



Case Study – Economic Impacts of *The Hummingbird Project*

Prepared for the Canadian Media Producers Association

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1. INTRODUCTION

The Hummingbird Project is a Canadian feature film produced by Montreal-based production company Item 7 that is written and directed by Kim Nguyen. The film was produced as an official majority co-production between Canada and Belgium with an overall production budget of \$16.4 million, of which Canadian expenditures totalled approximately \$13.0 million. *The Hummingbird Project* follows two cousins from New York as they attempt to disrupt the financial trading world by laying a 1000 mile fiber optic cable underground in a straight line from Kansas to New Jersey. The plan is for the new line to be a millisecond faster than what is currently being used, bringing the pair huge profits in the high stakes game of high frequency trading¹. The film, which stars Jesse Eisenberg and Alexander Skarsgård as the cousins, and Salma Hayek as their former boss, will be released in select theatres on March 22, 2019.

The Hummingbird Project filmed in Montreal and several small communities in Quebec with a few additional days of filming in Ontario.² Throughout the production of the film, significant economic impacts were created for residents and businesses in Quebec, and substantial tax revenues accrued to federal, provincial and local governments.

ABOUT ITEM 7

Item 7 is a Montreal-based film production company led by Pierre Even that has achieved critical and commercial success in Canada and abroad. The company, founded in 2009, has produced feature films including Jean-Marc Vallée's *Café De Flore*, Academy Award nominated *War Witch (Rebelle)* by Kim Nguyen and has co-produced *Bon Cop Bad Cop 2* with Jessie Films and *Brooklyn* by John Crowley which received 3 Academy Award nominations in 2016 including Best Picture.³

2. STUDY PURPOSE AND DISCLAIMER PRODUCERS

This study was commissioned by the Canadian Media Producers Association (CMPA) and supported by Telefilm Canada. MNP LLP was engaged by the CMPA to develop a case study of the economic impacts of the production of *The Hummingbird Project* on Quebec, Ontario and the rest of Canada's economy. For the study, MNP obtained data on production expenditures from Item 7 to estimate the economic impacts that occurred during filming of *The Hummingbird Project*.

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.

3. PRODUCTION SPENDING AND GOVERNMENT INCENTIVES

Production spending on *The Hummingbird Project* engaged over 650 vendors from across Canada. As shown in Table 1, this included 531 vendors from Quebec, 125 vendors from Ontario and 3 vendors from the rest of Canada.⁴ In Quebec, there were 392 vendors from Montreal and 139 vendors from 78 other communities in the province. The production engaged a wide variety of vendors including vehicle and equipment rental agencies, catering companies, professional services firms, post-production facilities and various types of retailers.

¹ IMDB "*The Hummingbird Project*" retrieved from <https://www.imdb.com/title/tt6866224/>

² Item 7 Inc. Some filming also took place in Ontario and post-production activities also took place in Belgium and in the UK.

³ Item 7 Inc. Retrieved from: <http://item7.ca/>

⁴ Estimated based on vendor data provided by Item 7 Inc.

Table 1: Vendor Data for *The Hummingbird Project*

Region	Number of Vendors
Montreal	392
Other Communities in Quebec	139
Ontario	125
Rest of Canada	3
Total	659

Source: Item 7

Based on data provided by Item 7, total production expenditures in Canada for *The Hummingbird Project* were approximately \$13.0 million. As shown in Table 2, *The Hummingbird Project* was associated with total production-related spending in Quebec of approximately \$11.2 million.⁵ About \$6.5 million was spent in Quebec on wages, salaries and per diems for individuals involved in production and post-production of the film, and another \$4.7 million was spent on production-related goods and services. In addition, \$1.8 million was spent in Ontario and the rest of Canada, with \$0.5 million spent on labour and \$1.3 million spent on goods and services.

