

# Case Study – Economic Impacts of *Frontier*

Prepared for the Canadian Media Producers Association (CMPA)

December 2018

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## 1. INTRODUCTION

The Canadian television series *Frontier* is produced by Take the Shot Productions and is licensed to Bell Media and Netflix. The historical drama is set during the Canadian fur trade in the late 1700s and is centered around an outlaw trapper who is attempting to break the Hudson’s Bay Company’s monopoly on the fur trade.<sup>1</sup> The series, co-created by Rob Blackie and Peter Blackie, premiered in November 2016 on Discovery Canada and on Netflix in January 2017. The series will premiere its third season on Netflix in November 2018 and on Discovery Canada in December 2018.

Table 1 summarizes the season premiere dates and number of episodes for *Frontier*.

**Table 1: *Frontier* Production Pattern**

	Season One		Season Two		Season Three	
Premiere Date	November 2016 on Discovery Canada	January 2017 on Netflix	October 2017 on Discovery Canada	November 2017 on Netflix	November 2018 on Netflix	December 2018 on Discovery Canada
Number of Episodes	6		6		6	

Source: IMDB, Take the Shot Productions

Filming of Season One of *Frontier* took place from November 2015 to March 2016, primarily in St. John’s, Newfoundland and Labrador over 41 days.<sup>2</sup> Throughout the production of the series, significant economic impacts were created for residents and businesses in Newfoundland and Labrador, and substantial tax revenues accrued to federal, provincial and local governments.

### ABOUT TAKE THE SHOT PRODUCTIONS

**Take the Shot Productions** is a Canadian television and film production company based in St. John’s, Newfoundland and Labrador, which has achieved critical and commercial success in Canada and abroad. The company produces scripted and unscripted projects for television, including such popular series as *Republic of Doyle* and *Majumder Manor*. Recently, Take the Shot Productions produced the CBC original series *Caught*, which is based on the novel by the same title.<sup>3</sup>

## 2. STUDY PURPOSE AND DISCLAIMER

MNP was engaged by the Canadian Media Producers Association (CMPA) to develop a case study of the economic impacts of the production of *Frontier* on the economy of Newfoundland and Labrador. For the study, MNP used data provided by Take the Shot Productions on production expenditures for Season One of the series, to estimate the economic impacts that occurred during the six episodes of Season One.

The following report solely reflects the views of the authors. Findings, conclusions or recommendations expressed in this report are those of the authors and do not necessarily reflect the views of the funders of this report, who are in no way bound by any recommendations contained herein.

This report is provided for information purposes and is intended for general guidance only. It should not be regarded as comprehensive or a substitute for personalized, professional, investment, or business advice.

<sup>1</sup> IMDB. "Frontier". Retrieved from: <https://www.imdb.com/title/tt4686698/>

<sup>2</sup> Take the Shot Productions. Some filming, support and post-production activities also took place in Nova Scotia, Ontario, and in the UK.

<sup>3</sup> Take the Shot Productions. Retrieved from: <http://www.taketheshotproductions.com/about-2/>

### 3. PRODUCTION SPENDING AND GOVERNMENT INCENTIVES

Production spending on *Frontier* engaged over 620 vendors from across Canada. As shown in Table 2, this included 368 vendors from Newfoundland and Labrador, 148 vendors from Ontario and 105 vendors from the rest of Canada.<sup>4</sup> In Newfoundland and Labrador, there were 340 vendors from St. John's and 28 vendors from 15 other communities in the province.

The production engaged a wide variety of vendors including vehicle and equipment rental agencies, post-production facilities, catering companies, professional services firms and various types of retailers.

