

# Impacts of 2017 Wildfires on Cariboo Chilcotin Coast Tourism Businesses

Summary of Economic Impacts, Issues, and Potential Mitigation Measures

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Cariboo Chilcotin Coast Tourism Association  
(CCCTA)



Report by



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## 1.0 REPORT OVERVIEW and KEY FINDINGS

Larose Research & Strategy was commissioned by the Cariboo Chilcotin Coast Tourism Association (CCCTA) to evaluate information and data collected by CCCTA from tourism operators impacted by wildfires in the CCCTA region from November 6 to December 2, 2017 and to develop a summary report of key findings.

This survey and analysis follows on an interim report of wildfire impacts on CCCTA tourism related stakeholders from July 20 to September 8, 2017.

This update reflects similar trends in perspectives as in the preliminary survey, with the main difference being that the “final” economic impacts are considerably higher. For the preliminary survey many businesses were still in the midst of Evacuation Alerts or Evacuation Orders, and the wildfires were continuing to suppress visitation to the region.

Written comments in the final report reflected concerns over lost revenues for the 2017 travel season, but also for the long-term impacts of the fires on the region’s tourism sector. With the immediacy of the wildfire impacts now in the past, these concerns expressed in November 2017 typically centered around factors such as degradation of the natural landscape and visuals – from the fires themselves and expected salvage logging in the region – as well as reputational impacts in key travel market segments.

By November 2017 most respondents had also applied for Red Cross Funding (from 42% in July-September to 70% of respondents in November). The percentage of respondents who had contacted the Business Recovery Hotline increased from 56% in July-Sept to 77% in November.

### Key Findings

- In total there were 94 completed surveys out of an estimated 760 tourism-related businesses in the planning region.  
*The preliminary July-Sept survey included an additional 157 survey responses (146 online and 11 by telephone)*
- Average (mean) revenue loss per business (as of Nov 2017): **\$73,000**
- Median (middle or “typical”) revenue loss per business: **\$20,000**
- Estimated direct revenue loss to tourism-related businesses in the CCCTA region due to the 2017 wildfires: **\$55 million**
- Additional Economic Impact estimates:
  - **\$101 million in total economic impact** (losses) – including direct, indirect, and induced economic impacts; and
  - **\$63 million in lost GDP.**

## Research and Sampling Methods

In total 94 CCCTA businesses responded to the online survey. Descriptive statistics were used for the analysis, including means, medians, distributions, and frequencies.

Economic impact estimates were produced using multipliers from Statistics Canada's Input-Output Model (2010).

## **2.0 SUMMARY of SURVEY RESULTS**

### Sample Size and Confidence

There were 94 survey completions that included economic impact related information, out of a sample size of 760 businesses<sup>1</sup> in the Cariboo Chilcotin Coast region. This results in a margin of error of +/- 10%, 19 times out of 20, which is sufficient to provide directional estimates of economic impacts and should be considered generally representative of the region's overall tourism and hospitality sector.

*Note: these final results complement the preliminary survey of CCCTA tourism businesses in which 157 businesses completed surveys (146 online and 11 via telephone). However, for the economic impact calculations, the final November survey data were used.*

### Study Area

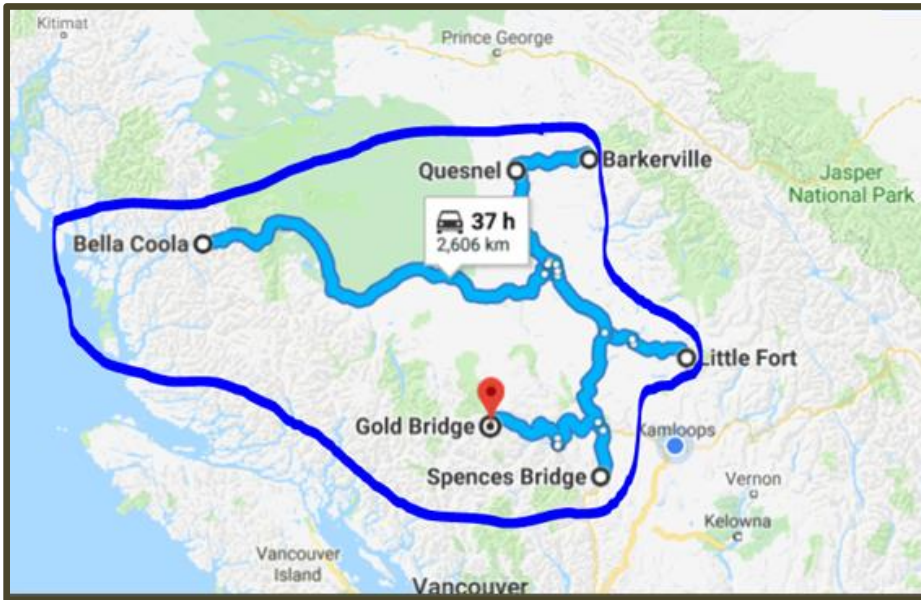
The study area includes the entire CCTA planning region, including some communities adjacent to the region but which were also impacted directly by the wildfires. This includes Bella Coola and the Central Coast in the northwest, to Quesnel and Barkerville in the northeast, south to Little Fort, and southwest to Spences Bridge and Gold Bridge. The planning area does not include Pemberton or Whistler (see *Figure 1*, below).

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<sup>1</sup> Businesses were identified based on an updated inventory of tourism related businesses in the Cariboo Chilcotin Coast tourism region in 2016 and 2017. A tourism-related business is any business which is considered to be dependent on tourists for a significant portion of their revenues, and may include restaurants (for which approximately 25% of their revenues are from tourists) to attractions and hotels (for which nearly 100% of revenues are from tourists).

