



The Economic Impact of the Screen Entertainment Industry in Canterbury

Executive Summary

- Historically, Canterbury has successfully attracted on-site filming of major international films but lacked the infrastructure to benefit from pre-and post-production activity.
- Canterbury can take advantage of the expanding international screen industry by investing in suitable infrastructure to increase the attractiveness of the region and attract new businesses.
- This economic benefit of the two scenarios presented in this report, namely i) increasing Canterbury's industry spending share and ii) attracting a share of the LOTR series, is new employment totalling 1,343 and \$138 million of additional GVA.

Compiled by:

David Dyason
Economic Advisor
ChristchurchNZ



ChristchurchNZ™

Contents

1. Introduction	3
2. Christchurch in Canterbury	3
3. The Economic Value of the Screen Industry	3
3.1 Revenue & employment benefits	3
3.2 The economy-wide benefit.....	5
4. International Screen Industry Growth	5
5. The Economic Impact Assessment for Canterbury	6
5.1 Future investment & potential	6
5.2 Economic Impact.....	6
5.2.1 Increased Canterbury Attractiveness.....	7
5.2.2 The Lord of the Rings Series.....	10
6. Conclusion.....	12
References	13

1. Introduction

Films such as the Lord of the Rings and the Hobbit showcased the tremendous natural beauty and value of New Zealand as a destination for the screen industry. The growth of the digital economy driven by *inter alia* increasing consumer demand has spilled-over and created new opportunities for the screen entertainment industry.

The Canterbury region continues to be a role-player in this industry and has been used as an on-site filming destination for films such as, Mission: Impossible Fallout (2018), Mulan (2018), The Hobbit (2012 – 2014), The Chronicles of Narnia (2005), Lord of the Rings (2001-2003). Although, Canterbury has been used as an on-site filming destination, the production of these films has often taken place elsewhere.

The aim of this report is to estimate the additional economic value for Canterbury as new investment in the screen entertainment industry is attracted to the region. This report refers to the screen entertainment as a combination of the screen and gaming industries.

2. Christchurch in Canterbury

The current market trends and future demand outlook lend itself to the development of production facilities that would support on-site filming for Canterbury. This is further supported by unofficial reports that Amazon could target New Zealand as a destination for the filming of a new series (Walls, 2019). This provides Canterbury an ideal opportunity to attract new business and investment.

Christchurch is the largest city in Canterbury and South Island and second only to Auckland in New Zealand. The city has a growing economy valued at \$21.3 billion and a labour force of 211 000 in 2019 while new investment in conference facilities, hotels, retail, residential and a large multi-use arena continues to expand the capacity of the city.

Furthermore, the renewal of the central city area provides ample opportunity to establish and develop a new state of the art, purposefully build studio and production facility within a prime location. The provision of affordable central city space is a unique opportunity that not many other cities within the world can provide. The agglomeration benefits would reposition the attractiveness and provide additional logistical advantages of Canterbury as a screen entertainment location.

