, or at one of the Oil Sites that flew residents safely to Edmonton. Damages coverage will depend on the type of coverage that was purchased under your specific auto policy.



Comprehensive coverage is required to cover any loss due to fire, including wild fire.



The rental car extension clause usually kicks in when your vehicle is out of service due to an insured loss. That would mean that it would not extend to pay due to an evacuation, although, if fire damage occurred to your vehicle, rental car extension would extend to it. Given the number of vehicles that were left behind, some home property

insurance policies would possibly cover rental car coverage under their ALE section, however, limits to the ALE would be affected and each policy would vary on inclusions. An issue that some policy holders had was prior to the insurer granting rental car coverage, the company wanted proof that the vehicle was in fact destroyed in the fire. This was an impossible task to prove since no resident could enter the town during the evacuation period.

Tenants Insurance

Tenants Insurance covers individuals and families that are renting their home. Tenants insurance policies provide coverage for belongings, to limits determined when obtaining insurance and are specified in the policy. This type of insurance would potentially cover them for liability, contents, ALE, and depending on the insurer mass evacuation, and many other coverages. The difference between tenant insurance and regular property insurance is that the building is not being insured, only the contents inside the building and the people living in the home.

Therefore, the premiums are substantially less than a home owner insuring the full building, and many individuals in Alberta can contact their own insurer where they have their automobile insured so that they would get "Multi-Line Discount" on their automobile and tenant insurance.

Loss of Fair Rental Value

As is the case of Fort McMurray, many of the homes had additional rental units providing accommodations for the large transient and commuting residents of the city. If the homeowner had properly declared and insured the rental portion and income at the onset of the policy, then the loss of fair rental value (rental



income) would apply during the mandatory evacuation period. Unfortunately, not all home owners had properly declared the rental portion of their home, therefore not paying the appropriate premiums, and were subsequently not covered under their policy. The same evacuation clause as the homeowner would come into effect, although the value and maximum benefit period could vary depending on what was written into the coverage summary at the onset of the insurance policy.

Re-entry

Re-entry circumstances

As per the Regional Municipality of Wood Buffalo media release, re-entry for residents would only occur starting June 1 if five conditions were met;

- That the fire is no longer "an imminent threat" to the city (and air quality is not hazardous).
- That the hospital is open and able to provide basic health services.
- ➤ That fire and police departments are operational, and 911 and ambulance service are restored.
- > That all roads are open to traffic and natural gas and electricity have been fully restored.
- ➤ That supplies of potable water and food are available, and people have access to banks and pharmacies. 18



For a town that had been completely shut down, and smoke levels that were at extremely toxic levels, there was a large amount of work that had to be completed to accomplish the last 4 requirements.

In a media release, the Regional Municipality of

Wood Buffalo said, "returning residents should expect some disruption and service delays, and a

¹⁸ (RMWB, 2016)

boil-water advisory is expected to remain in place for some time, and those coming back should arrive with enough food, water and prescription medication to last up to at least seven days". 19

Re-entry of residents to Fort McMurray was staggered and the original re-entry occurred over 4 days, which would have varying effects on evacuation time periods and additional living expense claims.

- ➤ Zone 1: Lower Townsite, Anzac, Fort

 McMurray 468 First Nation, Gregoire

 Lake Estates (June 1).
- Zone 2: Parsons Creek, Stone Creek, Timberlea, Eagle Ridge, Dickinsfield (June 2).
- Zone 3: Thickwood, Wood Buffalo (June3).
- Zone 4(a): Gregoire, Prairie Creek, Saprae
 Creek Estates (June 3).
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 Zone 1

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Re-entry Timeline for the Regional Municipality of Wood Buffalo

➤ Zone 4(b): Waterways, Abasand, Beacon Hill, Grayling Terrace, Draper (June 4).²⁰

Residents living in undamaged homes in the communities of Abasand, Beacon Hill, and Waterways were not allowed to stay in their homes permanently upon re-entry, even if the homes were undamaged, due to the potential of toxic ash remaining. Those residents would be escorted to gather some personal belongings and would again have to remain on evacuation notice until further notice. Permanent re-entry started for the 439 standing homes in the Abasand and

¹⁹ (RMWB, 2016)

²⁰ (RMWB, 2016)

Beacon communities on Aug. 31, 2016 ²¹, and the hardest hit Waterways community was not until October 24, 2016 for the remaining 31 still standing homes.²²

Clean-up and Loss Quantification – Standing Homes



Re-Entry Clean Up

Upon re-entry, residents were advised to pick up their free red cross "clean up" bucket from designated locations in the city. These buckets included everything needed for initial cleaning of all standing homes not overly

smoked damaged; 5-gallon bucket, mop, brooms, brushes, sponges, work gloves, respirator mask, heavy duty garbage bags, pine sol cleaner, Clorox bleach, and a smoke defuser. Ash laden with dioxins, furans, metals and polyaromatic hydrocarbons has likely travelled down roof vents, infiltrated insulation and HVAC systems in almost every structure left standing in Fort McMurray.²³ For many it took days and weeks of scrubbing walls, furniture, cupboards to get the smell to dissipate. Many began cleaning immediately, prior to having an insurance adjuster come to assess the condition of the house. This impulse caused the insurance adjuster, in some cases, to determine the house condition as it was post cleaning. Calling the insurance provider is an essential first step to getting financial compensation for a loss and must be done before anything is touched or altered at a damaged or destroyed home. Many residents that arranged

²¹ (RMWB, 2016)

²² (RMWB, 2016)

²³ (Sanderson, 2016)

for an assessment prior to cleaning, were potentially paid by their insurance provider for the hours of cleaning undertaken or had a professional cleaner hired by the insurance company.

Once a home owner has entered the home, the first thing that needed to be done was to start taking an inventory of the damage. Using a digital camera or smartphone, trying to capture as much evidence of the damage as possible. Alternatively, a video walk-through of the home would suffice. Narrate the video by explaining what was lost in the fire. These photos and videos will go a long way to helping the insurance adjuster assess the extent of the damage at the home and may be used in the adjuster's insurance assessment of the damages.

When the insurance adjuster initially comes to the property, they will assess the full interior and exterior of the entire house looking for damages caused directly by the fire. The roof and the attic insulation would need to be assessed due to falling embers on the roof, and smoke smell and toxins trapped in the attic insulation. They look for any obvious signs of damage that could have been caused by the fire, fire fighting efforts, water bombing, fire breaks, even explosions. One area of town had a gas explosion in a town house complex. The explosion was so severe it took the fire place off a wall a block away, and a block further away from that caused cracking in the taping of drywall. Once the home is assessed for damages and a settlement agreed upon, the homeowner will be informed that they would have a 2-year limitation, starting from the date of the fire, if any further damages resulting from the wildfire should arise.

The most commonly recommended expense incurred was each house having their vents vacuumed out by a professional company, which ranged from \$250 to \$600 depending on the company. Due to the sheer magnitude of demand, it was not easy to get a company to come when needed.

Another commonly recommended expense was the disposal of potentially contaminated food sources including regular cupboard foods and medicine cabinets. Depending on the area and extent of smoke damage, it was advised to dispose of all food and medicine cabinet items. For example, one home was in a moderately smoke effected area. The owners had a sealed hard plastic bottle of gripe water in the medicine cabinet, gripe water is perfectly clear. Following the wildfire, that gripe water was brown. These items would all fall under contents insurance and can significantly add up.

The extent and costs to each home owner varied during the clean up period. Some homes were completely sealed in and not in a directly affected area, which may have only needed a full house clean. Others may have been in a hard-hit area, or left windows open or air conditioning running, which left these properties requiring a more substantial cleaning of all house hold items, particularly anything with fabric that would hold on to the smoke odor. Some cases washing the walls were not enough and needed painting to dissipate the odor, others needed carpets, drywall, and attic insulation replaced. With each case, the homeowners' insurance adjuster would be required to give authorization to extend the cleaning. Any cleaning done before or outside of this authorization may not be reimbursed. Many homeowners had professional companies come in and complete, and others could not wait and did the cleaning themselves with some insurance providers compensating and others did not.

Insurance Adjuster vs Home Owner

One issue that resulted from the fire was the inability to determine what damage was caused by the fire, and what was already damaged prior to the fire, possibly without the knowledge of the home owner. This determination also varied depending on the insurance provider and coverage limits within policies. An example is a home owner who was directly across from burning

structures. The houses to either side of this homeowner's house each had to have their roofs replaced due to falling embers, however, this one homeowner's insurance adjuster claimed that they could not determine if the damage was due to old age, therefore the adjuster did not allow for any portion of the roof repair. It is very important to have a second opinion by a third party should you not agree with the insurance adjuster, although this could come as an extra cost to the homeowner.

Another variance between each insurance provider and policy was the topic of food and refrigeration. Many houses suffered damage and prolonged power loss that affected fridges in such a way that they became a total loss. The residents were advised to make sure the homeowner spoke with their insurance provider ahead of time and was recommended to not even open the refrigerator door, but to tape the doors closed and move to the curb for pick up. Other areas not suffering a prolonged outage would just need all food items disposed of and a very deep cleaning of the refrigerator. Some insurance providers were very accommodating, stating that any loss of power gave the insurer automatic fridge replacement, where other insurance providers would only cover food replacement. See an excerpt from the insurance policy from State Farm Insurance in Appendix D.

"We will pay for food contained in a freezer or refrigerator inside a building on the premises when a loss is caused by a mechanical breakdown of the unit or power interruption... we will not pay for ... repair or replacement of the freezer or refrigerator unit."²⁴

²⁴ (State Farm Insurance, 2018)

If the homeowner is to still disagree with their insurer, the Insurance Bureau of Canada outlines the following steps to resolve the issue;²⁵

- > Get more information from your insurer.
 - Ask the broker, agent, company representative or claims adjuster for an explanation. Insurance policies are legal contracts that specify the rights and responsibilities of both parties sometimes misunderstandings arise.
 - > For further questions, ask to speak with the claim supervisor.
 - ➤ Contact the IBC Consumer Information Centre. Their staff have years of insurance experience and can answer questions about: Technicalities of policy wordings and coverage, how insurance companies handle claims, buying, renewing or updating insurance coverage, and how to proceed with a complaint.
- ➤ Contact your insurance company's ombudsperson
- ➤ Use the General Insurance OmbudService (GIO). If the dispute is not resolved with the insurer's complaints liaison officer, request a final position letter and contact GIO. GIO is an independent, regionally based consumer dispute-resolution system for the insurance industry.
- ➤ The Province of Alberta's Treasury Board and Finance offers information and support for consumers who have complaints about the resolution of their claims, as well as a separate process for dispute resolution.