Figure 1: CCCTA Wildfire Impacts Study Region

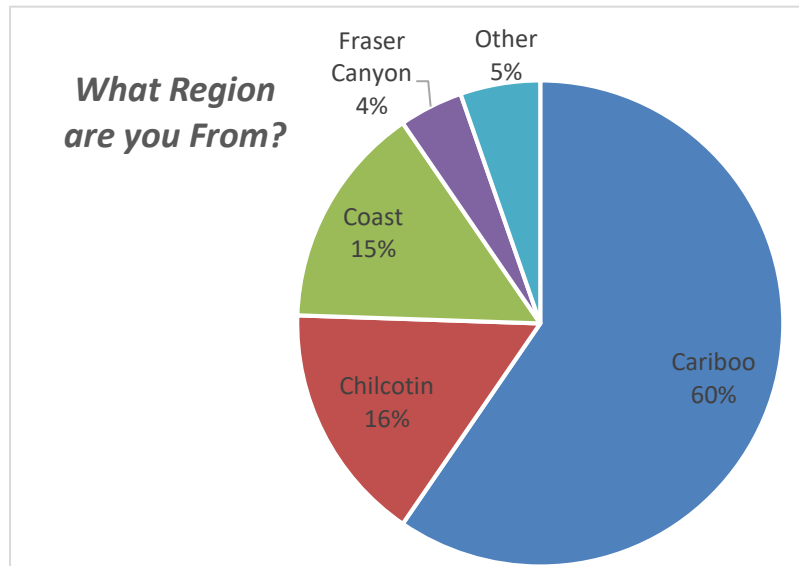
100 km 



### Respondent Origins

More than half (60%; or 56 respondents) of the respondents were from the Cariboo region, while 16% (15 responses) were from the Chilcotin region, 15% from the Coast region, 5% from “Other” regions (Interlakes to Little Fort), and 4% from the Fraser Canyon (see Figure 2, below).

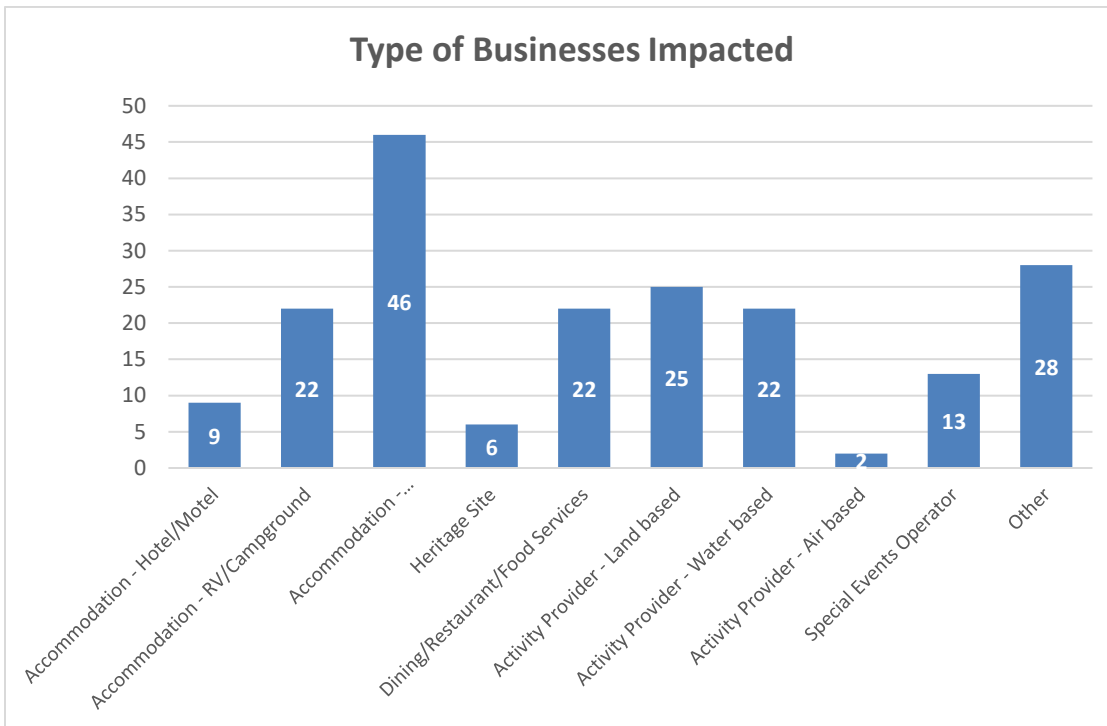
Figure 2: Origin of Respondents



## Type of Business Impacted

The impacted businesses represented a variety of tourism-related sub-sectors, with the highest number being Accommodation – Resorts/Cabins/Lodges/B&B (46 responses). Note: the figures add to more than 94 because multiple responses were allowed, as rural businesses often provide diverse services to guests. The 28 “others” were primarily retailers and galleries.