3. The Economic Value of the Screen Industry

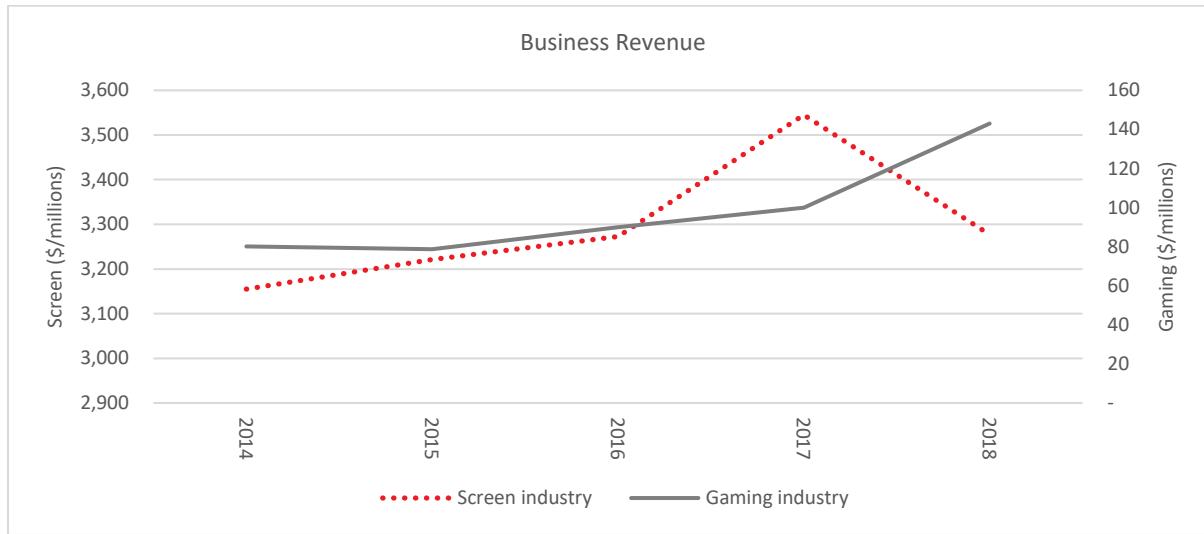
3.1 REVENUE & EMPLOYMENT BENEFITS

A recent study by Statistics New Zealand (2019) revealed the value of the screen industry within New Zealand. According to the results the industry remains an important and growing industry for New Zealand over time. The New Zealand Game Developers Association, similarly provides results from an annual survey which highlights a similar positive increase in revenue. The revenue for the industries is illustrated in Figure 1.



ChristchurchNZ™

Figure 1: Revenue, 2014-2018



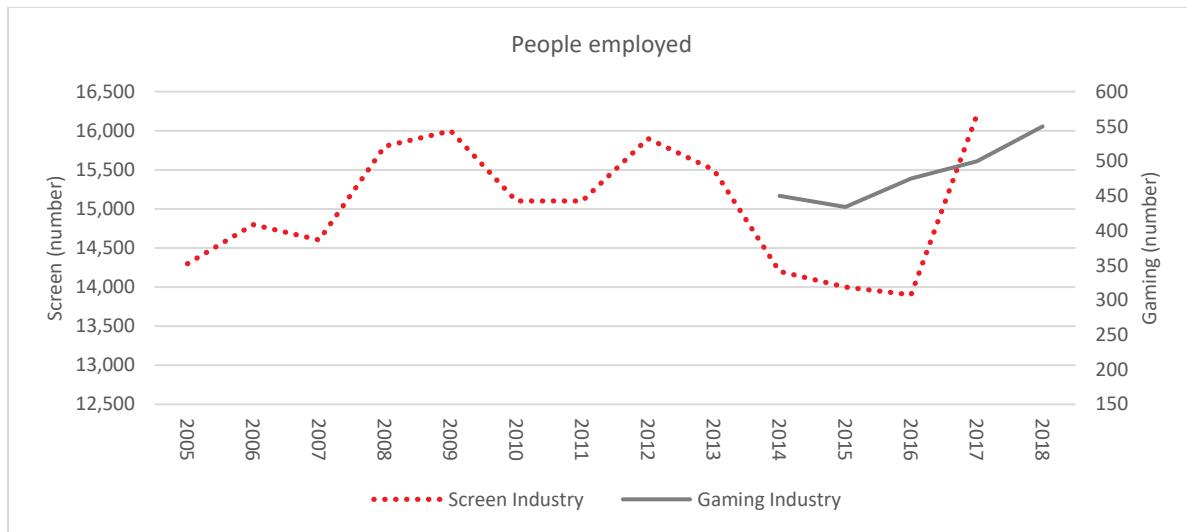
Source: StatsNZ & NZGDA

Note: Screen Industry - Due to changes in sampling methodology, caution should be used when comparing estimates for 2018 with previous years.

Note: Gaming Industry - Values are based on survey feedback from businesses that form part of the New Zealand Game Developers Association (NZGDA).

The level of employment is similarly positive and growing (Figure 2).

Figure 2: Number of jobs, 2005-2018



Source: StatsNZ & NZGDA

The employment in the gaming industry continues to increase annually while the screen industry employment fluctuates between years. Recently, the number of people employed in the screen industry has increased.



ChristchurchNZ™

3.2 THE ECONOMY-WIDE BENEFIT

The economic contribution from the screen industry benefits the economy through activities related to inter alia movies, television, online production and software-based entertainment and has **spill-over effects** on industries such as tourism, arts and culture (NZIER, 2017). The investment made by this industry to produce the output i.e. movies and other entertainment, provides a benefit to the economy through the **forward and backward linkages** associated with the production process.

The contribution of the industry to the New Zealand Economy was estimated to be over \$1 billion in 2015, this represent 0.4% of GDP and a similar size than the wine and forestry industries (NZIER, 2017) while slightly smaller than the accommodation industry in New Zealand (0.56% of GDP in 2015). The sector employed 14 000 people in 2015 which increased to over 16 000 in 2017 (Statistics New Zealand, 2019).

An increase (or decrease) in investment in this industry will be beneficial (detrimental) for the economy as changes in investment will not only impact the industry but also the **related industries** that benefit from activities that support the screen industry.

This industry has a strong link with **exporting**, in other words, a large portion of the output is for the international market, outside of New Zealand where international firms spend money locally by utilising local skills (NZIER, 2017). This points towards a significant **competitive advantage** that this local industry has within the international economy.

The screen industry has many linkages to other industries due to the complex nature of the products produced and the diverse range of inputs required (NZIER, 2017). The economic impact model provided below will show the wide range of industries that will be affected by investment in this industry.