Even when all available resources have been exhausted, there are times when the only resolve left is taking legal action against the insurance provider. One example of those being Gareth

²⁵ (Insurance Bureau of Canada, 2017)

Norris, owner of the local Irish restaurant/bar Paddy McSwiggins, who, for all intents and purposes, was over-insured on his business. He has been in a dispute with his insurance provider regarding the insurance related to his business for over two years. The popular Thickwood Heights restaurant had suffered severe smoke damage that the insurance provider insisted could be restored with several deep professional cleanings. The issue was that the location is in an older building with mainly wood construction. The air system kept running in the kitchen during the evacuation and it pushed the hazardous fumes throughout the building. Mr. Norris has since continually failed inspections by the health board, with their insistence that a renovation needed to occur prior to passing a health inspection; particularly in the floor, walls, and ceiling replacement. After years of renovation rejection by the insurance provider, and insistence on continually having professional cleaners, they finally agreed to pay a portion of reasonable costs of the renovation. To date, Mr. Norris has received a small amount of business interruption coverage at the onset of the claim, roughly 8 out of 26 months rent which was set at a high premium due to the desirable location, and a small percentage of the renovation costs to date. Many other businesses would have failed by this point in time. The insurance company has stated that Mr. Norris has now used a substantial amount of his policy coverage (over \$500,000) on the various unsuccessful 'cleaning' attempts, which were requested, insisted, and paid directly by the insurance provider. Mr. Norris has now retained legal counsel to attempt to rectify the unfortunate situation where an over-insured business, still could not receive the coverage he had paid for.²⁶

²⁶ (Norris, 2018)

Complete loss - Home Rebuild and Insurance Policies



Rebuild

After the complete loss of a residence it is very common to become overwhelmed by the various expenses and coverages contained within each policy. The different areas of insurable coverage will usually fall into three main categories within each insurance policy; reconstruction value, contents, and additional

living expenses. It is important to understand each category as they will all have varying limits set to them. If you are not careful you can reach a limit in one area and be considered under insured. For a home rebuild example, we will be using 3-member family who lost their home in the Stone Creek area of Fort McMurray. The names of the family and companies involved have been changed and removed from the examples. The family will be referred to as the 'Smith' family.

Reconstruction Value

The reconstruction value is generally the amount of coverage within an individual policy to rebuild the property, should an event occur. The reconstruction value provides the cost to construct, at current prices, an exact duplicate or replica of the building, using like-kind and quality materials, construction standards, design, layout and quality of workmanship.²⁷ An insurance provider calculates each homes reconstruction value when an individual first obtains

²⁷ (Independent Claim Services, 2012)

insurance for their property. For example, a major chartered bank calculates the reconstruction value by analyzing the following factors of the property, but are not limited to;

- Location of home
- > Type of heat
- > Construction material
- > Age and type of roof
- > Age of home
- > Any auxiliary heat
- > Style of home
- > Square footage

This, among other potential factors, are combined with the bank's existing database of house data and statistics, and determines the reconstruction value on that individual home. The amount is presented and agreed upon by the insured prior to the execution of the insurance policy.

Within an insurance policy there will be a clause that sets out either the maximum reconstruction value or it could indicate to completely rebuild regardless of the value, also known as Guaranteed Replacement Cost. The insurer may also have the opportunity to choose another option of taking a cash settlement by the insurance provider, however this amount may be significantly lower than the amount that would be received if the home was rebuilt. For the insurer, they would look at the actual cash value of the home prior to the fire, or the value of the home in the condition that it was in. One major chartered bank uses roughly 70% of the guaranteed rebuild value. The insurance contract does not cover the land, so if the insured was the owner of the land the insured will remain the owner of the land. Since the land does not transfer to the insurer, the insured would then be left with an empty lot that could be sold after

some additional expenses for demolition and permits to get the land to a product that could be sold.

Due to the drop in real estate values since purchasing the insurance policy, the Smith's were offered a cash settlement which was significantly less than their outstanding mortgage when combined with the land value. Therefore, they decided to rebuild the home.

Rebuild Process

Once it has been determined that an individual would rebuild their home, the next step would be to find a builder. This is not as easy as it would seem. When 2,500 structures all burn in a remote northern community, nearly 450 km from the nearest large urban town of Edmonton, the number of quality builders that will complete the job as required decreases quickly. A substantial difference between a regular rebuild after a single house fire versus a natural disaster is that not only are qualified builders few and far between, but supplies are as well. Not only did the cost of supplies in this small northern town increase due to higher demand, but it also coincided with an increase in drywall costs resulting from government tariffs²⁸. The logistics due to the location of the town, and the large influx of demand, could potentially cause delays to the rebuild process.

Many insurance companies gave their clients an approved list of builders to choose from, along with an estimated cost of what they believed it will cost to rebuild the home. This amount tended to be lower than what builders were quoting the job will take; it is unclear if it is due to a premium placed by the builder or the insurance company wanting a lower cost. Either way,

²⁸ https://www.ctvnews.ca/business/federal-drywall-tariff-out-west-raises-costs-threatens-fort-mcmurray-rebuild-1.3071346

before a builder would be approved by an insurance adjuster, an amount for the rebuild must be approved by both parties, the insurance company and the builder. Although many insured residents found it difficult to have the parties agree on a figure, it was safer than the alternative of having an insurance company let the individual choose and find their own builder. Many new construction companies were quickly formed, with some potentially unskilled labour.

Main areas included in rebuilding the Smith's home include;

- Foundation (including demolition/excavation/backfilling)
- > Structure
- ➤ Mechanical and Electrical
- > Finishing
- ➤ Administration (including permitting)
- Miscellaneous
- > Fee for contractors' profit
- > Fee for contractors overhead

See Appendix A for a full breakdown of the estimated cost for the Smith's rebuild.

Rebuild values do not include any changes or upgrades requested by a home owner. It is meant to put the insured back into the position they were in had the event not occurred. The insurance policy is not meant to increase the net worth or position of the insured past what their financial position was prior to the event. For the Smith family, their family home previously had a fully developed basement. However, the Smith's wanted to have a full legal basement suite put into this home, therefore it was a cost to them directly, and can be seen in Appendix B.

The Smith's also ran into problems with their builder due to some areas of the build not being completed to original requests or specs. Due to the mass amount of work that the contractors are completing, deficiencies have been a regular occurrence. Mr. Smith was sure to note all the deficiencies prior to take over, which was very important. The contractor had approached the insurance company to pay for the increased costs, however, they declined any further payments. Mr. Smith was fortunate since he had a contractor that fixed all the deficiencies and did not require the homeowner to pay for it. This was not the case in all situations as many homes had the deficiencies left behind or the contractor demanded payment by the homeowner. The costs of the deficiencies and changes for the Smith's are detailed in Appendix B.

Contents Insurance

Contents insurance is as the title describes, are the insurable contents or personal possessions on your insured residence. This type of policy pays for loss of or damage to insured possessions while located on an insured property. Since contents insurance is separate to home insurance, it can be added on to a home insurance policy or could be purchased on its own, as is the case in most tenants' insurance policies, and could potentially provide restricted coverage for personal possessions temporarily taken away from the insured property.

In this context "possessions" means anything that is not permanently attached to the structure of the home which would otherwise fall under home insurance. Some contents policies may also include possessions kept in outbuildings or in the garden area attached to the house, but may need to be indicated in the individual policy.²⁹

²⁹ (Wikipedia, 2018)

As per Can Star Research, some examples of contents that may not be covered under regular contents insurance;³⁰

- Expensive jewellery/artwork/antiques: Many insurers provide limited cover for precious valuables such as jewellery and artwork. For example, that extremely precious \$10,000 diamond ring of yours might only be covered up to \$1,000. You can add full coverage to these items as an extra by specifying the individual values, but this can add significantly to the cost of your contents insurance premium.
- ➤ Collections (DVD's, stamps, dolls, etc.) Collections of any type, be they trophies or Barbie dolls can take a lot of time (and obsession) to amass and can be worth a significant amount. Many contents policies ask for collections to be declared separately as an extra. By doing this, you can claim the full value of your \$15,000 happy meal toy collection if it is ever destroyed.
- ➤ Outdoor items (BBQs, outdoor settings, playgrounds) Since they are usually outside of the home, some insurers may not include such items under your standard contents insurance coverage. This is understandable, considering these items are more exposed to the elements and thus more susceptible to damage. Be sure to check your policy as outdoor items can often be covered as an optional extra.
- ➤ Plants and trees that are planted in the garden are not usually insured under contents insurance but may be covered under your home insurance. However, if your florae are in pots or tubs, they may be considered to be contents.
- ➤ Illegal items (drugs, unregistered guns, illegally downloaded media)
- ➤ Portable items (phones, laptops, jewellery)

³⁰ (Beattie, 2016)

- ➤ Portable items (mobile phones and handbags) are only usually insured under your contents insurance if you add them as an optional extra. Portable valuables are defined as any item that is normally carried with you away from the insured address.
- ➤ Items used for earning income (tools, musical instruments, photographic equipment).

 Some insurers will not insure specific contents of your home if they happen to be used for earning money.
- ➤ Cash usually has limited coverage and documents able to be cashed, you might only be covered up to \$200 in your contents insurance. Consider putting this money in a bank instead.

Each policy will indicate maximum amount of total claim for content insurance. One major chartered bank uses the calculation of 70% of the reconstruction value that was determined for the building while other policies will have varying calculations. Bear in mind that it is not a guarantee that an insured individual will obtain the entire 70% of the reconstruction value.

After an incident occurs, the daunting task of evaluating the contents of the home begins. This process can take some families months to complete. As seen in Appendix C, the schedule of Loss outlines each item in the home. Not only can this task be emotionally draining to the home owner, it is very difficult to note every item, when it was purchased, how much it was purchased for, locating receipts or proof of the purchases, etc. What some quick-thinking residents did prior to evacuating was that they took their phone and quickly took a video walking through their entire house, just in case they needed to complete such an inventory. Unfortunately, this was not the case in most loss situations. After the homeowner completes the schedule, then the insurance provider will begin to go through the list locating a replacement cost as well as removing an amount for depreciation, and ultimately coming to a settlement amount.

Contents insurance is usually sold alongside home insurance, but it can also be purchased as a stand-alone policy, especially for those who are renting rather than owning their home.

Additional Living Expenses

Additional living expenses (ALE) refers to home owner or tenant insurance policy's that covers the additional costs of living incurred by the policyholder should they be temporarily displaced from their place of residence. Such coverage usually amounts to about 10 to 20 percent of the insurance that covers the dwelling.³¹ Within my own insurance policy, the rate is 20% of the reconstructive value that was pre-determined by the agreed upon policy.

As discussed in the evacuation portion, ALE can cover things like the increase in a monthly food bill due to having to eat out at restaurants or even the loss of income that might be incurred if the insured person were renting out part of their dwelling to a tenant. Essentially, the insurance is intended to cover the insured person for the extra expenses he or she may incur due to being temporarily displaced from their home while the rebuilding is occurring. Some of the other items provided for under ALE coverage may include:³²

- Costs of doing laundry but only if you require laundry services because you don't have access to a washer and dryer at your temporary home.
- Furniture rental costs to rent special items you are usually accustomed to. Keep in mind that purchased furniture will fall under the contents insurance.
- > Storage costs for contents under special circumstances
- ➤ Moving or displacement costs

32 (Investopedia, 2017)

³¹ (Investopedia, 2017)

> Pet boarding

Although the above costs may be covered by ALE, there will always be an assessment on how claimed costs compare to the normal costs of a policyholder's lifestyle. This is because ALE is meant to cover the difference between what you would have normally paid and what you now must pay, due to the fact you're not living at your home.

Loss of Fair Rental Value

As previously discussed in the Mass Evacuation section, if the homeowner had properly declared and insured the rental portion and income at the onset of the policy, then the loss of fair rental value would apply during the rebuild period. Amounts of coverage, limits, and timelines would all be determined and agreed upon at the onset of the insurance policy. The following is an endorsement within a home policy regarding the loss of fair rental value,

"We insure the loss of fair rental value you incur:

(a) When all or part of the dwelling or its detached private structures rented to others or held for rental by you is made unfit for occupancy as a result of loss or damage caused to your insured property by an insured occurrence. Payment will be made solely for the reasonable time required to repair or rebuild the damaged building."³³

³³ (State Farm Insurance, 2018)

Other Rebuild Circumstances

Drop in Local Housing Market

Unfortunately, other economic issues were prevalent for the town of Fort McMurray when making the decision to rebuild their home or take a buy out option from their insurance provider. Data published at the end of 2015 showed that the average sale price on homes were down 20% over 2014 due to depressed oil prices in a town deeply dependent on the Alberta oil industry. 34 The slump in prices continued through 2016 and 2017, with West Texas International (WTI) oil prices plunging from \$107.95 per barrel on June 20, 2014 to a low of \$26.19 on February 11, 2017. 35 In normal circumstances this drop in oil wouldn't have a large effect, but in Fort McMurray this drop caused a substantial decrease in housing prices which limited many homeowners options. If they had purchased their home within a few years prior to the oil slump, there would be a good chance that the buy out option, coupled with the land sale, would not cover the mortgage still owing on the property. Now in 2018, many of the rebuild homes are reconstructed and on the market for sale, potentially furthering the the gap between supply and demand, to push the prices even lower.