**Figure 3: Tourism Businesses Impacted by Wildfires**



## Type of Impact

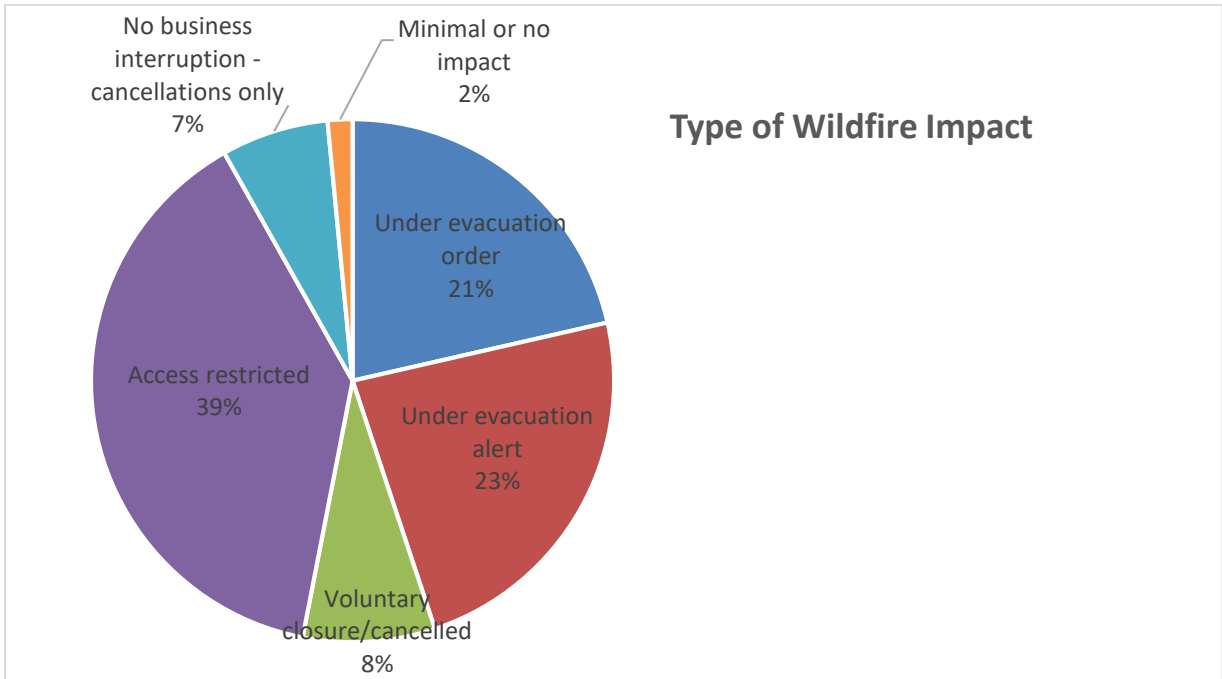
Respondents were affected by varying types of impacts during the 2017 wildfires, with the most alarming statistic being that 98% of businesses in the survey region experienced some form of negative impact to their operations.

While only 21% were evacuated (via a government Evacuation Order), 62% of respondents were affected by either an Evacuation Alert (21%) or restricted access (39%).

For businesses under Evacuation Order, the business was closed and no guests were able to access the business region. For businesses under Evacuation Alert but guests were still able to access the business region, the most common result was that guests cancelled their bookings in order to avoid the wildfire zone entirely. For those impacted by restricted access, the primary issue was that visitors (tourists) could not physically access the operation due to highway closures.

Written comments and evaluation of the dates of impacts suggest that most businesses experienced several of these different types of impacts, with Evacuation Alerts often becoming Evacuation Orders, then downgraded to Evacuation Alerts, with intermittent access closures.

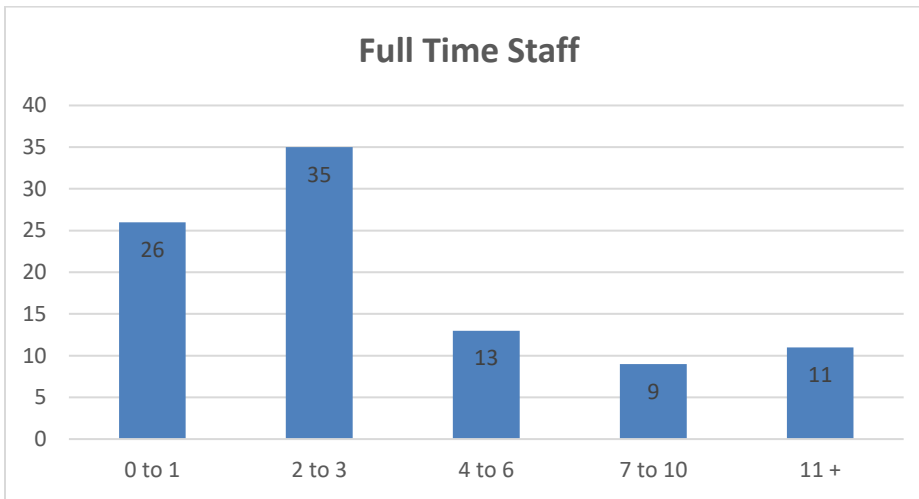
**Figure 4: Type Of Impact**



### Size of Business

Among respondents, the most common number of Full Time Staff of the business was "2 to 3" with 35 responses, followed by "0 to 1" staff with 24 responses. This generally reflects the composition of the tourism sector in the region, with many small and micro enterprises providing the majority of visitor services.

**Figure 5: Size of Businesses Impacted**



### First Day of Impact

The majority of businesses (93%) began witnessing negative impacts associated with the wildfires between July 7-10, 2017, after the initial lightning storm moved through the region on Friday, July 7.

### Length of Impact

Among the 94 responses to the question on length of impact, the average number of weeks that respondents were directly affected was seven weeks, with the majority being from the second week of July through to early September.

**Table 1: Duration of Impact of Wildfires** (Evacuation Alert, Evacuation Order, Highway Closure)

Duration	Number of Respondents
< 2 Weeks	4
3-4 Weeks	4
5-6 Weeks	22
7-8 Weeks	32
9+ Weeks	19



## Cancelled Bookings

The average response among respondents was that they lost 64% of their bookings for the duration of the wildfire impact.

In terms of the total number of bookings, Table 2 shows the distribution.

**Table 2: Number of Cancelled Bookings**

<b>Number of Cancelled Bookings</b>	<b>Number of Respondents</b>
< 20	4
20-39	4
40-59	22
60-99	32
100-199	19
200-499	5
500+	3

It should also be noted that the characteristics of the bookings varied, from individual nights in accommodation or single visits to attractions, to large group bookings for up to one week all-inclusive excursions.