**Table 2: Vendor Data for Season One of *Frontier***

Region	Number of Vendors
St. John's <sup>5</sup>	340
Other Communities in Newfoundland and Labrador	28
Ontario	148
Rest of Canada	105
<b>Total</b>	<b>621</b>

Source: Take the Shot Productions

Based on data provided by Take the Shot Productions, total production expenditure in Canada for Season One of *Frontier* was approximately \$21.1 million. As shown in Table 3, Season One of *Frontier* was associated with total production-related spending in Newfoundland and Labrador of approximately \$13.7 million.<sup>6</sup> About \$9.3 million was spent in Newfoundland and Labrador on wages, salaries and per diems for individuals involved in production and post-production of the film, and another \$4.4 million was spent on production-related goods and services. In addition, \$7.4 million was spent in Ontario and the rest of Canada, with \$3.8 million spent on labour and \$3.6 million spent on goods and services.

**Table 3: *Frontier* Season One Production Spending**

	Newfoundland and Labrador Spending	Ontario and Rest of Canada Spending	Total Canadian Spending
Spending on Labour Related to Production and Post-production, including Per-Diems	\$9.3 million	\$3.8 million	\$13.1 million
Spending on Goods and Services	\$4.4 million	\$3.6 million	\$8.0 million
<b>Total Spending</b>	<b>\$13.7 million</b>	<b>\$7.4 million</b>	<b>\$21.1 million</b>

Source: Take the Shot Productions

<sup>4</sup> Estimated based on vendor data provided by Take the Shot Productions.

<sup>5</sup> Includes communities within the St. John's metropolitan area, including Conception Bay South, Logy Bay, Middle Cove, Maddox Cove, Mount Pearl, Paradise, Petty Harbour, Portugal Cove – St. Philip's, Pouch Cove, and Torbay. Newfoundland and Labrador vendors for whom city data was not available were assumed to be located in St. John's.

<sup>6</sup> Estimated based on information and expenditure data provided by Take the Shot Productions.

As shown in Table 4, estimated federal and provincial government incentives for Season One included approximately \$5.4 million in federal government incentives, \$5.5 million in Newfoundland and Labrador government incentives, and \$1.6 million in Ontario government incentives.

**Table 4: Estimated Federal and Provincial Government Incentives for *Frontier* Season One**

	Season One Incentive Amount
Federal Government Incentives <sup>7</sup>	\$5.4 million
Newfoundland and Labrador Government Incentives <sup>8</sup>	\$5.5 million
Ontario Government Incentives <sup>9</sup>	\$1.6 million
<b>Total</b>	<b>\$12.5 million</b>

Source: *Take the Shot Productions*

#### 4. ECONOMIC IMPACTS OF PRODUCTION SPENDING

MNP estimated the economic impact of the production of *Frontier* using the 2013 Statistics Canada provincial input-output multipliers (the latest multipliers available). Statistics Canada’s input-output model is the most widely used system for measuring economic impacts in Canada and provides a measure of the interdependence between an industry and the rest of the economy.<sup>10</sup> The provincial economic multipliers show the direct, indirect and induced effects on economic metrics, and can be used to measure the quantitative impact of a change in the production or expenditure of a particular industry.

In general, economic impacts are viewed as being restricted to quantitative, well-established measures of economic activity. The most commonly used of these measures are output, gross domestic product (GDP), employment and government tax revenue:

- **Output** – the total gross value of all business revenue. This is the broadest measure of economic activity.
- **Gross Domestic Product (GDP)** – the “value added” to the economy (the unduplicated total value of goods and services).
- **Employment** – the number of jobs created or supported (in full-time equivalents or FTEs).
- **Government Tax Revenue** – the total amount of tax revenues generated for different levels of government.

Economic impacts may be estimated at the direct, indirect and induced levels:

- **Direct impacts** are due to changes to front-end businesses that receive expenses or operating revenue as a direct consequence of the activities of an industry or project.
- **Indirect impacts** are due to changes in the activity of suppliers of the front-end businesses.
- **Induced impacts** are due to shifts in spending on goods and services as a consequence of changes to the payroll of the directly and indirectly affected businesses.

<sup>7</sup> Federal government incentives include incentives through the Canadian Film or Video Production Tax Credit (CPTC) and the Canada Media Fund (CMF).