Although the oil industry and economy had a large impact on the depressed housing market, the wildfire would have an impact as well. In the short term it caused a slight increase in sales since some home owners who lost their residence decided to buy another property, either through a buy out by the insurance provider or while the rebuild of their home occurred. A study was conducted of post wildfire loss of residential property value in Los Alamos County following the Cerro Grande Fire in May 2000. The final report shows that after the fire and rebuild, the

³⁴ (Sanderson, 2016)

³⁵ (Albrecht, 2017)

average sale price of single-family homes in Los Alamos County declined between 3 percent and 11 percent.³⁶

Firebreak and Waterbombing Homes

Other issues occurred when homes were damaged or destroyed from uninsured perils. These instances included Firebreak and Water Bombed homes that were damaged or destroyed to supress the wildfire. Waterbombing took place around the city of Fort McMurray in the first few weeks of May 2016. Alberta's Agriculture and Forestry Ministry deployed a fleet of 16 air tankers as well as helicopters equipped with buckets attempting to stop the fire's spread. They would fill up water from one of the rivers and lakes in the area and drop the water trying to extinguish the fire, and in some cases hitting structures with water along the way. Some residents found that roof trusses and beams were compromised, cracked foundation, bowed walls, uneven flooring, warped sheet rock, and even fractures that ran like spider webs along the ceiling.³⁷ Some insurance companies were quick to acknowledge the damage and others have still not found a resolution.

A firebreak, or fuel break, is gap in vegetation or combustible materials (such as houses and outbuildings) that acts as a barrier to slow or stop the progress of a wildfire.³⁸ Firebreak property is real or personal property that has suffered damage as a result of proactive measures taken to demolish the property for firebreak purposes in advance of any ignition of the property.³⁹ The properties that were damaged or destroyed to be used as a firebreak included homes, garages,

³⁶ (FEMA, 2018)

^{37 (}Klinkenberg, 2017)/

^{38 (}NOR-EX Engineering, 2016)

³⁹ (NOR-EX Engineering, 2016)

fences, and decks. For the Fort McMurray wildfire, the Provincial and Federal provisions of financial assistance for uninsurable loss and damage caused by emergencies and disasters reimbursed reasonable costs for firebreak properties. Residents were advised to either receive funding through the Municipality who would submit it to the Disaster Recovery Program, or for full house rebuilds, the homeowners' insurance company would complete their entire process and then receive compensation through the Disaster Recovery Program.

Inability to Rebuild

Another unfortunate effect of mass destruction of an area includes the potential for the land to be deemed unusable in that same location. The small community of Waterways had 90% of its structures destroyed. The devastation to this area was extended since the area was located on an active flood plane, and although the ability to rebuild was eventually approved, some homes were left unable to rebuild due to other environmental reasons. The location of Waterways is also on the edge and bottom of a large slope of land. Previously, this land was secured as it was covered in vegetation, but after the fire ravaged the trees and brush whose roots were used to stabilize the hill, it left the area vulnerable to slope movement and potential mud slides. The area underwent rigorous slope stability studies for the potential of the soil covered slopes ability to withstand and undergo any movement.⁴⁰ Unfortunately dozens of residents of Waterways were unable to rebuild due to safety concerns, and the homes were bought out by the local government at pre-fire values.

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⁴⁰ (NOR-EX Engineering, 2016)

Business Insurance and Business Interruption Policies

A business's ability to generate sales could be at risk at any moment. It is of the utmost importance to ensure that a business has adequate insurance coverage to mitigate any financial risk and potential losses. Business insurance provides coverage for the buildings, equipment, contents and inventory of a



business. Business interruption coverage, on the other hand, covers a business owner so that they can collect the income he or she would have expected to generate were it not for the unexpected event. Insurance policies must be reviewed in detail prior to an event occurring to determine how coverage would impact any given loss situation, including a natural disaster. Fort McMurray saw over 5,000 commercial insurance claims following the 2016 wildfire, most of the claims have been settled and only complicated ones remain.⁴¹

Business Insurance

Business insurance coverage protects businesses from losses due to events that may occur during the normal course of business. It is important for business owners to carefully consider and evaluate their business insurance needs, particularly small businesses as they may have more personal financial exposure. Unlike home insurance policies, business insurance may have multiple policy variations. However, virtually all business insurance policies cover damages due

⁴¹ (Thurton, 2018)

to wildfire, but should be reviewed for other potential natural disaster occurrences as extensions to standard policies may be required. Working with a reputable, experienced, and licensed insurance broker is particularly important if a business owner may not have experience or capability to effectively assess business risk and the various needs for coverage.

Property insurance for businesses are designed to protect the physical assets of a business, the property and buildings, against loss and/or damage in the event of destruction or damage due to events like fire and other perils.⁴²

Content insurance covers assets that are stored at the business premises such as equipment, signage, inventory and furniture in the event an insured peril. If a business is leasing their space then owner of the building would retain the property insurance policy, but the business is responsible for its own contents insurance. Along the same concept, if a business is run out of the owners' home, it will likely need separate contents insurance for the business assets. Along the same concept, if a business assets. Not all business property and content insurance cover all mass-destruction events like floods and earthquakes, so if the business area is at risk for these issues, a separate policy may be required and should be reviewed with the insurance agent.

There are two basic business insurance policy types;⁴⁴

- Named perils which covers only loss and/or damage caused by perils specifically listed in the policy. Loss and/or damage caused by any other peril is not covered.
- Comprehensive covers loss and/or damage caused by any peril, unless specifically excluded.

^{42 (}Government of Canada, 2018)

^{43 (}Government of Canada, 2018)

⁴⁴ (Insurance Bureau of Canada, 2017)

Business Interruption Coverage

Business Interruption coverage is an add-on to an existing business insurance policy. This type of insurance is especially important to businesses that require a physical location to do business, such as retail stores. Business interruption insurance compensates a business for its lost income during events that cause a disruption to the normal course of business.⁴⁵ In the event of a business temporarily needing to shut down, business interruption covers the continuing expenses or replaces lost profits. There are three types of business interruption policies;

- For Gross earnings policy, which generally pays only until property or damage is replaced or repaired, or inventory is replaced. This coverage is straight forward as it insures for the earnings lost as a result of an insurable claim. Earnings are calculated as revenue minus expenses that ceased while the business was not operating as a result of a direct damage loss. General inclusions in this coverage are profits, continuing or fixed expenses, management payroll, and ordinary payroll.⁴⁶
- Profits form policy, which is more extensive than gross earnings as it continues to pay until it resumes its normal, pre-interruption level (subject to policy limits). This type of insurance provides indemnification for the loss of profits and ongoing fixed expenses.
 Business interruption continues for a period of time, quite often up to a year after the doors re-open to assist the business in re-acquiring their clientele and profit levels. This type of coverage is commonly used by sales and highly competitive businesses where an extended downtime could cost market share and client loyalty.⁴⁷

⁴⁵ (Investopedia, 2018)

⁴⁶ (International Risk Management Institute, Inc, 2017)

⁴⁷ (Insurance Help Canada, 2011)

Extra expense policy is designed for businesses that can remain operational during periods affected by loss and/or damage. This is coverage over and above the cost of doing business and is used to quickly get a business up and running again.⁴⁸

Business interruption policies are not standardized and include many variants, but most contain language indicating that the insurer will pay for the actual loss of "business income" due to the "necessary suspension" of operations during "the period of restoration." Several concepts and nuances come into play, including:

- The physical damage requirement: The usual pre-requisite to coverage is proof that an insured premise sustained physical damage covered under the policy (such as fire, heat, flooding or other damage from firefighting efforts) causing an interruption and ultimately resulting in a loss of business income. Smoke damages would likely qualify as physical damage caused by an insured peril. Most policies would, however, require proof that the presence of ash and smoke resulted in a business interruption that caused a loss of income.
- The period of restoration: Once business interruption policy coverage is commenced, a significant issue becomes determining the period of indemnity or restoration. Most policies will pay business income loss through to the point that the business is restored from a physical damage point of view or when the coverage expires, usually 12 months from the beginning of the interruption. In some policies coverage is keyed to restoring prior cash flows.52

^{48 (}Insurance Help Canada, 2011)

⁴⁹ (Berry, 2002)

⁵⁰ (Sanderson, 2016)

⁵¹ (Sanderson, 2016)

⁵² (Sanderson, 2016)

The duty to mitigate losses: Most policies offering business interruption require the insured to take reasonable steps to mitigate the loss of business income. In most policies, the income less any extra expense that could have been derived from reasonable mitigation is deducted from the amount payable, even if the mitigation did not occur. 53

Each policy will outline the requirements for mitigating losses, but for the most part will cover the additional expenses of carrying on business at another location and bringing in business income in the interim.

Limited Indemnity vs Extended Indemnity

The indemnity period is the time covered for a loss of business. There are two basic forms of business interruption indemnities:⁵⁴

- ➤ Limited (or earnings); This policy pays only until the damage is repaired or the property is replaced. As soon as the business resumes, the policy stops paying even if the business has not regained its previous level of earnings.
- Extended (or profits); This coverage continues to pay until a business resumes its normal, pre-interruption level subject to the maximum period of indemnity listed in the policy.

Business Civil Authority Coverage

A civil authority clause is a provision which outlines the application of income coverage for the loss of business income when a government entity denies access to a property that is covered by an insurance policy. One of the primary responsibilities of government is protecting individuals and businesses, especially from catastrophes, such as hurricanes, wildfires, or floods. A civil

⁵³ (Sanderson, 2016)

⁵⁴ (Insurance Bureau of Canada, 2017)

authority clause also protects an insured from damages caused by firefighters and police officers when dealing with a situation on a property.⁵⁵

Civil authority coverage differs from business interruption coverage, since the business lost income solely because access was denied due to a mandatory evacuation order. If a policy includes civil authority coverage, it will typically be offered if the insured proves:⁵⁶

- > The issuance of the order
- ➤ That the order prohibited access to the covered premises
- ➤ The action was the result of damage that occurred away from the covered premises; or, the action taken was in view of the risk that property away from the covered premises would be damaged
- That the risk of physical damage that generated the order would have been covered under the policy if that risk materialized at the covered premises
- > The order causes a business loss.

A business should review their policy details and wording as many discrepancies could exist. For example, some policies may state that the coverage applies only if the order is issued with respect to adjacent property or property within a certain geographical radius of an insured location.⁵⁷ Other policies may also state that the indemnity period begins 72 hours after the issuance of the order and extends for a period of weeks (usually three or four weeks) but seldom for a period beyond that.⁵⁸ Once the evacuation order is lifted, or limits are reached, the civil authority coverage will terminate or transfer to another form of insurance.

^{55 (}Investopedia, 2018)

⁵⁶ (Sanderson, 2016)

⁵⁷ (Sanderson, 2016)

⁵⁸ (Sanderson, 2016)

This can become an issue when the individual evacuation period extends past the removal of the evacuation order, when there are no smoke damages to be claimed since the loss wouldn't transfer to another form of the insurance policy.