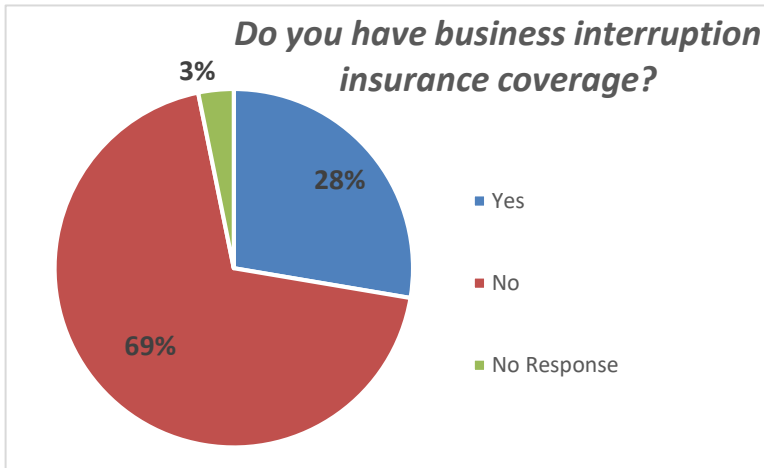
A number of respondents also had difficulty estimating their lost bookings as they relied primarily on visitor traffic that is not pre-booked, such as cafés, restaurants, and retail operations.

## Emergency Response Support and Insurance

Less than one-third of the respondents (28%) had business interruption insurance during the wildfires, while the majority (69%) did not have business interruption insurance coverage at the time of the fires.

Compounding the problem was the fact that business interruption insurance only addressed a portion of losses in most cases. Businesses with interruption insurance indicated that insurance providers would only cover structural damage, and loss of revenue/wages while on Evacuation Order. Businesses that were impacted by Evacuation Alerts, that had restricted access through highway closures, or generalized losses due to smoke or perceptions of danger, were not eligible for business interruption insurance.

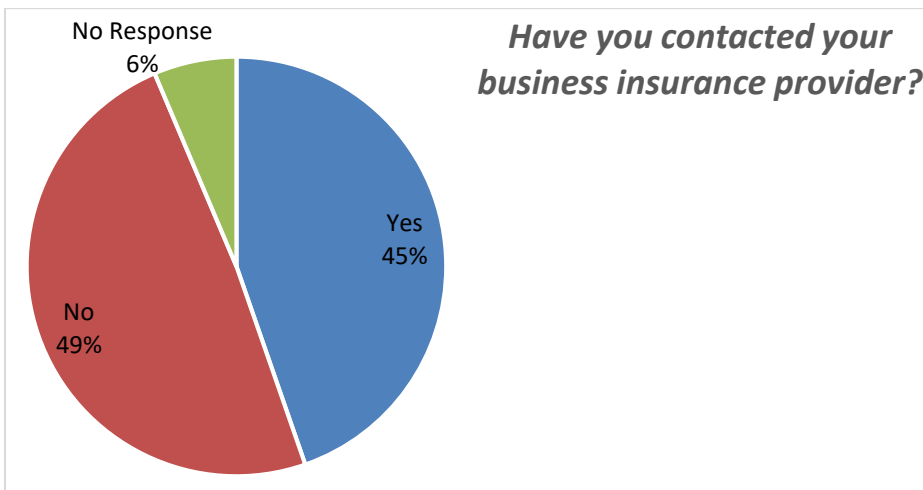
Figure 6: Business Interruption Coverage



In many cases Evacuation Orders only lasted for a short period, while many businesses were negatively affected by alerts and restricted access for over seven (7) weeks on average.

At the time of the survey, about half of the respondents had contacted their insurance provider.

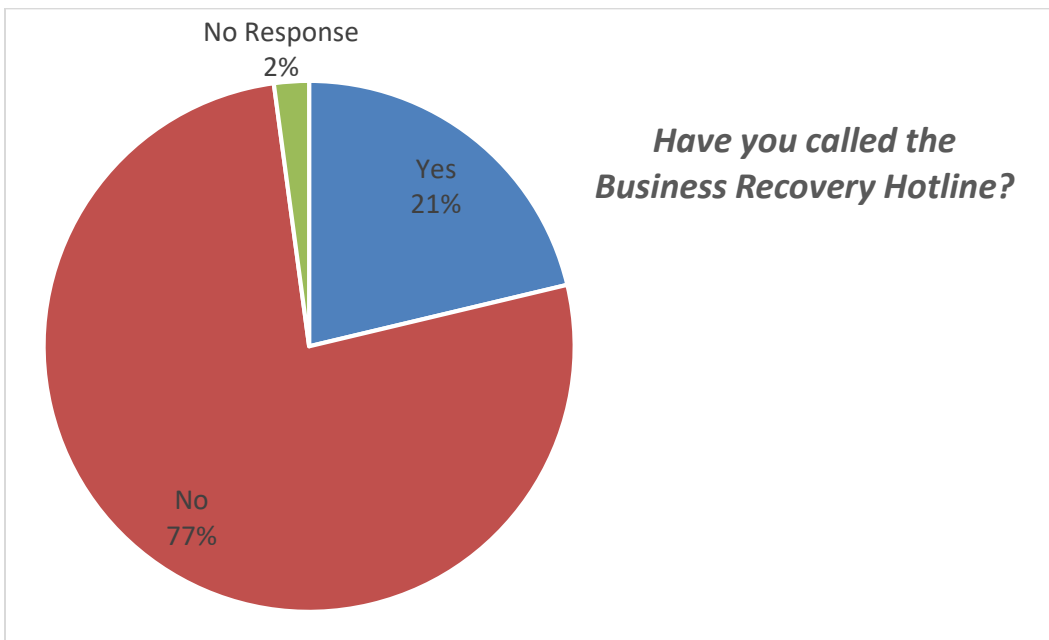
Figure 7: Contacting Insurance Providers