<sup>8</sup> Newfoundland and Labrador government incentives include equity investment from the Newfoundland and Labrador Film Development Corporation (NLFDC) and incentives through the Newfoundland and Labrador Film Tax Credit administered by NLFDC.

<sup>9</sup> Ontario government incentives include incentives through the Ontario Film and Television Tax Credit (OFTTC).

<sup>10</sup> Note that Statistics Canada’s input-output model is based on the assumption that there is no social safety net, i.e. those that do not earn wages have no income from social assistance or unemployment programs, and therefore all induced spending is new spending in the economy. Economic impacts estimated with a social safety net assumption would be slightly lower.

In this analysis, MNP estimated the impacts of a set of direct expenditures related to the production of Season One of *Frontier*. The television series, like other productions, has an amount of direct expenditure, which in turn stimulates so-called indirect impacts across the industry supply chain. These expenditures also create or support jobs, as firms add or retain labour to meet rising demand. This, in turn, raises incomes and stimulates what are known as induced impacts, as higher incomes flow through to consumption. The total economic impact of the production spending is the sum of each of these direct, indirect and induced impacts.

Using Statistics Canada’s input-output multipliers and Season One production-related expenditures provided by Take the Shot Productions, MNP estimated the total economic impacts (i.e. direct, indirect and induced) arising from \$13.7 million of production expenditure for Season One in Newfoundland and Labrador, and from \$7.4 million in Ontario and other areas of Canada. The results of this analysis are presented in Table 5. (For an overview of the methodology used to estimate the economic impacts and for more detailed results, please see Appendices A and B of this report.)

**Table 5: Estimated Total Economic Impacts of *Frontier* Season One Production Spending**

	Newfoundland and Labrador Production Impacts	Ontario and Rest of Canada Production Impacts	Total Canadian Production Impacts
<b>Direct Production Expenditures</b>	\$13.7 million	\$7.4 million	\$21.1 million
<b>Total Output</b>	\$21.3 million	\$14.1 million	\$35.4 million
<b>Total GDP</b>	\$18.2 million	\$9.2 million	\$27.4 million
<b>Total Employment (FTEs)<sup>11</sup></b>	180 FTEs	116 FTEs	296 FTEs
<b>Federal Tax Revenues</b>	\$1.8 million	\$1.2 million	\$3.0 million
<b>Provincial Tax Revenues</b>	\$1.8 million	\$0.6 million	\$2.4 million
<b>Municipal Tax Revenues</b>	\$0.4 million	\$0.2 million	\$0.6 million

Production of Season One of *Frontier* was estimated to benefit from incentives of approximately \$2.5 million through the Canadian Film or Video Production Tax Credit (CPTC). Table 6 shows the estimated total economic impacts per dollar of the CPTC federal tax credit for Season One of *Frontier*.

**Table 6: Estimated Total Economic Impacts per Dollar of the CPTC Federal Tax Credit**

	Season One Production Impacts
<b>Output per Dollar of the CPTC Federal Tax Credit</b>	\$14.36
<b>GDP per Dollar of the CPTC Federal Tax Credit</b>	\$11.12
<b>Employment per \$100,000 of the CPTC Federal Tax Credit</b>	12 FTEs
<b>Federal Tax Revenues per Dollar of the CPTC Federal Tax Credit</b>	\$1.22

<sup>11</sup> One FTE is equivalent to one person-year of employment.

Production of Season One of *Frontier* was estimated to benefit from incentives of approximately \$3.2 million through the Newfoundland and Labrador Film Tax Credit. Table 7 shows the estimated economic impacts per dollar of the Newfoundland and Labrador Film Tax Credit for Season One of *Frontier*.

**Table 7: Estimated Total Economic Impacts per Dollar of the Newfoundland and Labrador Film Tax Credit**

	Season One Production Impacts
Output per Dollar of Newfoundland and Labrador Film Tax Credit	\$6.74
GDP per dollar of Newfoundland and Labrador Film Tax Credit	\$5.77
Employment per \$100,000 of Newfoundland and Labrador Film Tax Credit	6 FTEs

Assuming that the level and pattern of production spending per episode over Seasons Two and Three of *Frontier* was similar to the spending per episode in Season One, the estimated economic impacts generated over the life of the series through Season Three could be expected to be roughly three times that from Season One. These impacts are presented in Table 8.