Loss Calculations

The following is a framework by the Insurance Institute of Canada and are basic steps of determining the loss for either a gross earnings or profits form policy. Keep in mind that each business and subsequent policy would be unique⁵⁹;

➤ Calculate the insurable values using the profit and loss statement for the most recent financial year, adjusted to reflect the results that would have been obtained without the insured incident.

Insurable	e Values
Gross Earnings Policy	Profit Form Policy
Net sales and other earnings derived from operations less the cost of merchandise sold including packaging materials, materials and supplies consumed directly in supplying the service(s) of the insured, and services purchased from outsiders (not employees of the insured) for resale which do not continue under contract	Net income before taxes plus insured standing charges

➤ Calculate the rate of contribution based on the insurable values as a percentage of sales.

Contribu	tion Rate
Gross Earnings Policy	Profit Form Policy
Gross Earnings / Net Sales	Gross Profit / Net Sales (turnover)

⁵⁹ (Claims Canada, 2008)

➤ Calculate the rate of recovery by comparing the insurance in force with the minimum coverage required (determined by applying the specified coinsurance percentage to the insurable values).

Rate of 1	Recovery
Gross Earnings Policy	Profit Form Policy
Co-insurance percentage stated in	Co-insurance percentage contained in
declarations: 50 % or 80 %	Measure of Recovery clause: 100 %

➤ Calculate the sales loss that occurred during the indemnity period as a direct result of the damage. The sales loss is the difference between the projected sales and the actual sales.

Lost	Sales
Gross Earnings Policy	Profit Form Policy
Gross earnings indemnity period: the	Profits indemnity period: the period in
length of time required to rebuild, repair,	which operations are affected as a result
or replace damaged property	of the damage (maximum of 12 months)

> Calculate the lost contribution by applying the rate of contribution to the sales loss.

Lost Cor	ntribution
Gross Earnings Policy	Profit Form Policy
Projected net sales (absent the damage)	Projected turnover (absent the damage)
less actual net sales = reduction in net	less actual turnover = reduction in
sales	turnover
Dadystian in not sales y note of aness	Reduction in turnover x rate of gross
Reduction in net sales x rate of gross	profit = loss of gross profit due to loss of
earnings = loss of gross earnings	turnover

- ➤ Calculate the increased cost of working (Profits form) or the additional expenses necessarily incurred to mitigate the sales loss (Gross Earnings form). Compare these expenses to the avoided loss by applying the rate of contribution to the avoided sales loss (economic test*).
- ➤ Deduct the savings in insured standing charges or non-continuing expenses.
- ➤ Calculate the loss related to ordinary payroll if separate coverage applies.

- Apply the rate of recovery to losses where a coinsurance clause applies.
- ➤ Determine the amount recoverable subject to the policy limits and not more than the actual loss sustained. Consider any waiting periods and deductibles that may apply.

Contingent Business Interruption Coverage

Businesses outside of the evacuation area may be affected by the evacuation as well. A business interruption policy would apply if a business experiences a reduction in customers related to the evacuation and it results in reduced profits, subject to the terms of the policy. Contingent business interruption insurance, also known as dependent business coverage, is specifically designed to protect policyholders against economic loss caused by damage to property owned by others, including upstream suppliers and downstream customers. 60 The contingent property may be specifically named, or a blanket coverage to all customers and suppliers. Companies purchase this type of insurance as an extension to their standard property insurance. Coverage is usually triggered by physical damage to customers' or suppliers' property, or to property which the insured company depends on to attract its customers. This could also extend to a customer or supplier shutdown due to an evacuation order. The type of physical damage or shutdown must be the same as what is insured under the businesses own policy that outlines various economic losses. Fort McMurray disrupted the supply chain for a great number of businesses across the province, country, even globally. For example, a direct supplier that is located in Edmonton, which has a significant portion of its revenue generated through supplying parts to the oil and gas industry in and around Fort McMurray. The shut down of various oil sites, and the inability to

⁶⁰ (Levin, 2013)

haul its loads through the town during the evacuation, caused a significant loss in earnings for the company.

There are four situations in which this coverage is widely used⁶¹:

- ➤ When the insured depends on a single supplier or a few suppliers for materials.
- ➤ When the insured depends on one or a few manufacturers or suppliers for most of its merchandise.
- ➤ When the insured depends on one or a few recipient businesses to purchase the bulk of the insured's products.
- ➤ When the insured counts on a neighboring business to help attract customers, known as a leader property.

Residual Effects on a Business Following a Natural Disaster

Business Fails Following a Disaster

Although a business may have some form of Business Insurance or Business Interruption coverage it may not save the business. The Insurance Bureau of Canada reports the following statistics;

After a significant natural disaster in the United States; ⁶²

- ➤ 40% of local businesses do not reopen,
- ➤ 25% fail after one year, and
- > 90% fail within two years.

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⁶¹ (Torpey, 2003)

⁶² (Insurance Bureau of Canada, 2017)

In Canada, following the 2013 southern Alberta flooding⁶³;

- ➤ 43% of small- and medium-sized businesses did not reopen.
- ➤ Of the businesses that did reopen, 29% failed within two years.

Loss of Market Share

After a disaster can hit an area, it can be difficult for businesses to recover to pre-disaster levels. For small businesses in Fort McMurray and other areas effected by a natural disaster, the chance of failing is even greater. This is because the impact is typically two-fold; direct physical damage and the loss of customers who are also affected by the event. Although insurance providers may accommodate for some loss in profits due to the event, it will have time limits assigned, as well as other indemnities.

The first component of the loss of market share would be the shortfall of customers once the business has returned to pre-disaster levels. Normally, the base valuation for a company's earnings would be the prior year. For example, during December 2015 a retail business earned \$100,000 in sales. It took this business 6 months to rebuild and are considered to be at pre-disaster levels. During the months of December 2017 and December 2018, the business earned \$65,000 and \$70,000 in sales, respectively. Some businesses may suggest that the losses of \$35,000 and \$30,000 are insurable losses due to the wildfire, however, these losses may be the 'new norm' for this business environment. Whether or not the loss in market share is insured will result from the wording of each individual policy. Insurers may provide coverage until the business is in the position it was in prior to the event but will not extend loss coverage

⁶³ (Insurance Bureau of Canada, 2017)

⁶⁴ (Simpson, 2017)

indefinitely. Other factors like decreased consumer spending patterns following a disaster, or an actual loss of residents due to them not returning to the area, may change the local economy as a whole.

Another large impact to a company is the consequences of typical or systematic business and economic cycles, and that effect on the market share for the business. Fort McMurray's economy has been quickly declining since 2014 and although oil prices began to slowly recover in the later end of 2017, it is still not at pre-2014 values; with current May 2018 values hovering around \$65 per barrel, a large drop from the peak of \$107 per barrel in 2014. Investment in new oil sands projects fell from \$30 billion in 2014 to just \$10 billion in 2017.⁶⁵ This drop in economic activity directly affects businesses in and around Fort McMurray or other businesses claiming contingent losses resulting from the wildfire. This is an important factor when analysing the loss in market share of a business, as this has no relation to the wildfire but would adversely affect businesses within the Regional Municipality of Wood Buffalo and the oils sands industry. It is very common to use the prior years figures to determine lost values, which is relevant in static industries. However, in Fort McMurray the effects of the drop in oil prices on the business would also need to be included.

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^{65 (}Cunningham, 2018)

Macro Loss Quantification

The financial extent of a natural disaster does not end at insured individuals, businesses, or government, and is the aspect that makes it difficult to quantify the actual loss incurred. Tens of thousands of businesses and individuals donated their time and/or finances towards helping those in need. The various levels of government assistance included the Provincial Disaster Recovery Program and the Federal Disaster Financial Assistance Arrangement. The Red Cross, which was the main hub for donations world-wide to assist in the needs of those affected. Finally, the financial impact of increased insurance premiums that would later be felt by all of Canada.

It is nearly impossible to put an exact dollar figure to quantify the full extent of what this natural disaster cost. Many relief areas were philanthropic in nature and very substantial. Individuals donated clothing, food, and supplies at evacuation centers across Alberta. Thousands of businesses across Canada stepped up and donated labour, supplies, shelter, even entertainment for evacuees just so they could have a small moment of normalcy. Just one example of a business who went over and above was West Jet, who flew tens of thousands of residents and workers to safety when they were trapped North of Fort McMurray with no way to escape, free of charge. Then for Christmas 2016, the first Christmas for many after losing their homes and possessions, West Jet organized a Christmas dinner with 48 West Jet volunteers, a personal show by Johnny Reid, and topped it off by gifting each of the 348 families in attendance, 826 individuals that lost their home, a free family trip anywhere, anytime. 66

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⁶⁶ (West Jet, 2016)

Disaster Recovery Program and Disaster Financial Assistance Arrangements

The Disaster Recovery Program (DRP) is a Provincial provision of financial assistance for uninsurable loss and damage caused by emergencies and disasters.⁶⁷ The Disaster Financial Assistance Arrangements (DFAA) is a federal-level arrangement that prescribes procedures that must be followed for the cost-sharing of provincial DRPs.

The Federal and Provincial Governments will fund a significant portion of the recovery from a Natural Disaster through the federal DFAA and provincial DRP programs. The estimated combined funding from these programs towards Fort McMurray is \$615 million. The exact breakdown between response efforts already completed and recovery efforts yet to occur will take time to resolve, although preliminary estimates indicate that \$175 million was used in the immediate response to the wildfire.



The Canadian Red Cross

The Canadian Red Cross' record for donations was set with more than one million Canadians donating more than \$191 million to help the residents of the region. Through matching contributions, the provincial government added \$30 million and the

federal government added another \$104 million to make the total funding available from the Red Cross \$325 million for response and recovery.⁶⁸ As of March 31, 2018, 89.5% of donated funds

⁶⁷ (Government of Alberta, Municipal Affairs, 2017)

⁶⁸ (The Canadian Red Cross, 2018)

had been spent or committed totalling 291 million.⁶⁹ The following is a breakdown from the 2-year donor report of how that money has been spent to help the recovery efforts.

- ➤ 213 Million to assist individual and families
- ➤ 40 Million to Community Groups
- ➤ 29 Million to Eligible Small Businesses
- ➤ 2.8 Million to Future Disaster Planning and Preparation
- ➤ 6.2 Million to Fundraising Costs

Out of the 65,000 families that registered with the Red Cross, 1,500 are still in need of assistance from the red cross.⁷⁰

Increase in Insurance Premiums

Each insurance provider will vary in direct increased premiums to the individual and business following the claims made after the wildfire. What is not as obvious is the increase that may be felt province wide, or Canada wide, following this natural disaster.

The higher frequency of billion-dollar-plus natural catastrophe events in Canada contributes to the global reinsurance community viewing the country differently and reinsurers pricing will need to change to reflect increased financial risk⁷¹. Reinsurers are the companies that back the risk of insurance companies. When large scale disasters take place and many claims are processed, these reinsurers will raise their rates, and that almost guarantees that the various insurers will pass on that increase to their consumers.