## Use of Business Recovery Hotline

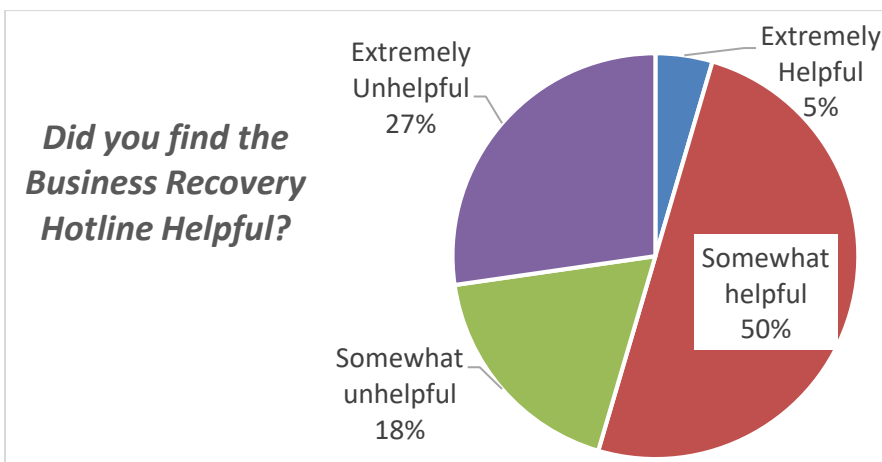
More than three-quarters (77%) of respondents had not contacted the Business Recovery Hotline. Written comments suggested that a number of respondents did not know about the Business Recovery Hotline, or their calls were not returned.

**Figure 8: Use of Business Recovery Hotline**



Of the respondents that did call the Business Recovery Hotline, half (50%) found the Hotline "somewhat helpful" while 45% found it to be somewhat or extremely unhelpful.

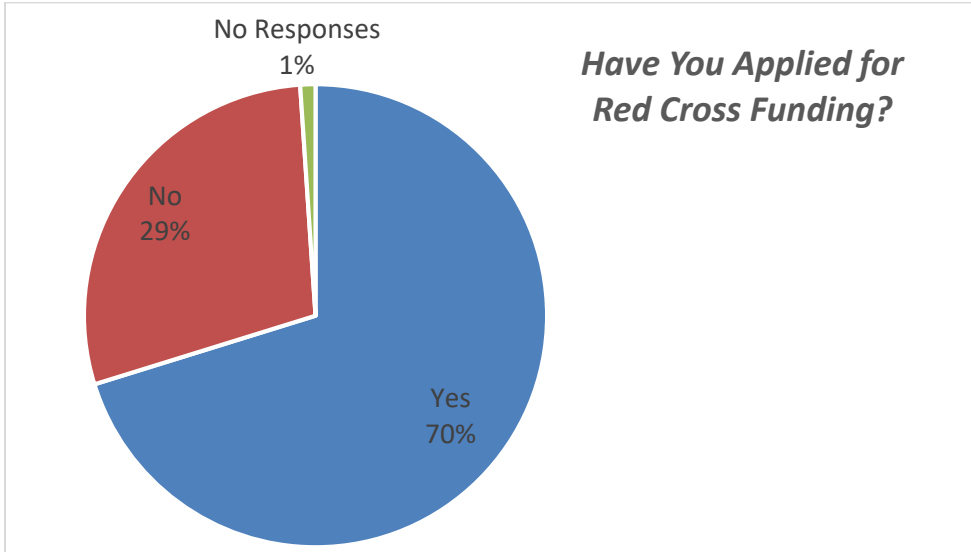
**Figure 9: Helpfulness of Business Recovery Hotline**



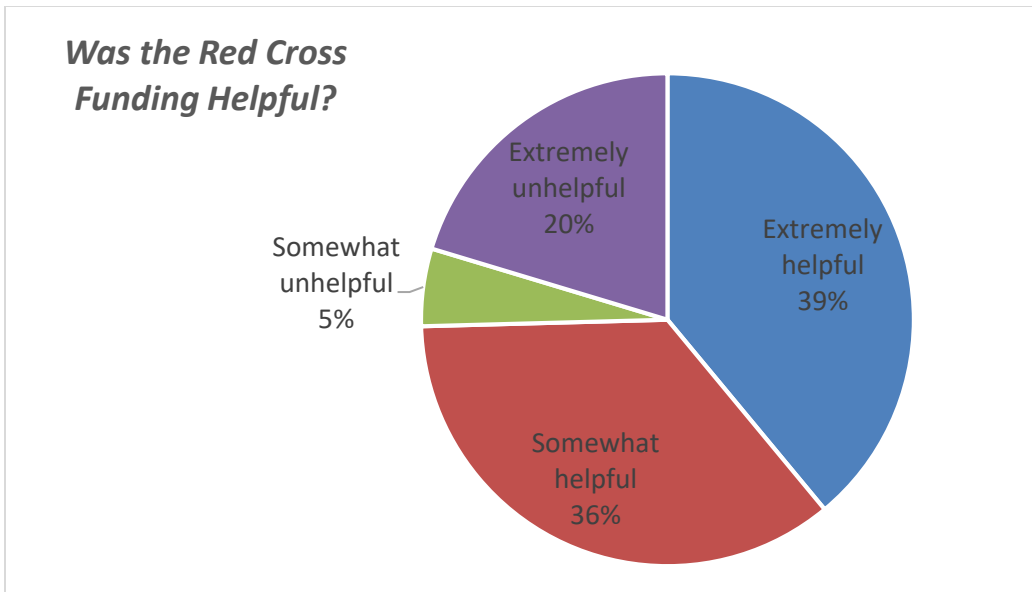
## Red Cross Assistance

The majority of the respondents (70%) applied for Red Cross Funds. Of those that applied, 39% found the funding “extremely helpful” and 36% found the funding “somewhat helpful”. Many respondents reported that while the \$1500 amount provided by the Red Cross was helpful, it did not come close to covering their losses incurred.