**Table 8: Estimated Total Economic Impacts of Seasons One Through Three Production Spending**

	Newfoundland and Labrador Production Impacts	Ontario and Rest of Canada Production Impacts	Total Canadian Production Impacts
Direct Production Expenditures	\$41.2 million	\$22.2 million	\$63.4 million
Total Output	\$63.8 million	\$42.2 million	\$106.0 million
Total GDP	\$54.6 million	\$27.5 million	\$82.1 million
Total Employment	539 FTEs	349 FTEs	888 FTEs
Federal Tax Revenues	\$5.5 million	\$3.5 million	\$9.0 million
Provincial Tax Revenues	\$5.4 million	\$1.9 million	\$7.3 million
Municipal Tax Revenues	\$1.2 million	\$0.6 million	\$1.8 million

## 5. COMPARISON WITH OTHER INDUSTRIES IN NEWFOUNDLAND AND LABRADOR

To provide perspective on the size of the economic impacts generated by the production of *Frontier* in Newfoundland and Labrador, it is useful to compare the impacts with those created by other industries. Examples of other industries are new home construction and the cruise ship industry:

- **New Home Construction** – The estimated total employment supported by the Season One production of *Frontier* in Newfoundland and Labrador is equivalent to the direct and indirect employment supported by the construction of 79 new homes.<sup>12</sup> The estimated total employment supported over three seasons of production is equivalent to that supported by the construction of 237 new homes.<sup>13</sup>
- **Cruise Ship Visits** – Newfoundland and Labrador has an active cruise ship industry. Each cruise ship call involves local spending by passengers through onshore visits. The direct production spending on Season One of *Frontier* in Newfoundland and Labrador is equivalent to onshore spending by approximately 240,000 cruise ship passengers in Newfoundland and Labrador.<sup>14</sup>

## 6. ADDITIONAL IMPACTS

In addition to economic impacts that arise through production spending, productions such as *Frontier* produce impacts that can result from infrastructure spending, film induced tourism and personal spending by non-resident labour.

- **Infrastructure Impacts** – Infrastructure spending includes expenditures associated with production facilities and equipment. While the economic impacts of infrastructure spending have not been assessed in this report, it is important to note that the impacts can be significant.
- **Film Induced Tourism Impacts** – Film induced tourism (FIT) is the phenomenon of films and television programs encouraging viewers to visit the country or region where filming occurred. FIT and its related tourism impacts, which include the effects of TV, films, movies and media culture, has increasingly been viewed as an important component of tourism marketing.<sup>15</sup>
- **Personal Spending by Non-resident Labour while in Newfoundland and Labrador** – This may include spending by non-resident labour on vacations or other personal purchases while on location in Newfoundland and Labrador.

### Community and Tourism Benefits

It is worth noting that film and television productions can also generate additional economic, community and social benefits. These may include the creation of opportunities for trainees or interns, the development of business partnerships, the creation of spin-off companies and contributions to community and culture.

To illustrate some additional impacts and broader benefits of *Frontier*, MNP interviewed Craig Borden, Manager of Rugged Edge Outdoor Lifestyle Emporium in Corner Brook, Newfoundland and Peter Blackie, Producer of *Frontier*.

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<sup>12</sup> Will Dunning Inc. 2017. "Economic Impacts of New Home Construction –Newfoundland and Labrador, 2017." Retrieved from: <https://www.chba.ca/CHBADocs/CHBA/HousingCanada/Information-Statistics/Impacts/1%20Newfoundland%20and%20Labrador%20Economic%20Impacts%20of%20New%20Home%20Construction%202017.pdf>

<sup>13</sup> Ibid.

<sup>14</sup> Business Research & Economic Advisors. April 2017. "The Economic Contribution of the International Cruise Industry in Canada."