⁶⁹ (The Canadian Red Cross, 2018)

⁷⁰ (The Canadian Red Cross, 2018)

⁷¹ (Stelmakowich, 2016)

Economic Impacts

The Conference Board of Canada released a briefing that assessed the impact of the Fort McMurray wildfires on the economies of Alberta and Canada. The briefing estimated that the impact to overall GDP in Alberta would be slightly negative for 2016, while at a national level, the impacts will hardly be noticeable.⁷²

The shutdown of activity in Fort McMurray and in the oil sands, on the other hand, had a major impact on the local economy in the short term. Many families lost their jobs, businesses were shut down, and re-entry to the area was staggered with many residents choosing not to return. However, at the provincial level, much of the economic activity lost in the city of Fort McMurray was accrued elsewhere. Families that had temporarily and in many cases permanently moved to other areas, mostly within Alberta, needed to spend money on food, accommodations and other services. Each household received emergency funding from the Red Cross, while the Alberta government also disbursed \$1,250 per adult and \$500 per dependent to evacuated households. These funds, totalling around \$160 million, was quickly spent to meet the immediate needs of each evacuated household. These efforts helped to bolster real economic activity in the province, and Canada. 73

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^{72 (}Conference Board of Canada, 2016)

⁷³ (Conference Board of Canada, 2016)

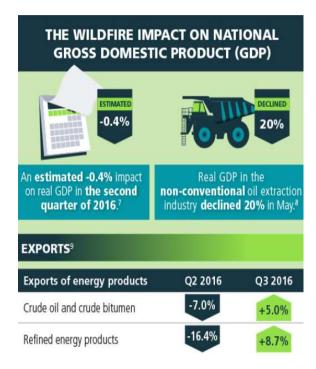
- ➤ The impact of the Fort McMurray

 Wildfires to Alberta's overall GDP was

 slightly negative for 2016. Nationally, the

 economic impact was minimal.⁷⁴
- Lost oil production will average about

 1.2 million barrels per day for 14 days,
 translating to roughly \$985 million in lost
 real GDP—or 0.33 per cent out of
 Alberta's Annual GDP in 2016 and only
 0.06 per cent out of Canada's GDP.⁷⁵



The rebuilding effort is considered a mitigating factor since it is estimated to add roughly \$1.3 billion in real GDP to Alberta's economy in 2017—contributing 0.4 per cent to overall growth.⁷⁶

In the short term, therefore, natural disasters have a negative impact on output, income, and employment. However, recovery spending may lead to higher output and employment after a period that the rebuild begins. Even this positive effect, however, is somewhat of an illusion because GDP typically does not account for all the economic losses from the disaster, notably loss of capital.

^{74 (}Conference Board of Canada, 2016)

⁷⁵ (Conference Board of Canada, 2016)

⁷⁶ (Conference Board of Canada, 2016)

Lessons learned

- 1. Insurance coverage levels, lapsing, and uninsured. It is important to refer to the policy to confirm the coverage before an incident is to occur. Many home owners, renters, businesses, and even government, had incidences where the wildfire left them either under insured or having no insurance at all. Insurance must be in place from the date of possession, with auto-renewals set up. Some natural disasters, such as earthquakes or floods may not be included in a standard insurance policy but could be purchased as an add-on to an existing policy. Of those who were under insured, the majority did in fact think that they had enough coverage but did not take the time to review the policies, coverage, and limits within them. Insurers must also recognize that although items may be covered, they may not be reimbursed 100% of the items value.
- 2. Representation of the true value of a property and its contents. It may be very tempting to under-value certain items to avoid paying higher insurance premiums, however, this could be putting yourself at risk. When creating an insurance policy, insurance advisors rely on the homeowners to provide complete details of their property and contents. If a homeowner misrepresents materials and values than this may leave them without sufficient protection, and underinsured, in the event of a claim. This was especially prevalent in the loss of fair rental value for those not declaring rental income to their insurance provider.
- 3. Guaranteed Replacement Cost coverage on your home is very important. It ensures it will be rebuilt, even if the cost exceeds your policy limit. Many underinsured homeowners found that they could not rebuild their home within their limits due to

- various reasons, this becomes even more apparent in more remote areas that can be subject to increases when demand spikes.
- 4. Establishing regular communication with an insurance representative prior to an event and an insurance adjuster following an event. Prior to an event occurring, it is very important to ensure that policies are updated constantly with any new information, and that the policies are renewed and/or have not lapsed. Update it regularly and include everything, especially if you've done renovations or made additions to your home. Changes can happen that can alter the needs of the insurer, the premiums required to pay, or possibly even eligibility. It is also equally important to be in regular contact with an insurance adjuster following an event and having them involved from the very first day.
- 5. Keep a record and document all property items before an event occurs. Remembering all the items after a home loss is impossible. Keep the bills, receipts, warranties and instruction manuals for the more valuable possessions as these can potentially serve as proof of ownership. The insured can store their records and receipts in a safe place, such as a safety deposit box or a secure online option. A new trend is to use a smart phone and take photos or videos of all the items, and receipts, on the insured property. It could be as simple as opening closet doors and snapping a picture or walking through a garage videoing the contents inside. Smart technology can be backed up with cloud computing, so having pictures or scanned documents could even save the need to keep receipts in a safety deposit box. The residents who had completed periodic inventory of contents or took a quick inventory when they were evacuating from their home, had their content list at the touch of their finger tips. For

others it took months to remember and document all the contents of their home, with insurance adjusters depreciating it based on estimations, or wanting proof that items existed or were in the home. This is also very important to do when re-entering the home for the first time after the damage occurred.

- 6. The Insurance Act sets out a two-year deadline for property claims to be settled ⁷⁷, therefore, most insurance policies have a 2-year settlement limitation. As of May 2018, 900 residential claims remained unresolved and the 2-year deadline was extended another 12 months for this event. ⁷⁸ Although this one event received an extended 12 months, this may not be the case in all natural disaster occurrences so timing is very important.
- 7. Research the history of the insurance provider being chosen. It became very apparent through the use of social media which insurance companies came into Fort McMurray and worked very hard to make it a less painful process for evacuation claims, minor home cleanings, full smoke damage claims, or the full rebuild of a home. Many individuals will choose their home insurance provider based upon the lower premiums that they have to pay, and it was very clear that some companies took a different stance than others. A minor increase in premiums between providers could be the difference between a smooth claims process or not.
- 8. If a disagreement between the insured and the insurer occurs, make sure to get a second opinion. Many of the disagreements occurred between the timing and valuation of damages or destroyed property and contents. An insured is entitled to have a 3rd party come in to review, this may come at a cost to the insured, although it

^{77 (}Government of Alberta, 2018)

⁷⁸ (Insurance Bureau of Canada, 2017)

- may prove to be invaluable in the future. If a disagreement persists there are many avenues an insured could take to try to gain a mutual agreement. If an agreement cannot be reached, the insurer should obtain advice on their legal options.
- 9. Loss of market share for a business following the disaster may extend long term and become the new norm. A business may be brought to its pre-disaster state by the insurer, and the insurance policy has done everything it was meant to do. However, the state of the local economy may have changed following the disaster. Cash flows may never return to pre-wildfire levels, as the population may not return to its pre-wildfire levels and the current downturn in the oil industry, or other economic factors, may deepen.⁷⁹ Whether or not the loss in market share is insured will result from the wording of each individual policy.
- 10. Financial impacts on psycho-social and mental health. The amount of strain and hardship a natural disaster can have on an individual, family, or business can become very overwhelming. Do not underestimate the value of a solid insurance policy or insurance provider when it comes to mental health following a natural disaster. A natural disaster on its own can be traumatizing, having adequate insurance can ensure that the trauma does not compound.

⁷⁹ (Sanderson, 2016)

Conclusion

It was only after the smoke cleared that the full extent of the devastation could be comprehended. The loss of property and livelihoods has surpassed all previous disasters in Canadian history and the effects of this fire have reached every corner of the Regional Municipality of Wood Buffalo. The Canadian landscape and change in global warming patterns have caused all Canadians to be at a greater risk of loss due to a Natural Disaster. It is of the utmost importance to ensure that adequate insurance coverage is obtained and reviewed prior to an event occurring. If there is one lesson to be learned from the Fort McMurray Wildfire, is that natural disasters can and do happen in Canada. They have deeper financial impacts than a single insurable event, such as a stand-alone structure fire. Every Canadian must ensure that the policy coverage they have is enough to cover them for when it is truly needed the most.

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^{80 (}NOR-EX Engineering, 2016)

^{81 (}NOR-EX Engineering, 2016)

Appendix A: Cost Estimate for the Smith Family Home

"Construction Company	"	"The Sn	nith's"
		Fort McMurray, A	В
		1550 sq ft	
HOME ESTIMATE SHEET			
DISICIPLINE	PRICE	GST	TPRICE
FOUNDATION			
EXCAVATION/BACKFILL/GRADING	\$6,000.00	\$300.00	\$6,300.00
BASEMENT CONCRETE (Material)	\$28,000.00	\$1,400.00	\$29,400.00
BASEMENT LABOR (Cribbing)	\$7,930.00	\$396.50	\$8,326.50
DAMPROOFING & WEEPING TILE	\$3,600.00		\$3,780.00
BASEMENT SAND (Material and Labour)	\$2,500.00	\$180.00	\$2,625.00
GARAGE SAND (Material and Labour)	\$2,500.00	\$0.00	\$2,625.00
DRIVEWAY SAND (Material and Labour)	\$0.00	\$0.00	\$0.00
WALKWAY SAND (Material and Labour)	\$350.00	\$17.50	\$367.50
CONCRETE PADS LABOR	\$350.00	φ17.50	φ307.3U
Basement	¢1 652 00	\$82.65	\$1,735.65
	\$1,653.00 \$2,500.00	\$125.00	\$2,625.00
Garage Driveway/Walkway	\$6,000.00	\$300.00	\$6,300.00
PUMPER TRUCK	\$1,200.00	\$60.00	\$1,260.00
WINDOW WELLS (Installation)	\$600.00	\$30.00	\$630.00
PARGING	·	-	
COMPACTION	\$800.00 \$600.00	\$40.00 \$30.00	\$840.00 \$630.00
BRACKET	\$200.00	\$10.00	\$210.00
POWER TRENCH	\$600.00	\$30.00	\$630.00
CIDITCHIDE			
STRUCTURE			
MATERIAL PACKAGE	***	0004.50	* 4 4 6 7 4 7 6
Windows & Doors	\$13,690.00	\$684.50	\$14,374.50
Framing	\$21,659.00	\$1,082.95	\$22,741.95
Trusses	\$12,600.00	\$630.00	\$13,230.00
FRAMING	\$22,550.00	\$1,127.50	\$23,677.50
SHINGLING	\$7,963.00	\$398.15	\$8,361.15
SIDING	\$17,836.00	\$891.80	\$18,727.80
EAVESTROUGHING	\$1,690.00	\$84.50	\$1,774.50
BRICK	\$6,830.00	\$341.50	\$7,171.50
STUCCO	\$0.00		\$0.00
DECKS	\$2,500.00	\$125.00	\$2,625.00
DECK PILES	\$1,200.00	\$60.00	\$1,260.00
GARAGE DOOR	\$2,560.00	\$128.00	\$2,688.00
DRYWALL AND INSULATION	\$33,597.00	\$1,679.85	\$35,276.85
MECHANICAL & ELECTRICAL			
HEATING (inc fireplace)	\$23,560.00	\$1,178.00	\$24,738.00
PLUMBING	\$48,569.00	\$2,428.45	\$50,997.45
AIRCONDITIONING	\$5,000.00	\$250.00	\$5,250.00
ELECTRICAL FIXTURES	\$3,800.00		\$3,990.00
ELECTRICAL LABOR (inc material)	\$18,960.00	\$948.00	\$19,908.00

