Economic Impacts of *Riverdale*

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INTRODUCTION

The television series *Riverdale* premiered on January 26, 2017 on the CW Network. The series is based on characters from the Archie Comics franchise.¹ Season One begins shortly after the mysterious death of Jason Blossom, a rich and popular high school student. Archie and his friends take on the haunting case of Jason Blossom and soon discover the dark secrets hidden in the small town of Riverdale.²

Table 1 summarizes the premiere date and number of episodes for *Riverdale*.

Table 1: *Riverdale* Production Pattern

	Season One	Season Two
Premiere Date	January 26, 2017	October 11, 2017
Number of Episodes	13	22

Source: Warner Bros. Entertainment

Riverdale is primarily filmed in and around Vancouver, British Columbia (BC) and has been renewed for Season Two by the CW Network.³ Throughout the production of Season One, significant economic impacts were created for BC residents and businesses.

STUDY PURPOSE

MNP LLP (MNP) was engaged by the Motion Picture Association – Canada to conduct an independent economic impact assessment of the production of the series *Riverdale* on the BC economy. For the study, MNP used data from Warner Bros. Entertainment to estimate the economic impacts that occurred during Season One of production.

¹ Warner Bros. Retrieved from: https://www.warnerbros.com/tv/riverdale

² IMDB. Retrieved from: http://www.imdb.com/title/tt5420376/

³ Variety. Retrieved from: http://variety.com/2017/tv/news/riverdale-renewed-season-2-cw-netflix-1202003847/

SEASON ONE PRODUCTION SPENDING

Season One production spending engaged approximately 773 vendors from 31 communities across BC (Table 2). This included vendors from 16 communities in Metro Vancouver as well as from 15 communities from other regions of BC. The Metro Vancouver vendors were spread out across the region and included a significant number of vendors outside of Vancouver. For example, there were over 100 vendors each in Burnaby and Langley/Fort Langley, as well as over 80 vendors in Surrey.

Production of Season One required the engagement of a wide variety of BC vendors, including equipment rental companies, production facilities, retailers, security services, dry cleaners, hotels and restaurants, catering companies, automobile rental companies, hair and make-up services, and alteration and repair services.⁴

Vendors	Number
BC Businesses	534
BC Individuals	239
Total Number of Vendors	773
Communities	
Metro Vancouver	16
Other regions of BC	15
Total Number of Communities	31

Table 2: Season One BC Vendor Data

Source: Warner Bros. Entertainment

As shown in Table 3, the Season One production of *Riverdale* resulted in total spending in BC of over \$22.4 million. BC production crew and other labour received 75 percent of the total BC expenditures, while the remaining 25 percent was spent on purchases of BC goods and services.

Table 3: Season One Production and Post-Production Expenditures in BC

	Expenditures (in millions)	Share of Expenditures
BC Production Crew and Qualifying Labour ⁵	\$16.7	75%
BC Purchases (Spending on Goods and Services)	\$5.7	25%
Total BC Spending	\$22.4	100%

Source: Warner Bros. Entertainment

⁴ Based on vendor data provided by Warner Bros. Entertainment.

⁵ Please note that the analysis excludes production spending on non-resident labour.

ECONOMIC IMPACTS OF SEASON ONE PRODUCTION SPENDING

Using Statistics Canada's input-output multipliers for BC and the Season One production expenditure data provided by Warner Bros. Entertainment, MNP estimated the total economic impacts (i.e. direct, indirect, and induced) in BC arising from the \$22.4 million in production spending for Season One. The results of this analysis are presented in Table 4. For more information on economic impact measures and the methodology used, please see Appendix A.

Table 4: Estimated Economic Impacts of Season One Production Spending in BC

	Production Impacts
Direct Production Expenditure in BC (in millions)	\$22.4
Total Output (in millions)	\$38.8
Total GDP (in millions)	\$30.3
Total Employment (in full-time equivalent positions or FTEs ⁶)	387

According to Warner Bros. Entertainment, Season One of *Riverdale* benefited from approximately \$1.8 million in federal tax incentives and \$6.2 million in provincial tax incentives. The incentives provided by the Government of BC are estimated to have resulted in the following total impacts:

- \$6.2 in economic output for every dollar of BC tax incentive received by the production.
- \$4.9 in provincial GDP for every dollar of BC tax incentive received by the production.