**Figure 10: Red Cross Funding**



**Figure 11: Helpfulness of Red Cross Funding**



### 3.0 ECONOMIC IMPACT ANALYSIS

A central component of this analysis is estimating the economic impacts of the wildfires on CCCTA region tourism businesses.

#### Total Economic Impact

The mean (average) direct economic loss per survey respondent was **\$72,659** while the median (middle respondent) loss was **\$20,000**.

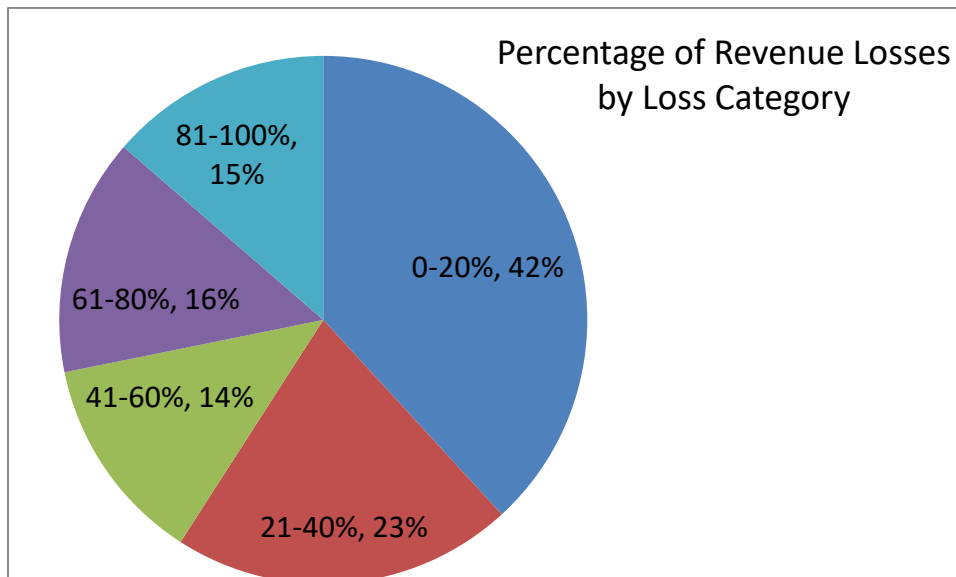
Put another way, the “typical” (median) business loss was approximately \$20,000.

The difference between the two is due to the fact that a small number of businesses with larger revenue bases experienced substantially higher losses than the smaller businesses, skewing the mean (average) upward.

#### **Wildfire Losses as Percentage of Annual Revenues**

Respondents indicated that on average, this loss represented 36% of their total annual revenues. Breaking this down further, the highest loss category was for businesses that lost from 0% to 20% of their revenues, with 42% of respondents being in this category. Nearly one-quarter of businesses (23%) indicated that they lost 21-40% of their revenues, while 14% indicated that they lost 41-60% of their revenues. The remaining 31% of businesses suffered catastrophic revenue losses, with 61-100% of their annual revenues lost due to wildfires.

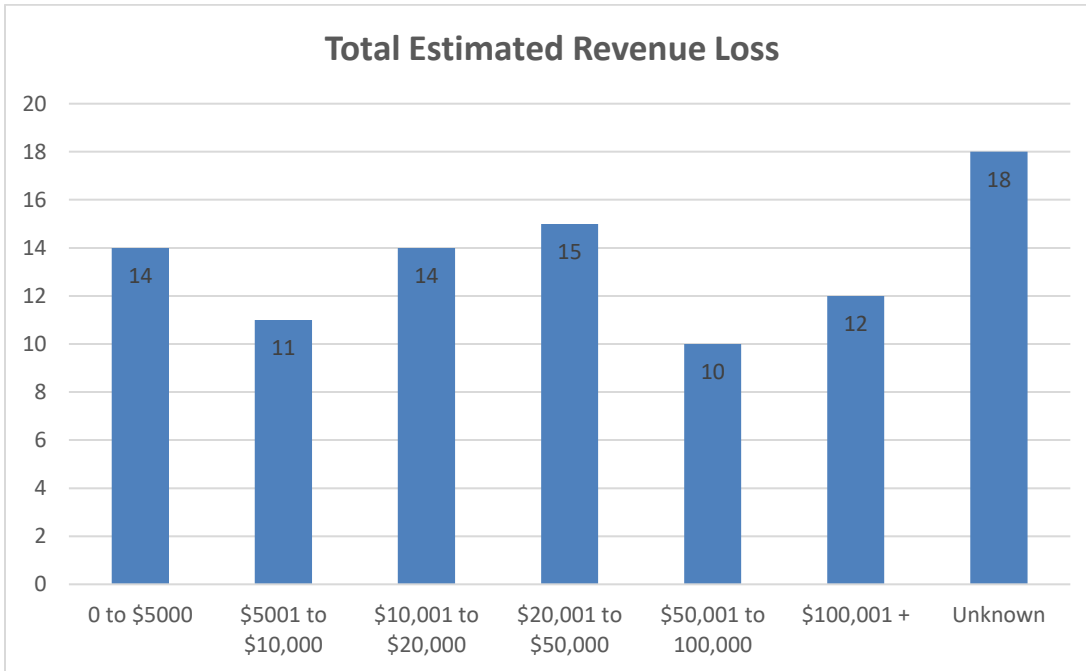
**Figure 12: Revenue Loss Percentages**



## Total Revenue Losses

Revenue losses were quite evenly distributed, from those that lost less than \$5,000 to those that lost more than \$100,000.