FINISHING			
KITCHEN and BATHROOM CABINETS	\$28,612.00	\$1,430.60	\$30,042.60
FLOORING	\$26,000.00	\$1,300.00	\$27,300.00
SUBFLOOR	\$1,500.00	\$75.00	\$1,575.00
FINISHING	\$13,690.00	\$684.50	\$14,374.50
PAINTING	\$12,598.00	\$629.90	\$13,227.90
STAIN/LAQ	\$3,500.00	\$175.00	\$3,675.00
MANTLE	\$500.00	\$25.00	\$525.00
RAILING	\$5,500.00	\$275.00	\$5,775.00
IVAILING	ψ3,300.00	Ψ213.00	ψ3,113.00
ADMINSTRATIVE			
LAND	\$0.00	\$0.00	\$0.00
OFFSITE LEVY	\$0.00	\$0.00	\$0.00
LAWYER	\$1,000.00	\$50.00	\$1,050.00
PERMITS			
Building Permit	\$200.00	\$10.00	\$210.00
Development Permit	\$2,500.00	\$125.00	\$2,625.00
ARCHECTICIAL FEE	\$0.00	\$0.00	\$0.00
CGL INSURANCE Construction Insurance	\$2,356.00	\$117.80	\$2,473.80
CGL INSURANCE General Liability	\$0.00	\$0.00	\$0.00
PROGRESSIVE Warrenty	\$1,200.00	\$60.00	\$1,260.00
APPRAISAL	\$737.62	\$36.88	\$774.50
REAL ESTATE FEES	\$0.00	\$0.00	\$0.00
FINANCING	\$0.00	\$0.00	\$0.00
HOUSEPLANS	\$0.00	\$0.00	\$0.00
MISCELLANEOUS			
SURVEYOR	\$3,600.00	\$180.00	\$3,780.00
LANDSCAPING	\$8,500.00	\$425.00	\$8,925.00
CLEANING	\$1,263.00	\$63.15	\$1,326.15
ELECTRICAL	\$1,500.00	\$75.00	\$1,575.00
GAS	\$2,000.00	\$100.00	\$2,100.00
SOIL TEST	\$900.00	\$45.00	\$945.00
MIRRORS/SHOWER DOORS	\$1,820.00	\$91.00	\$1,911.00
MISCELLANEOUS (Rentals)	\$500.00	\$25.00	\$525.00
GARBAGE BIN	\$1,000.00	\$50.00	\$1,050.00
CENTRAL VAC ROUGHIN	\$2,100.00	\$105.00	\$2,205.00
MISCELLANEOUS	\$2,000.00	\$100.00	\$2,100.00
APPLIANCES	\$2,000.00	\$100.00	\$2,100.00
TAX PAYABLE	\$0.00	\$0.00	\$0.00
SUBCONTRACTOR (Allen)	\$2,000.00	\$100.00	\$2,100.00
DESIGN	\$2,000.00	\$100.00	\$2,100.00
BEGGN	Ψ2,000.00	Ψ100.00	Ψ2,100.00
CONTINGENCY	\$0.00	\$0.00	\$0.00
PROJECT MANAGEMENT FEE	\$0.00	\$0.00	\$0.00
Subtotal	¢/30 472 62	¢21 Q00 60	\$460 000 00
Subtotal	\$438,173.62	ψ ∠ 1,3U0.00	\$460,082.30
10% Profit	\$43,817.36	\$2,190.87	\$46,008.23
10% Overhead	\$43,817.36	\$2,190.87	\$46,008.23
Total	\$525,808.34	\$26,290.42	\$552,098.76

Appendix B: Total Home Building Costs

Item	In Quote or Added	Price Increase
House 1499 sqft	In Quote	\$445,168.00
Air Conditioning	In Quote	\$5,000.00
Oversized Deck	In Quote	\$5,308.00
Additional 89 Sqft	Added	\$13,350.00
Basement	In Quote	\$35,000.00
Development	200-200-200	
Legal Suite	Added	\$10,000.00
In Floor Heat in	Added	\$15,000.00
Basement	00	A 500
Hot Water on Demand	Added	\$3,500.00
Garage Heater	Added	\$3,500.00
Two Custom Tiled	Added	\$12,000.00
Showers	200000	4 194 950 5 10 10 10
Custom Fireplace	Added	\$1,500.00
Shelving	C	
Additional 4 Potlights	Added	\$500.00
Upgraded Kitchen	Added	\$184.00
Faucet		
Central Vac	Added	\$1,800.00
Kitchen Stain Upgrade	Added	\$1090.35
Laundry Cabinets	Added	\$2,600.00
Dimmer	Added	\$30.00
Sound Proofing	Added	\$2,400.00
Upgraded LVP on Stairs	Added	\$2,200.00
Total	**************************************	\$560,130.35
Total GST	St.	\$28,006.52
Total		\$588,136.87
	A section in the section is a section in the sectio	

Total Build Cost: \$588,136.87

Credit from oversized deck: \$2,000.00

Total: \$585,136.87

Insurance Paid: \$515,000.00

Remaining Owing: \$71,136.87

Kirk Write Off: \$53346.55

Total extras owing: \$17,790.32

Appendix C: Schedule of Loss

_	Insured						Schec	Schedule of Loss	Loss					
_	File No.		Policy No.											
	ART I	PART I - To be completed by the insured	nred				PARTI	I – To be c	ompleted b	PART II – To be completed by the insurer				
-	hew •	Description of Property	Location of purchase or	Document(s) enclosed	Date of Purchase	Price Paid	Replacement	l '	Depreciation	Actual	Cash	Settlement	Remplacement Supplier's Name	Settlement
	+		origin					*	Amount				=	Date
	+							+						T
	_							_						
ш														
ш														
ш														
ш	Н													
•			:			Totals:								
Ξ	Jour a	Yease complete Part I of the Schedule of Loss, including: your account of the event; advantaged properties described to the second of the secon	s, including:											
•		a completed and signed copy of the Police Department report form.	Department report form					Date		l		Signatur	Signature of Insured	
								Date		I		Signatur	Signature of Insured	

Appendix D: Property Insurance Policy

Your Property Insurance^{MC}

Location 01 Homeowners 943 119 (2016-09)

Page 1 of 5

Property Coverages

A Guide to your Policy

This insurance covers your dwelling building, detached private structures and personal property. It also applies to any additional living expense and/or fair rental value loss incurred by you if an insured peril makes your dwelling or part of the dwelling rented to others unfit for occupancy.

Agreement

We provide you, as a homeowner, with coverage against various perils as described in this policy, in return for payment of the premium and subject to the terms and conditions set out in this policy.

Insurance cannot be a source of profit. It is designed only to indemnify you against actual losses incurred by you or for which you are liable.

Important

This policy contains various exclusions and limitations which restrict coverage. These have been clearly identified. Please read them carefully.

Glossary

"You" and "your" refer to the Insured. "We" and "us" refer to the Company providing this insurance.

Additional Living Expense means any necessary increase in living expenses, including moving expenses incurred by you, so that your household can maintain its normal standard of living.

Business means any continuous or regular pursuit undertaken for financial gain including a trade, profession or occupation.

Cash Card or Plastic Money means a card storing electronic cash and used as a method of payment, which at the time of the purchase transaction does not require any personal identification number (PIN), signature or authorization time.

Civil Authority means an authority as defined in any act or regulation.

 $\mbox{\sc Collection}$ means a group of related objects of the same type.

Data means information (including facts, concepts or execute statements) represented in any form whatsoever.

Data Problem means:

- erasure, destruction, corruption, misappropriation or misinterpretation of data;
- error in creating, amending, entering, deleting or using data;
- inability to receive, transmit or use data.

Detached Private Structures means structures or buildings separated from the dwelling by a clear space or connected to the dwelling by a fence, utility line or similar connection only.

Drawn Machinery means a vehicle without a load space that is used to carry only equipment or machinery which is permanently installed upon it.

Dwelling means the building described on the Coverage Summary page occupied by you as a private residence.

Fair Rental Value means the amount of rent you would have received, less any expenses that do not continue while that part of the dwelling or detached private structures rented or held for rental is unfit for occupancy.

Fungi includes, but is not limited to, any form or type of mould, yeast, mushroom or mildew whether or not allergenic, pathogenic or toxigenic, and any substance, vapour or gas produced by, emitted from or arising out of any fungi or spore(s) or resultant mycotoxins, allergens or pathogens.

Insured means the person(s) named as Insured on the Coverage Summary page and, while living in the same household, the following persons:

- his or her spouse;
- the relatives of either; and
- any person under 21 in their care.

Spouse means either of two persons of the same or opposite sex who are legally married to each other, who have entered into a legally recognized civil union or who have cohabited continuously for more than one year and have publicly represented themselves as spouses of each other.

Spouse status is lost where the marriage or civil union is legally annulled or dissolved, or where cohabiting spouses have been effectively separated for more than 3 months.

In addition, a **student** who is enrolled in and attends a school, college or university on a full time basis and who is either:

- a spouse: or
- a dependant of the Named Insured or of the spouse of the Named Insured for support and maintenance,

is also insured even if residing away from the principal residence.

Plumbing System means water supply, distribution and disposal piping on the premises, including appliances and equipment attached thereto, between their connection points to a public or private system.

Pollutant means any solid, liquid, gaseous or thermal irritant or contaminant, including fuel oil, vapour, soot, furnes, acids, alkalis, chemicals, pesticides, herbicides, waste and smoke, whether from agricultural smudging or industrial operations or any other source.

Premises means the land contained within the lot lines on which the dwelling is situated. Premises also includes a location where a student insured by this policy resides.

Residence Employee means a person employed by you to perform duties in connection with the maintenance or use of the premises. This includes persons who perform household or domestic services or duties of a similar nature for you. This does not include persons while performing duties in connection with your business.

Retention Tank or Holding Pond means a basin in which sudden influxes of surface or ground water runoff are held temporarily before being released gradually into the drainage system.

Spore(s) includes, but is not limited to, any reproductive particle or microscopic fragment produced by, emitted from or arising out of any fungi.

Terrorism means an ideologically motivated unlawful act or acts, including but not limited to the use of violence or force or threat of violence or force, committed by or on behalf of any group(s), organization(s) or government(s) for the purpose of influencing any government and/or instilling fear in the public or a section of the public.

Vacant refers to circumstances where, regardless of the presence of furnishings, all occupants have moved out of the dwelling with no intention to return to live there. A newly constructed dwelling is vacant after it is completed and before the occupants move in.

Underwritten by Certas Home and Auto Insurance Company

1 Coverages

Amount of Insurance

The blanket amount of insurance shown on the Coverage Summary page represents the total of the amounts of insurance for Coverage A (Dwelling Building), B (Detached Private Structures), C (Personal Property) and D (Additional Living Expense and Fair Rental Value).

1.1 Coverage A – Dwelling Building

We insure:

- · Your dwelling and attached structures;
- Indoor swimming pools, hot tubs, spas, saunas and their attached equipment on the premises;
- Permanently installed outdoor equipment on the premises, including outdoor antennae, fences, retaining walls and driveways;
- Temporary car shelters and other temporary structures, once installed on the premises;
- Appliances, furniture and equipment forming a permanent part of the building, including built-in ovens and dishwashers;
- Materials and supplies located on or adjacent to the premises intended for use in construction, alteration or repair of your dwelling or private structures on the premises;
- Building fixtures and fittings temporarily removed from the premises for repair or seasonal storage;
- All outdoor trees, shrubs, plants and lawns on your premises up to 2.5% of the blanket amount. We will not pay more than \$500 for any one tree, plant or shrub including debris removal expenses.

We insure these items against loss caused by fire, lightning, explosion, impact by aircraft, land vehicle, satellite or spacecraft, riot, vandalism, theft or attempted theft, subject to the conditions, limitations and exclusions of this policy.