Table 2: *The Hummingbird Project* Production Spending

	Quebec Spending	Ontario and Rest of Canada Spending	Total Canadian Spending
Spending on Labour Related to Production and Post-production, including Per-Diems	\$6.5 million	\$0.5 million	\$7.0 million
Spending on Goods and Services	\$4.7 million	\$1.3 million	\$6.0 million
Total Spending	\$11.2 million	\$1.8 million	\$13.0 million

Source: Item 7

As shown in Table 3, federal and provincial government tax incentives for *The Hummingbird Project* included approximately \$1.0 million in Federal government tax incentives and \$2.1 million in Quebec government tax incentives.⁶

Table 3: Estimated Federal and Provincial Government Tax Incentives for *The Hummingbird Project*

	Incentive Amount
Federal Government Tax Incentives ⁷	\$1.0 million
Quebec Government Tax Incentives ⁸	\$2.1 million

⁵ Estimated based on information and expenditure data provided by Item 7.

⁶ According to Item 7, the film also benefited from a recoupable investment from Telefilm Canada of \$3.7 million for production and funding from Eurimages (the Council of Europe's dedicated coproduction fund to which Canada is a new member) in the amount of €360,000.

⁷ Federal government tax incentives were received through the Canadian Film or Video Production Tax Credit (CPTC).

⁸ Quebec government tax incentives were received through the Quebec Film and Television Production Tax Credit (Crédit d'impôt remboursable pour la production cinématographique et télévisuelle Québécoise).

4. ECONOMIC IMPACTS OF PRODUCTION SPENDING

MNP estimated the economic impact of the production of *The Hummingbird Project* using the 2013 Statistics Canada provincial input-output multipliers. 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.⁹ 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.

In this analysis, MNP estimated the impacts of a set of direct expenditures related to the production of *The Hummingbird Project*. A feature film, 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 the film's production-related expenditures provided by Item 7, MNP estimated the total economic impacts (i.e. direct, indirect and induced) arising from \$11.2 million of production expenditure for the filming in Quebec, and from \$1.8 million in Ontario and other areas of Canada. The results of this analysis are presented in Table 4. (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.)

⁹ 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.

Table 4: Estimated Total Economic Impacts of *The Hummingbird Project* Production Spending

	Quebec Production Impacts	Ontario and Rest of Canada Production Impacts	Total Canadian Production Impacts
Direct Production Expenditures	\$11.2 million	\$1.8 million	\$13.0 million
Total Output	\$20.6 million	\$2.2 million	\$22.8 million
Total GDP	\$14.1 million	\$1.1 million	\$15.2 million
Total Employment (FTEs)¹⁰	199 FTEs	20 FTEs	219 FTEs
Federal Tax Revenues	\$1.1 million	\$0.2 million	\$1.3 million
Provincial and Municipal Tax Revenues	\$2.0 million	\$0.1 million	\$2.1 million

Production of *The Hummingbird Project* was estimated to benefit from incentives of approximately \$1.0 million through the Canadian Film or Video Production Tax Credit (CPTC). Table 5 shows the estimated total economic impacts per dollar of the CPTC federal tax credit for *The Hummingbird Project*.

Table 5: Estimated Total Economic Impacts per Dollar of the CPTC Federal Tax Credit

	Production Impacts
Output per Dollar	\$23.12
GDP per Dollar	\$15.47
Employment per \$100,000	22 FTEs
Federal Tax Revenues per Dollar	\$1.30

Production of *The Hummingbird Project* was estimated to benefit from incentives of approximately \$2.1 million through the Quebec Film and Television Production Tax Credit.¹¹ Table 6 shows the estimated economic impacts per dollar of the Quebec Tax Credit for *The Hummingbird Project*.

Table 6: Estimated Total Economic Impacts per Dollar of the Quebec Film and Television Production Tax Credit

	Production Impacts
Output per Dollar	\$9.83
GDP per dollar	\$6.70
Employment per \$100,000	9 FTEs

¹⁰ One FTE is equivalent to one person-year of employment.

¹¹ Cr dit d'imp t remboursable pour la production cin matographique et t l visuelle Qu b coise.