<sup>15</sup> Croy, Glen W. 2004. "The Lord of the Rings, New Zealand, and Tourism: Image Building with Film."

Rugged Edge Outdoor Lifestyle Emporium (Rugged Edge) is a locally-owned ATV and snowmobile sales, parts and rentals business located in Corner Brook, Newfoundland. The company also sells recreational off-road vehicles, clothing and other outdoor gear, and runs snowmobile tours.

According to Craig Borden, Manager of Rugged Edge, the company was engaged by Take the Shot Productions to assist in scouting shooting locations and provided services during the filming of *Frontier*. According to Mr. Borden, interest in *Frontier* and the popularity of lead actor Jason Momoa has generated increased demand for both their outdoor products and snowmobile tours, which include guided tours of *Frontier* filming locations. He estimated that *Frontier* was responsible for a 25 percent increase in the tourism side of the business, which has led Rugged Edge to modify its business from being mainly retail-focused to be more tourism and tours-oriented. Due to customer demand, they are even considering offering a *Frontier*-themed outdoor tourism experience. After ten years of being in business, Rugged Edge won the Greater Corner Brook Board of Trade's award for "Business of the Year," and Mr. Borden attributes part of this success to their work with Take the Shot Productions on *Frontier*.

According to Mr. Borden, the production of *Frontier* has also had a significant positive effect on the community of Corner Brook. During production, Rugged Edge engaged several members of the community, including retired military veterans, to assist the production in making sure the cast and crew were prepared for the outdoor conditions of *Frontier*'s shooting locations.

"Not a day goes by that people don't come in asking about *Frontier*. It has been great for promoting Newfoundland and Corner Brook and letting everyone know what a great place it is to do business."  
- **Craig Borden, Manager, Rugged Edge Outdoor Lifestyle Emporium**

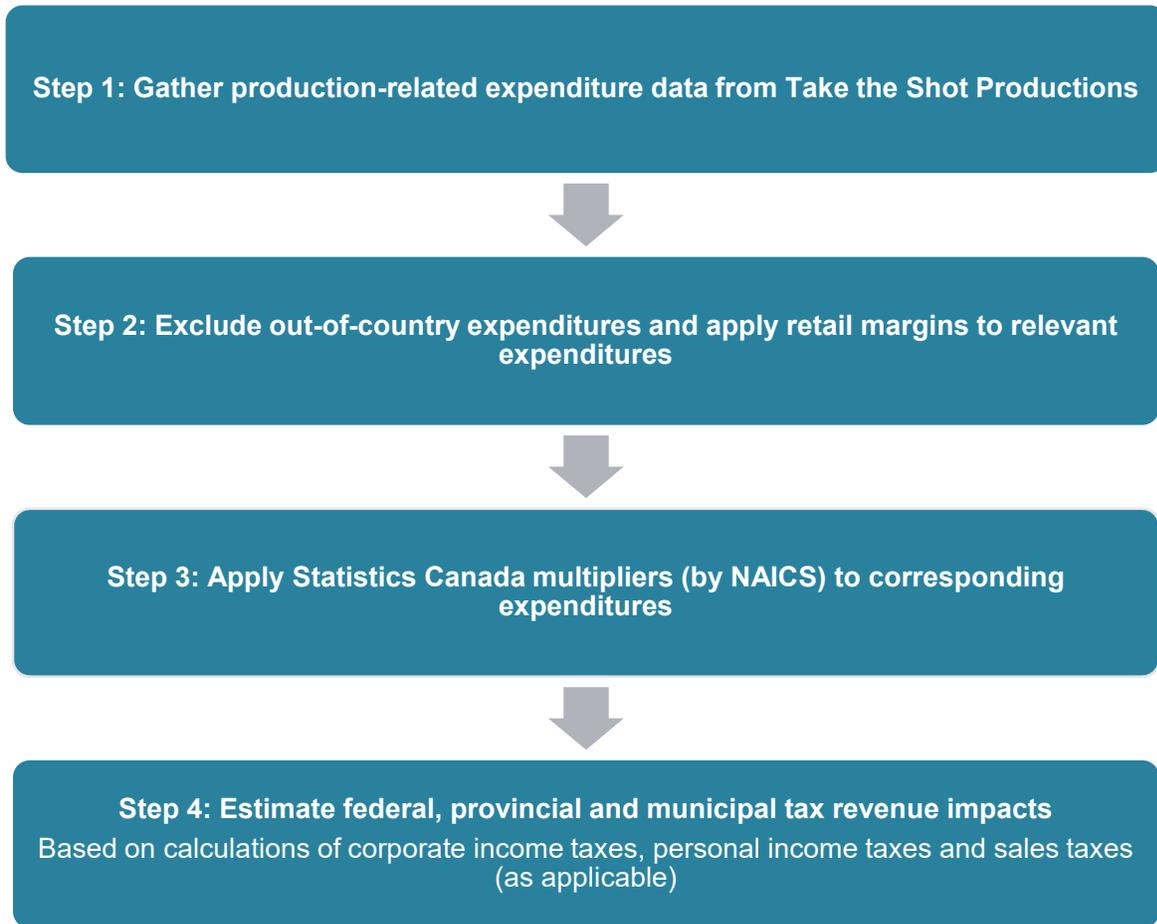
According to Peter Blackie, Producer of *Frontier*, working in remote areas of Newfoundland required Take the Shot Productions to focus on investing in and strengthening relationships within the local community.