ECONOMIC IMPACTS OF TOTAL PRODUCTION SPENDING

Assuming that the level and pattern of production spending over the 13 episodes in Season One of Riverdale remain similar across the 22 episodes in Season Two, the estimated economic impacts generated over the life of the series (i.e. Seasons One and Two) could be expected to total roughly 2.7 times that from Season One. These impacts are presented in Table 5.

Table 5: Estimated Economic Impacts of Seasons One and Two Production Spending in BC

	Production Impacts
Direct Production Expenditure in BC (in millions)	\$60.4
Total Output (in millions)	\$104.5
Total GDP (in millions)	\$81.5
Total Employment (in FTEs)	1041

⁶ One FTE is equivalent to one person-year of employment.

COMPARISONS WITH OTHER INDUSTRIES

To provide perspective on the size of the economic impacts of the production of *Riverdale*, it is useful to compare the impacts with those created by other industries. Four examples of other industries are port container handling, new home construction, overnight visitors and cruise ship sailings.

- **New Home Construction** The employment supported by the Season One production of *Riverdale* is equivalent to the direct and indirect employment supported by the construction of approximately 170 new homes in BC.⁷ The employment supported over Seasons One and Two of production is equivalent to that supported by the construction of about 460 new homes.
- Tourism/Overnight Visitors The employment supported in BC by the Season One production of *Riverdale* is equivalent to the employment supported by the spending of about 50,000 overnight visitors to Vancouver. Season One and Two production combined supports the same employment as the spending of about 130,000 overnight visitors⁸.
- Cruise Ship Sailings Vancouver has a vibrant cruise ship industry. On average, each sailing involves local spending by 3,600 passengers and over 1,000 crew members, as well as substantial spending by the cruse line operator⁹. The employment supported in BC by the Season One production of *Riverdale* is equivalent to the employment supported by about 10 cruise ship sailings from the Port of Vancouver. The employment supported over Seasons One and Two of production is equivalent to the employment by about 26 cruise ship sailings.

ADDITIONAL IMPACTS

In addition to economic impacts that arise through production spending, television series such as *Riverdale* can produce impacts that 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.¹⁰ FIT and its related tourism concepts, which include the effects of TV, films, movies, and media culture, have increasingly been viewed as an important component of tourism marketing. Television series are especially likely to reach much larger audiences than specifically targeted tourism promotion.¹¹
- **Personal Spending by Non-resident Labour while in BC –** This may include spending by non-resident labour on vacations or other personal purchases while on location in BC.

While we have not quantified the broader benefits of the production of *Riverdale* in this study, it is worth noting that television production 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.

⁷ Will Dunning Inc., *Economic and Fiscal Impacts of Residential Construction – 2016*. Retrieved from:

 $http://www.chba.ca/CHBA/Housing_in_Canada/Information_and_Statistics/impacts/1\%20British\%20Columbia\%20Economic\%20Impacts\%20of\%20New\%20Home\%20Construction\%202016.pdf$

⁸ Tourism Vancouver.

⁹ Port of Vancouver 2016 Economic Impact Study. Prepared for Vancouver Fraser Port Authority by InterVISTAS Consulting Inc.

¹⁰ Oxford Economics, The Economic Impact of the UK Film Industry, 2007.

¹¹ Croy, Glen W, The Lord of the Rings, New Zealand, and Tourism: Image Building with Film, 2004.

An example of the broader benefits to local businesses is illustrated in the increased popularity of a restaurant that is featured in the filming.

Rocko's Diner located in Mission, BC was transformed into Pop's Diner for the pilot episode of *Riverdale* and is featured in subsequent episodes throughout Season One. Although the production has built their own replica set, Debbi Schiller, owner of Rock's Diner, notes that fans of the series have been drawn to the diner. According to Schiller, there has been an increase in clientele aged 15-25 taking pictures and sitting in the same booth as the *Riverdale* characters.

"There's been an influx because of *Riverdale*. We are now busy straight through the night with teenagers and fans of the show taking pictures and ordering milkshakes. We had to put up signage about *Riverdale* because the staff were getting so many questions."

- Debbi Schiller, Owner of Rocko's Diner

APPENDIX A – ECONOMIC IMPACT METHODOLOGY

The main goal of an economic impact study is to quantify the economic contributions that an organization, industry, or project makes to a region.

MNP estimated the economic impact of the production of *Riverdale* using the 2013 Statistics Canada provincial input-output multipliers for BC (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. 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, GDP, and employment:

- **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 FTEs¹²).

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 impact on the BC economy of a set of direct expenditures related to the filming of Season One of *Riverdale*. 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.

¹² One FTE is equivalent to one person-year of employment.