Figure 13: Revenue Losses



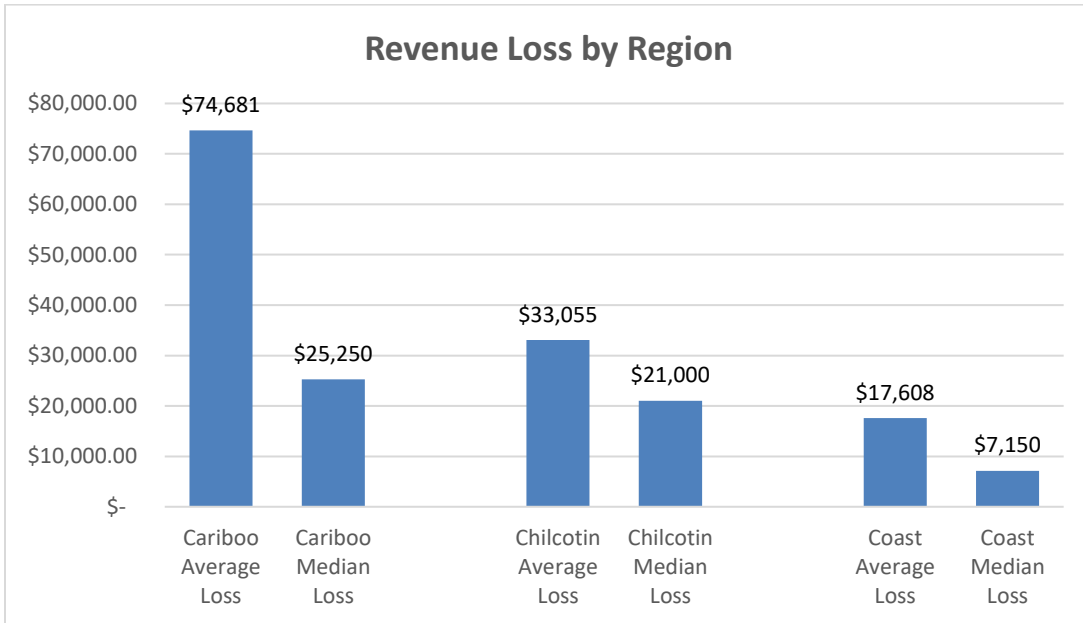
## Economic Impact By Region

When comparing the economic impact by region, we see that on average the Cariboo region experienced the highest losses with an average loss of \$74,680, and a median loss of \$25,250. This difference is due to a small number of large businesses having significant impacts, skewing the average upward.

The second most heavily impacted region was the Chilcotin, with average losses of \$33,000. This was followed by the Coast region, with average losses of approximately \$18,000.

Note: the Fraser Canyon is not included in the chart as it had only 4 responses, which included two businesses with massive losses in both real terms (the actual revenue losses) and relative terms (revenue losses as a percentage of their business income). These individual responses skew the data significantly, and are included in the total economic loss section.

**Figure 14: Revenue Losses by Region**



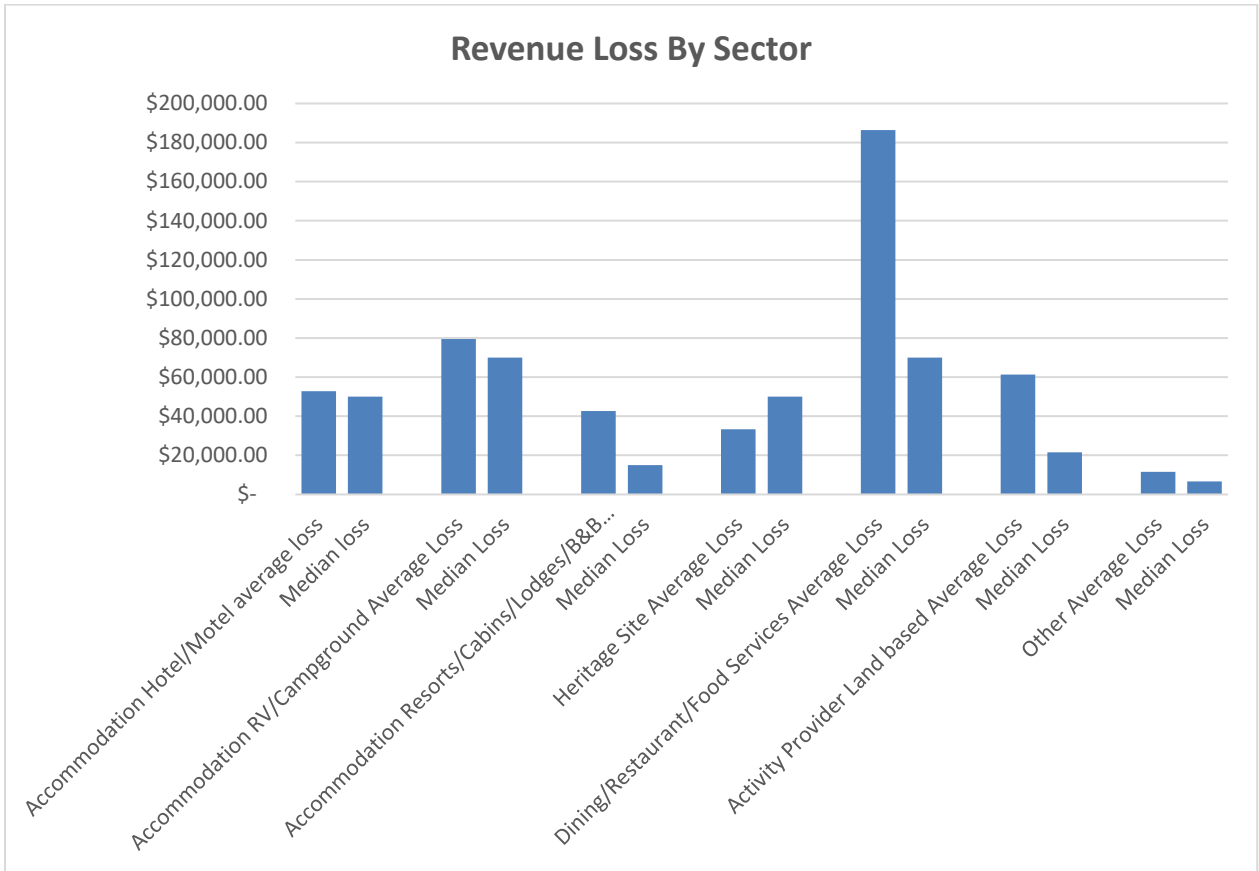
### Economic Impact By Sector

Estimated Revenue Loss by Sector shows the biggest average loss in the Dining/Restaurant sector with \$186,333. This sector’s median loss was lower at \$70,000, once again reflecting a small number of businesses with disproportionately large losses.