5. COMPARISON WITH OTHER INDUSTRIES IN QUEBEC

To provide perspective on the size of the economic impacts generated by the production of *The Hummingbird Project* in Quebec, 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 Hummingbird Project* in Quebec is equivalent to the direct and indirect employment supported by the construction of 97 new homes.¹²
- **Cruise Ship Visits** – Quebec has an active cruise ship industry. Each cruise ship call involves local spending by passengers through onshore visits. The direct production spending on *The Hummingbird Project* is equivalent to onshore spending in a port of call by approximately 79,000 cruise ship passengers in Quebec.¹³

6. ADDITIONAL IMPACTS

In addition to economic impacts that arise through production spending, productions such as *The Hummingbird Project* 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.¹⁴
- **Personal Spending by Non-resident Labour while in Quebec** – This may include spending by non-resident labour on vacations or other personal purchases while on location in Quebec.

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 *The Hummingbird Project*, MNP interviewed Producer, Pierre Even and Associate Producer, Jeannette Garcia.

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

¹³ Business Research & Economic Advisors. April 2017. "The Economic Contribution of the International Cruise Industry in Canada."

¹⁴ Croy, Glen W. 2004. "The Lord of the Rings, New Zealand, and Tourism: Image Building with Film."

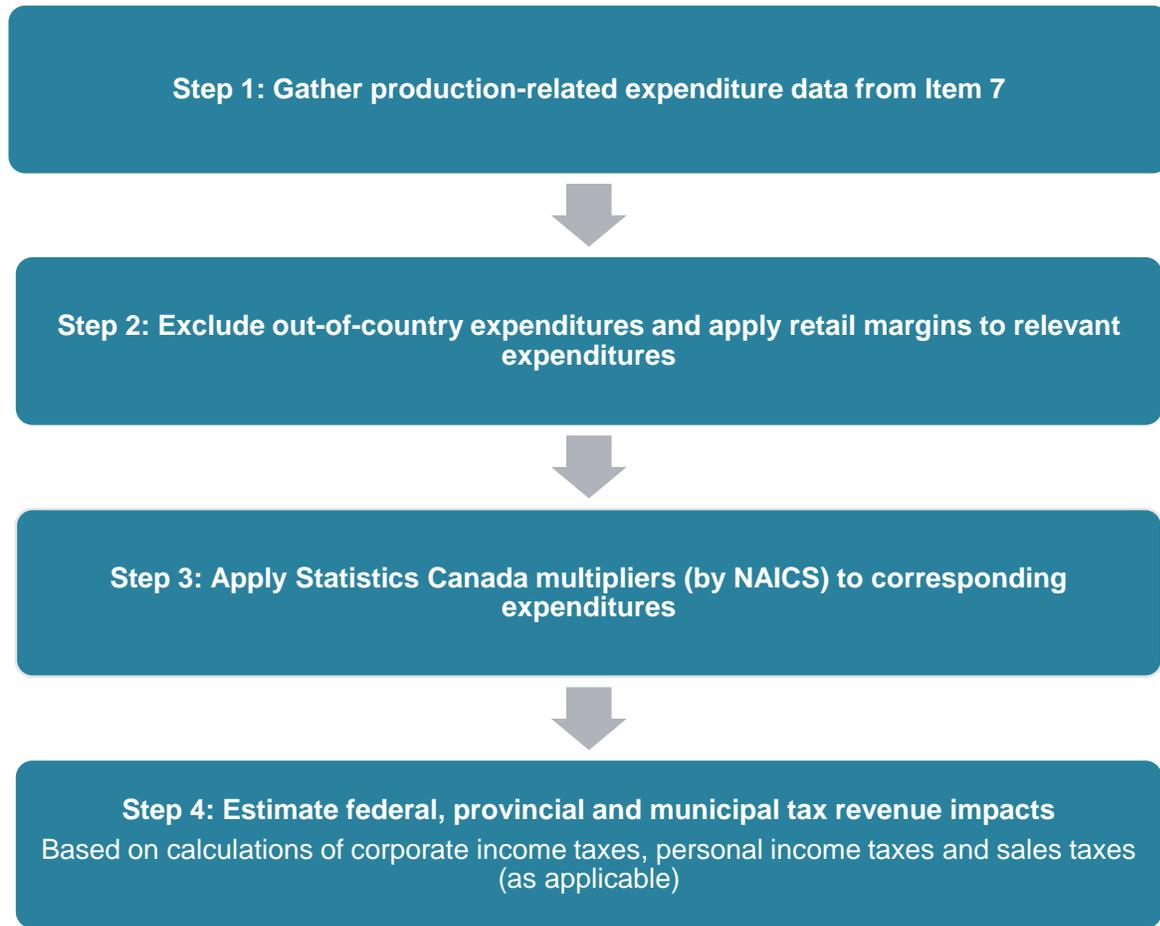
According to Pierre Even, producer and Jeannette Garcia, Associate Producer of *The Hummingbird Project*, the production was committed to creating local business opportunities in the communities in Quebec where the production was filmed. For example, in Irlande, Quebec local catering services were provided by the resident chef and owner of the Manoir D'Irlande. While filming in Thetford Mines, the Café-Resto l'Allongé was approached to provide catering for the cast and crew during filming scenes in the movie that are set at an Amish farm. All of the extras were hired locally and they happily agreed to shave their beards to look like the Amish community members depicted in the film. Local carpenters, in these and other rural communities, were also hired to do most of the woodwork under the supervision of department heads from Montreal. For accommodation, most of the crew stayed at the La Cache Du Domaine in Thetford Mines, and many commented that they intend to return with their families so they can fully experience the outdoor activities and beauty of the region.