Through *Frontier*, Take the Shot Productions cultivated local talent, which involved giving opportunities to local youth and investing in them through on-the-job training and mentorship. Mr. Blackie provided examples of youth that joined as Assistants in the camera and art departments and, within a short period of intense training and on-set learning, graduated to roles with higher responsibility.

According to Mr. Blackie, several local members of the production staff on *Frontier* are also artists and aspiring filmmakers. Hiring and training these individuals has enabled them to gain valuable film experience and make industry connections that can help them with their own film projects. Mr. Blackie believes that hiring local talent on larger productions such as *Frontier* will help expand the film industry ecosystem in Newfoundland and Labrador.

## APPENDIX A – ECONOMIC IMPACT METHODOLOGY

A step-by-step overview of our approach to estimating the economic impacts of *Frontier* is provided below.<sup>16</sup>



<sup>16</sup> Note that Statistics Canada's input-output model is based on the assumption that there is no social safety net, i.e. those that do not earn wages have no income from social assistance or unemployment programs, and therefore all induced spending is new spending in the economy. Economic impacts estimated with a social safety net assumption would be slightly lower.

## APPENDIX B – DETAILED RESULTS

**Table B-1: Estimated Economic Impacts of the Season One Production of *Frontier* in Newfoundland and Labrador**

	Output	GDP	Employment (FTEs)	Federal Tax	Provincial Tax	Municipal Tax
<i>Direct</i>	\$13,353,356	\$11,802,154	107	\$1,260,559	\$1,069,018	\$80,274
<i>Indirect and Induced</i>	\$7,913,058	\$6,380,923	73	\$577,749	\$742,618	\$305,605
<b>Total</b>	<b>\$21,266,414</b>	<b>\$18,183,077</b>	<b>180</b>	<b>\$1,838,308</b>	<b>\$1,811,636</b>	<b>\$385,879</b>

**Table B-2: Estimated Economic Impacts of the Season One Production of *Frontier* in Ontario and the Rest of Canada**

	Output	GDP	Employment (FTEs)	Federal Tax	Provincial Tax	Municipal Tax
<i>Direct</i>	\$7,125,596	\$5,256,307	64	\$727,342	\$336,399	\$23,536
<i>Indirect and Induced</i>	\$6,930,880	\$3,925,763	52	\$442,348	\$309,356	\$189,951
<b>Total</b>	<b>\$14,056,476</b>	<b>\$9,182,070</b>	<b>116</b>	<b>\$1,169,690</b>	<b>\$645,755</b>	<b>\$213,487</b>