The average loss for the Accommodation Hotel sector was \$52,857 (median loss of \$50,000) and for the Accommodation RV/Campground sector \$79,536 was the average reported loss (median loss of \$70,000).

\* The ‘Activity Providers Water Based’ sector was removed from this chart, as one respondent reported significant losses which greatly skewed the data. This sector is included in the total economic loss section.

**Figure 15: Revenue Losses by Sector**





## Total Economic Impacts

The total economic impact of a natural disaster such as wildfires includes three components:

- i. Direct impacts (initial expenditures (or losses) minus consumption taxes) – 100% of which are incurred by the destination, itself.
- ii. Indirect impacts (income losses by suppliers of the expenditure-related businesses – e.g., a construction or warehousing businesses supplying hotels and restaurants).
- iii. Induced impacts (income losses by businesses serving resident employees of tourism businesses – e.g., recirculated salaries of hotel and restaurant employees in local grocery stores).

The sum of these economic impact (loss) components is the total economic impact (output).

The total expenditure losses can be estimated by multiplying the average economic impact per business by the number of businesses impacted.

**Note on methodology:** while the self-selection bias inherent in an online survey of this nature would suggest that the average impact of respondents would possibly be biased upward, the reasonably large sample size (nearly 100 businesses out of 760 total businesses) means that the results can be treated with confidence.

The direct revenue losses of the wildfires, at the time of response are estimated to be \$55 million.

**Table 1: Total Business Revenue Losses**

Average Business Revenue Loss	\$72,659
Total Number of “Tourism-Related Businesses” in Region	760
Total Direct Revenue Impact (Loss)	\$55 million

## Total Economic Impacts

A weighted combination of tourism component industry economic multipliers are used from the Statistics Canada Input-Output Model (2010) to estimate total economic impacts and GDP loss.<sup>2</sup> These losses are summarized in Table 2, below.

**Table 2: Total Economic Impacts of Wildfires on Tourism Related Businesses**

Total Revenue Losses	\$55 million
<i>Estimated Total Economic Impact (Loss)</i>	<i>\$101 million</i>
<i>Estimated GDP Impact (Loss)</i>	<i>\$63 million</i>

These figures should be interpreted with caution, however, as it assumes that revenue losses in the region were not recovered elsewhere in B.C., whereas written comments suggested that some travellers did in fact travel elsewhere in B.C. after cancelling plans to visit the Cariboo Chilcotin Coast region. Therefore, while the direct revenue losses (\$55 million) attributed to the Cariboo Chilcotin Coast region are reliable within 10%, 19 times out of 20, it cannot be assumed that all of these losses accrued to B.C. overall.

Another important consideration is that revenue losses are primarily for cancelled bookings, and do not include forgone opportunities for last-minute bookings nor for travellers who decide to forgo a trip to B.C. entirely. There were also significant expenses associated with addressing wildfire-related factors or hazards which would be not included in these figures.

## Additional Impacts

Respondents were asked to identify additional impacts of the fires that may not necessarily be monetary or financial in nature. A number of recurring themes related to negative impacts of the wildfires that weren't directly related to financial losses, as follows:

- Emotional stress related to uncertainty of the situation's resolution, and potential long-term impacts;
- Impacts related to the reputation of the destination and business viability as a result;
- Damage to the natural landscape, particularly for adventure tourism operators with land tenures;

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<sup>2</sup> The economic multipliers used were for Accommodation and Food Services (code BS72000), Sightseeing/Tourist Transportation (BS48B000), Retail (BS4A000), and Other Services (BS71000). The aggregate multiplier is thus 1.83 for total tourism output (revenue – not including taxes). These multipliers are constrained to British Columbia, and do not include other losses to the Canadian economy outside of B.C.

- Problems regarding tenure inflexibility during the emergency situation were also noted by respondents;
- Limited business income to undertake planned expansions and/or renovations;
- Health impacts related to smoke exposure; and
- Other residual effects such as loss of access to feed for animals, increased costs of some items that were in shortage.

### Priorities and Other Comments

Respondents were asked for any priorities or other comments not covered in the survey. Some recurring comments were:

- The negative effects of prolonged and arguably unnecessary Evacuation Alerts (from the perspective of respondents);
- A high level of appreciation for service providers and members of the community who pitched in to assist those in need;
- Poor communication around highway closures affecting guest itineraries and travel plans; and
- The need for ongoing positive marketing for the region as a whole.

## 4.0 RECOMMENDED MITIGATION MEASURES and CONCLUSION

Respondents were given a number of potential relief options from which they were to indicate how important (desirable) the options are to them, on a scale from “Very Important” to “Not at all Important.”

Respondents indicated that the *most* import relief options were direct financial aid followed by increased tourism marketing, then property and business tax relief. The only non-financial relief option that was in the top-five was “Increased Marketing.”

Respondents indicated that the *least* important relief options would be “Operating permit payment deferrals” followed by “Communication payments deferrals” and then “Business Tax payment referrals”.

Figure 16: Preferred Relief Options