The production was also shot in the region of the Laurentians, near the small town of Grenville-sur-la-Rouge. The accommodations and shooting locations were provided by Carling Lake Hotel. It was the third shoot in two years for Item 7 in the same region after Kim Nguyen's *Eye on Juliet* and Emanuel Hoss-Desmarais' *Birthmarked*. Catering, accommodations and extras were found locally. For the equipment needed in the film, production relied on the advice and expertise of Daniel Di Chiaro whose Quebec based company ForAction Inc. is a Canadian industry leader in horizontal drilling. ForAction supplied the drilling equipment and Mr. Di Chiaro served as a consultant by vetting the script for accuracy and instructing the cast on how to operate the machinery.

The production was also committed to providing opportunities for youth. The production hired three interns from Concordia University to assist with marketing and release of the film. In addition, the production engaged a young filmmaker to create an electronic press kit that showcased the making of the film and included interviews with the director, cinematographer, art director and members of the cast. This young filmmaker had just completed her training at INIS, a Montreal-based film, television and interactive media training centre.

APPENDIX A – ECONOMIC IMPACT METHODOLOGY

A step-by-step overview of our approach to estimating the economic impacts of *The Hummingbird Project* is provided below.



APPENDIX B – DETAILED RESULTS

Table B-1: Estimated Economic Impacts of *The Hummingbird Project* in Quebec

	Output	GDP	Employment (FTEs)	Federal Tax	Provincial Tax	Municipal Tax
<i>Direct</i>	\$11,154,867	\$8,649,056	114	\$736,116	\$998,161	\$48,901
<i>Indirect and Induced</i>	\$9,494,603	\$5,479,166	85	\$390,617	\$656,473	\$260,136
Total	\$20,649,470	\$14,128,222	199	\$1,126,733	\$1,654,634	\$309,037

Table B-2: Estimated Economic Impacts of *The Hummingbird Project* in Ontario and the Rest of Canada

	Output	GDP	Employment (FTEs)	Federal Tax	Provincial Tax	Municipal Tax
<i>Direct</i>	\$1,252,482	\$654,131	9	\$92,471	\$66,860	\$7,483
<i>Indirect and Induced</i>	\$905,628	\$484,894	11	\$60,401	\$46,754	\$22,966
Total	\$2,158,110	\$1,139,025	20	\$152,872	\$113,614	\$30,449