1.2 Coverage B – Detached Private Structures

We insure detached private structures on your premises.

1.3 Coverage C – Personal Property (Contents)

We insure the following property subject to the exclusions or up to the limits stated in

the section entitled "Property Coverages-Addendum":

. Property on the Premises

We insure the following property while it is on your premises:

- Personal property you own, wear or use which is usual to the ownership or maintenance of a dwelling, including personal property of a student who is insured by this policy;
- Motorized wheelchairs, remote-control caddies, watercraft, drawn machinery, motorized lawn mowers, other gardening equipment and snow blowers;
- Motorized golf carts which are on your premises for repair or storage.

If you wish, but only while it is on that portion of your premises which you occupy, we will include uninsured personal property of others, except for:

- Roommates who are not named on the Coverage Summary page and who are not related to you;
- Roomers and boarders who are not related to you.

Property Away from the Premises

We insure:

- Your personal property, including personal property of a student who is insured by this policy, while it is temporarily away from your premises anywhere in the world;
- Motorized wheelchairs, remote-control caddies, watercraft, drawn machinery, motorized lawn mowers, other gardening equipment and snow blowers, while they are temporarily away from your premises anywhere in the world;
- Motorized golf carts while in use as such on a golf course or while at any other location for repair or storage anywhere in the world.

If you wish, we will include uninsured personal property belonging to others while it is in your possession away from your premises or belonging to a residence employee travelling for you.

We do not insure:

- Motorized vehicles, trailers and aircraft or their equipment (except for motorized vehicles described above). Equipment includes audio, visual, recording or transmitting equipment powered solely by the electrical system of a motorized vehicle or aircraft;
- Personal property normally kept at any other location you own.

1.4 Coverage D – Additional Living Expense and Fair Rental Value

Additional Living Expense. If an Insured Peril makes your dwelling unfit for occupancy, or you have to move out while repairs are being made, we insure any Additional Living Expense. Payment shall be for the reasonable time required to repair or rebuild your dwelling or, if you permanently relocate, the reasonable time required for your household to settle elsewhere.

Fair Rental Value. If an Insured Peril makes that part of the dwelling or detached private structures rented to others or held for rental by you unfit for occupancy, we insure its Fair Rental Value. Payment shall be for the reasonable time required to repair or replace that part of the dwelling or detached private structures rented or held for rental.

If a civil authority prohibits access to your premises as a direct result of damage to neighbouring premises by an Insured Peril, we insure any resulting Additional Living Expense and Fair Rental Value loss for a period not exceeding 14 days.

The periods of time stated above are not limited by the expiration of the policy.

1.5 Extensions of Coverage

The following extensions of coverage do not increase the amount of insurance in this policy and are subject to the conditions, limitations and exclusions of this policy.

Property Removed

If you must remove insured property from your premises to protect it from loss or damage following an insured loss, it is insured for 90 consecutive days or until your policy term ends, whichever occurs first.

Moving to Another Home

If you move and provided it is not insured under any other policy, we will insure your personal property:

- at your old principal residence until all property has been moved to your new principal residence described on the Coverage Summary page;
- while in transit within Canada to your new principal residence;
- at your new principal residence, purchased or rented by you in Canada. Coverage applies for 30 consecutive days commencing on the date you begin to move property there, but not beyond the date the policy expires or is terminated.

· Food in a Freezer or Refrigerator

We will pay for food contained in a freezer or refrigerator inside a building on the premises when loss is caused by mechanical breakdown of the unit or power interruption.

This amount includes reasonable expenses incurred to save and preserve the food from spoilage while your unit is being repaired or until electrical power is restored.

We will not pay for:

- loss caused by manually turning the power supply off on the premises;
- loss from natural spoilage;
- repair or replacement of the freezer or refrigerator unit.

Credit or Debit Cards, Forgery and Counterfeit Money

We will pay up to \$2,000 for:

- your legal obligation to pay because of the theft or unauthorized use by any person other than an Insured of credit or debit cards issued to you or registered in your name provided you have complied with all of the conditions under which the card was issued;
- your legal obligation to pay because of unauthorized transactions by any person other than an Insured, or electronic banking transactions, including over the Internet, provided you have complied with all of the access conditions for the transactions:
- loss caused by the theft of your automated teller card provided you have complied with all of the conditions under which the card was issued and have not revealed your Personal Identification Number to anyone nor written it on your card or any other document;
- loss to you caused by forgery or alteration of cheques, drafts or other negotiable instruments;
- loss by your acceptance in good faith of counterfeit Canadian or United States paper currency.

We will pay for losses which occur while this policy is in effect and which are not discovered up to 12 months after its cancellation or termination.

If a suit is brought against you, we will pay in addition to the amount stated above reasonable legal fees and court costs incurred for your defence, provided we have given prior consent to defend you in that suit.

• Change of Temperature

We insure your personal property damaged by change of temperature resulting from physical damage to your dwelling or equipment by an Insured Peril. This only applies to personal property kept in the dwelling.

· Lock Replacement or Rekeying

We will pay up to \$1,000 (with no deductible) for expenses incurred to rekey or to replace, whichever is less, the locks on any building on your premises, if your keys are lost or stolen.

This coverage also applies to the locks on your automobile, if it is insured with us and the keys have been lost or stolen at the same time as the keys to your principal residence.

Tear out

We will pay for expenses incurred to replace or repair any interior parts of the insured building that must be removed or torn apart before any repairs can be made to the system, equipment or appliance having caused insured water damage.

The following extensions of coverage are in addition to the amount of insurance in this policy and are subject to the conditions, limitations and exclusions of this policy.

• Debris Removal

We will pay the expenses incurred in the removal of the debris of insured property damaged as a result of an Insured Peril. When the amount payable for the property damaged or destroyed exceeds the applicable amount of insurance, we will pay up to an additional 5% of that coverage for debris removal expenses.

This extension does not apply to debris removal expenses incurred for outdoor trees, plants, shrubs or lawns and for which coverage is provided elsewhere in this policy.

• Fire Department Charges

We will reimburse you up to \$1,000 if you have an agreement with a fire department outside the municipality where your dwelling is located and that fire department charges for attending your dwelling because of an Insured Peril.

Lawyer's Fees (Notary's Fees in Quebec) or Surveyor's Fees

We will pay up to \$2,000 for lawyer's (or, in Quebec, notary's) fees or surveyor's fees necessarily incurred when an insured building must be completely rebuilt following a loss that we insure.

Contingent Liability from Enforcement of Building By-Laws

In the event of:

- (a) loss or damage to the dwelling building caused by an Insured Peril; and
- (b) a by-law, regulation, ordinance or law which regulates zoning or the demolition, repair or construction of a damaged dwelling building allows you to repair or reconstruct the building on the same site or an adjacent site,

we will pay up to 5% of the blanket amount of insurance shown on the Coverage Summary page for:

- expenses incurred to demolish and clear the site of any undamaged portion of the building;
- loss occasioned by the demolition of any undamaged portion of the building;
- any increase in the cost of repairing, replacing, constructing or reconstructing the building.

This extension of coverage is subject to the following conditions:

- (a) the building must be a total loss;
- (b) the expenses, loss or increase in costs must arise from the enforcement of the minimum requirements of such by-law, regulation, ordinance or law;
- (c) repair, replacement, construction or reconstruction must be effected within a reasonable time after the loss, on the same site or an adjacent site;
- (d) the building occupancy must be similar as prior to the loss.

Payment under this extension of coverage will be made on a Replacement Cost basis as described under the Basis of Settlement section in this policy, including the damaged portions of the building.

Inflation Protection

If there is a loss insured by this policy, we will automatically increase the amount of insurance shown on the Coverage Summary page for the Property Coverages of your policy by an amount which is solely attributable to the inflation increase since the inception date of this policy, the latest renewal or anniversary date or from the date of the most recent change to the amount of insurance shown on the Coverage Summary page, whichever is the latest 63 | Page

On renewal or anniversary date, we will automatically increase the amount of insurance shown on the Coverage Summary page for the Property Coverages of your policy by an amount which is solely attributable to the inflation increase since the inception date of this policy or the latest renewal or anniversary date.

2 Insured Perils

You are insured against **all risks** of direct physical loss or damage to the property described in Coverages A, B and C subject to the conditions, limitations and exclusions of this policy.

3 Common Exclusions

The following exclusions are additional to those contained elsewhere in this policy.

We do not insure:

- (1) loss or damage caused by invasion, war or civil war, insurrection, rebellion, revolution, military or usurped power or by operation of armed forces while engaged in hostilities, whether war be declared or not.
- (2) loss, damage or expense caused directly or indirectly, in whole or in part, by terrorism or by any activity or decision of a government agency or other entity to prevent, respond to or terminate terrorism regardless of any other cause or event (including loss or damage to insured property caused by fire or explosion) that contributes concurrently or in any sequence to the loss, damage or expense.
- (3) loss or damage caused directly or indirectly:
- by any nuclear incident as defined in the Nuclear Liability Act or any other nuclear liability act, law or statute, or any law amendatory thereof or nuclear explosion, except for ensuing loss or damage which results directly from fire, lightning or explosion of natural, coal or manufactured gas;
- by contamination by radioactive material.
- (4) loss or damage arising out of the actual or threatened discharge, dispersal, release or escape of pollutants.
- (5) loss or damage:
- occurring before, during or after flood waters reach the premises. "Flood" includes waves, tides, tidal waves and the rising or overflow of any stream of water or body of water, whether natural or man-made;
- caused by impact by water-borne objects.

- (6) loss or damage caused directly or indirectly by volcanic eruption, tidal wave, snowslide, earthquake, landslide or other earth movements, such as:
- movements caused by expansion, contraction or compression resulting from freezing and thawing of the ground;
- movements caused by bulging, buckling or cracking due to the exposure to cold or heat or the drying out or irrigation of the ground.

This exclusion does not apply to loss or damage resulting from fire or explosion of natural, coal or manufactured gas ensuing from snowslide, landslide, volcanic eruption or tidal wave.

(7) loss or damage to animals, birds or fish unless the loss or damage is caused by fire, lightning, explosion, smoke, falling object which strikes the exterior of a building, riot, vandalism, hail, windstorm or transportation.

The peril of transportation means loss or damage caused by collision, upset, overturn, derailment, stranding or sinking of any motorized vehicle or attached trailer, watercraft or aircraft in which the insured property is being carried. This would also apply to any conveyance of a common carrier.

- (8) loss or damage caused by wear and tear, deterioration, defect or mechanical, electrical or electronic breakdown or disturbance, rust or corrosion, dampness of atmosphere, extremes of temperature, wet or dry rot, fungi or spores, but resulting damage to other property caused by a peril not otherwise excluded is insured.
- **(9)** damage to property causing the loss including, but not limited to, cases where the loss results from the breakdown, inherent vice or nature of the property.
- (10) the cost of making good faulty material or workmanship.
- (11) settling, expansion, contraction, moving, bulging, buckling or cracking of any insured property, except resulting damage to building glass.
- (12) marring or scratching of any property <u>unless</u> caused by impact by land vehicle, aircraft, satellite or spacecraft, riot, vandalism, hail, windstorm, theft or attempted theft or transportation as defined in exclusion (7) above.
- (13) breakage of the following fragile or brittle articles: glassware, statuary, marbles, bric-a-brac, porcelains and earthenware, <u>unless</u> caused by impact by land vehicle, aircraft, satellite or spacecraft, riot, vandalism, hail, windstorm, theft or attempted theft or transportation as defined in exclusion (7) above.

- (14) mysterious disappearance.
- (15) sporting equipment where the loss or damage is due to its use.
- (16) samples, goods and other property at any fairground, exhibition or exposition for the purpose of exhibition or sale.
- (17) loss or damage caused by the weight of ice, snow or wet snow.
- (18) loss or damage:
- to outdoor radio, T.V. and communications antennae (including satellite receivers) and their attachments caused by windstorm, hail or collapse;
- to outdoor swimming pools, hot tubs, spas, saunas and their equipment, their specific fittings and decks or patios attached to the swimming pools, hot tubs, spas or saunas but detached from the building;
- caused by vermin, insects, rodents, raccoons or birds <u>except</u> loss or damage to building glass.
- (19) water damage:
- caused by continuous or repeated seepage, leakage, discharge or overflow of water;
- caused by the discharge, backing up, escape or overflow of water from a sewer, sump, septic tank, wastewater treatment system, retention tank, holding pond, subsoil drainage pipe, eavestrough, downspout or rainwater leader:
- caused, during the usual heating season, by freezing of any part of a plumbing, heating, sprinkler or air conditioning system, domestic appliance, aquarium, waterbed, swimming pool, hot tub, spa or sauna and their equipment, which is located within a building that is:
 - unheated;
 - heated and has been unoccupied for more than 7 consecutive days. <u>However</u> if you had a competent person enter your dwelling every 7 days to ensure that the heating was being maintained or if you had shut off the water supply and had drained all the pipes and appliances, you would still be insured.
 - Damage caused by freezing to any part of the systems or appliances listed above is also covered if you had taken one of the precautions mentioned above;
- caused by seepage or influx of surface or ground water derived from natural sources through basement walls, doors, windows or other openings therein, foundations, basement floors or sidewalks, <u>unless</u> concurrently and directly caused by a per 4ndt Pothegwise excluded;

- caused by the entrance or seepage of rain or snow through walls or roofs and doors, windows or other similar openings therein, unless through an aperture concurrently and directly caused by a peril not otherwise excluded.
- (20) loss or damage caused by theft or attempted theft:
- which happens at any other location which you own, rent or occupy except while you are temporarily living there or if the location is a student's residence;
- caused by any tenant or member of the tenant's household to property used by them;
- of property from a dwelling under construction or of property located on the site of such dwelling or of materials and supplies for use in the construction until the dwelling is completed and ready to be occupied;
- of property on the premises of a vacant dwelling, even if permission for vacancy has been given by us.
- (21) the following loss or damage if they occur while the building is under construction or vacant, even if permission for construction or vacancy has been given by us:
- glass breakage;
- loss or damage caused by vandalism;
- water damage.
- (22) loss or damage occurring after your dwelling has, to your knowledge, been vacant for more than 30 consecutive days, <u>unless</u> permission for vacancy has been given by us and then subject to all other exclusions of this policy.
- (23) buildings or structures occupied by the Insured or others and used in whole or in part for:
- business or farming purposes, unless declared on the Coverage Summary page;
- illegal or criminal activities, including the cultivation and manufacturing of marijuana or other illegal drugs or substances.
- (24) loss or damage caused directly or indirectly, proximately or remotely, arising in consequence of or contributed to by the enforcement of any by-law, regulation, ordinance or law regulating zoning or the demolition, repair or construction of buildings or structures, which by-law, regulation, ordinance or law makes it impossible to repair or reinstate the property as it was immediately prior to the loss, except as provided in the Extensions of Coverage.
- (25) loss or damage to property while being worked on or undergoing any process, whether or not it involves the application of heat, <u>but</u> resulting damage to other property caused by a peril not otherwise excluded is insured.

- (26) loss or damage to any property illegally acquired or kept, including property brought into Canada in contravention of the Customs Act.
- (27) loss or damage to any property lawfully seized or confiscated.
- (28) loss or damage resulting from any criminal act by an Insured.
- (29) loss or damage caused:
- to data
- directly or indirectly by data problem(s).
 However, if fire, explosion or smoke results from data problem(s), this exclusion does not apply to damage to insured property directly caused by such perils.

4. Basis of Settlement

We will pay for insured loss or damage up to your financial interest in the property, but not exceeding the applicable amount of insurance for any loss or damage arising out of one occurrence.

Any payments for loss or damage under this policy will not reduce the amount of insurance available for any subsequent occurrence under this policy.

If any property is subject to more than one limit, only the lowest limit will apply.

Under the Property Coverages section only the person(s) named on the Coverage Summary page may take legal action against us.

Deductible

We are responsible only for the amount by which the loss or damage caused by any of the Insured Perils exceeds the amount of the deductible shown on the Coverage Summary page in any one occurrence.

However, if the occurrence results in a total loss of all the property insured, we will waive this deductible when settling the loss under the applicable coverage.

4.1 Dwelling Building and Detached Private Structures

If you repair or replace the damaged or destroyed dwelling building or detached private structures, you may choose as the basis of loss settlement either (A) or (B):

(A) **The Actual Cash Value** of the damage at the date of the occurrence, but not exceeding the amount of insurance shown on the Coverage Summary page. The Actual Cash Value will take into account such things as the cost of replacement less any depreciation, and in determining depreciation we will consider the condition

immediately before the damage, the resale value and the normal life expectancy.

- (B) **The Replacement Cost**. This means the cost of repairs or replacement (whichever is less) without deduction for depreciation, subject to the amount of insurance shown on the Coverage Summary page. This option is subject to the following conditions:
- repair or replacement must be effected on the same location with materials of similar quality within a reasonable time after the loss or damage;
- the building occupancy must be the same as prior to the loss.

If you fail to comply with the conditions set out in (B) or if you decide not to repair or replace your damaged or destroyed building, settlement will be as in (A).

4.2 Personal Property

If you repair or replace the damaged, destroyed or stolen property, you may choose as the basis of loss settlement either (A) or (B) below subject to the applicable amount of insurance:

- (A) **The Actual Cash Value** of the damage at the date of the occurrence. The Actual Cash Value will take into account such things as the cost of replacement less any depreciation, and in determining depreciation we will consider the condition immediately before the damage, the resale value and the normal life expectancy.
- (B) **The Replacement Cost**. This means the cost, at the time of loss, of repairs or replacement (whichever is less) with new property of similar kind and quality, without deduction for depreciation. This option is subject to the following conditions:
- the property at the time of loss must have been useable for its original purpose;
- repair or replacement must be effected within a reasonable time after the loss or damage.

Replacement Cost does not apply to:

- articles that cannot be replaced with new articles because of their inherent nature, including antiques, fine arts, paintings and statuary;
- articles for which their age or history substantially contributes to their value, such as memorabilia, souvenirs and collectors' itams:
- property that has not been maintained in good or useable condition.

If the conditions set out in (B) are not met or if you decide not to repair or replace your property, settlement will be as in (A).

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If indicated on the Coverage Summary page, the endorsement(s) described below amends your policy.

Special Limits of Insurance Applicable to Coverage C - Personal Property (Contents) (Endorsement 38)

The limit set opposite each class of property is the maximum we will pay in any one covered loss for all items in that class.

For all Insured Perils	
Class of property	Limit of insurance
Animals, birds or fish	\$2,000
Watercraft, their furnishings, accessories, equipment, motors and trailers	\$3,000
Personal property (including books, tools, instruments, clothing and goods) pertaining to a business:	
- while on your premises	\$5,000
- while temporarily away from your premises	\$1,000
Computer software	\$1,000
Bullion, bank notes and money, including cash cards and plastic money	\$200
Garden-type tractors and snow blowers, including attachments and accessories and drawn machinery	\$10,000
Stocks, bonds and other securities	\$1,000

Class of property	Limit of insurance
Silverware, meaning silverware, silver-plated ware, goldware,	
gold-plated ware and pewterware	\$5,000
Bicycles, their equipment and all accessories (per bicycle)	\$3,000
Numismatic property (including coin collections)	\$200
Jewellery, watches and gems	\$5,000
Collectable cards (such as sports and artistic personality cards)) \$1,000
Collections, excluding all categories of property	
already subject to another limit	\$2,000
Fur garments and garments trimmed with fur	\$3,000
Manuscripts and philatelic property (including stamp collections) \$500
Works of art, such as paintings, pictures, drawings, etchings,	
engravings, prints and lithographs, including their frames,	
sculptures, statuettes and assemblages,	#00.000
and hand-made rugs and tapestries	\$20,000
Audio and video media, including tape recorder and VCR tapes	,
compact discs and video DVDs	

In the event of theft or loss

All other terms and conditions of the policy remain unchanged.

945 941 (2014-06)

Guaranteed Replacement Cost for Dwelling Building (Endorsement 17)

Property Coverages

Basis of Settlement Dwelling Building and Detached Private Structures

If you repair or replace the damaged or destroyed building or structure you may alternatively choose the following option as the basis of loss settlement:

- The Guaranteed Replacement Cost, in which case we will pay for the actual cost of repairs or replacement, regardless of the applicable amount of insurance, provided:
 - The amount shown for Coverage A -Dwelling Building on the Coverage Sum-

mary page is equal to 100% of the current replacement cost, as determined by a home evaluation guide recognized by us or any other evaluation acceptable to us;

- Repair or replacement is effected on the same location with materials of similar quality within a reasonable time after the loss or damage;
- The building occupancy is the same as prior to the loss;
- You notify us within 30 days of any additions or alterations which increase the replacement cost of your dwelling or detached private structures by \$5,000 or more.

If you fail to comply with the conditions set out for the Replacement Cost or the Guaranteed Replacement Cost or if you decide not to repair or replace your damaged or destroyed building or structure, settlement will be on an Actual Cash Value basis.

All other terms and conditions of the policy remain unchanged.

945 929 (2000-02)

Please see over \rightarrow

Page 2 of 3

Replacement Cost with No Obligation to Rebuild in Case of a Total Loss (Applicable Only for Dwelling Building) (Endorsement 50)

Property Coverages

Basis of Settlement

Dwelling Building and Detached Private Structures

With respect to the dwelling building only, you may alternatively choose the following additional option as a basis of settlement:

Replacement Cost with No Obligation to Rebuild

If you decide not to replace your dwelling building following a total loss, you will still be eligible for the Replacement Cost option. This means the cost of replacement with materials of similar quality, without deduction for depreciation, subject to the amount shown in brackets for Coverage A – Dwelling Building on the Coverage Summary page.

However, the Guaranteed Replacement Cost coverage (Endorsement 17) will not apply.

All other terms and conditions of this policy remain unchanged.

945 993 (2014-11)

Basis of Settlement

Dwelling Building and Detached Private Structures

In the event of damage to the Roof caused by wind or hail, we will pay a percentage of the Replacement Cost of the portion(s) of the Roof that have been damaged, including all related labour expenses, in accordance with the following table:

Age of the Roof of the Dwelling or Detached Private	•	depreciation to be a ed labour expenses	• •		all
Structures on the date of the occurrence	Asphalt Composition	Metal, Clay, Concrete, Fiberglass, Rubber Tiles or Shingles, Plastic, Slate, Steel Tile, Copper/Zinc Sheets	Wood Cedar, Cedar Shake or Shingles	Membrane, Tar and Gravel	Other
Less than 15 years	0%	0%	0%	0%	0%
15 years	45%	30%	30%	40%	65%
Additional annual percentage of depreciation to be added after 15 years	3%	2%	3%	2%	5%

The maximum depreciation applicable is 75%.

We shall pay you any amount as determined by the terms of this endorsement, whether the damaged portion(s) of the Roof are repaired or replaced.

The terms of this endorsement shall apply and prevail, even if your policy includes Guaranteed Replacement Cost for Dwelling Building (Endorsement 17).

All other terms and conditions of your policy remain unchanged.

946 003 (2015-03) R

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