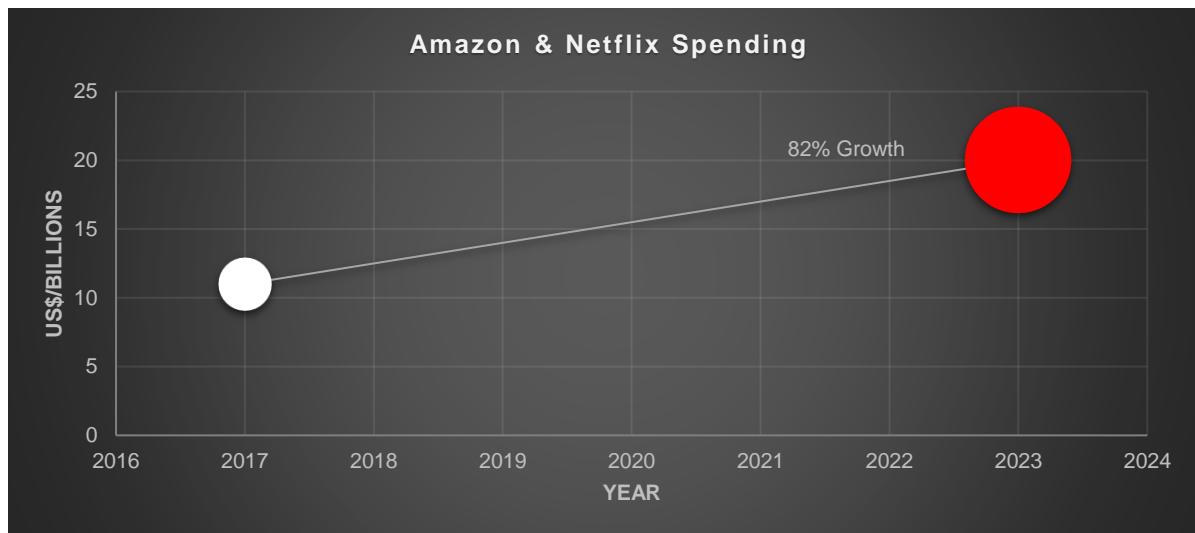
4. International Screen Industry Growth

The international screen and gaming industries are expected to growth. The global film industry shows healthy projections for the coming years, as the global box office revenue is forecast to increase from ±38 billion U.S. dollars in 2016 to nearly 50 billion U.S. dollars in 2020 (Watson A, 2018). This enables film production studios to expand activity and investment in the global economy. With this expected investment increase competition between studios and destinations to attract this investment will intensify. This will take place on an international level between countries such as USA against UK, between locations that share similar locational attributes for example Scotland and New Zealand, and cities with studio infrastructure for instance Los Angeles vs. New York.

Countries, regions and cities that provides good value (i.e. low cost, adequate skills, diverse and unique natural locations and business space), is bound to attract a share of this expanding market. This provides an opportunity for New Zealand and Canterbury to attract new investment and capture some of the international market growth. The increased investment in the screen industry is evident by the investment value by some of the largest role-players such as Amazon and Netflix.

The TV and video analytics firm, Ampere Analysis, estimates that in 2017, Disney spent around \$12 billion on content, NBCUniversal \$11 billion, Netflix \$6 billion and Amazon \$5 billion. Ampere Analysis estimates that this number invested by Amazon and Netflix alone will pass \$20 billion per year by 2023 (Weprin, 2018).

Figure 3: Estimated increased spending by Amazon & Netflix up to 2023



Source: ChristchurchNZ, 2019

5. The Economic Impact Assessment for Canterbury

5.1 FUTURE INVESTMENT & POTENTIAL

The continued growth of the international market for screen entertainment has already provided new opportunities for New Zealand in the form of a new TV series based on the Lord of the Rings (LOTR). Amazon has announced this new series and New Zealand has been identified as a probable location for the production (Theunissen, 2019). Large portions of the original movie series have been filmed in the Canterbury region and it is to be expected that the new series will provide similar opportunities for Canterbury. The value of this series has also been estimated at around NZ\$1.5 billion, significantly more than the original movies (US\$281 million). A significant additional value to the economy can be captured by also attracting the production activities of this series to Canterbury.

The gaming market provides an additional opportunity for Canterbury. The university of Canterbury with financial support from government, is investing \$7.7 million into the gaming industry within Canterbury. The funding will be used to boost the University of Canterbury's Applied Immersive Gaming Initiative, which will research and accelerate public use of immersing gaming applications (University of Canterbury, 2019).

Investment in screen and gaming provides a real opportunity for the Canterbury and Christchurch economies while research initiative and support from national government strengthens the case of Canterbury as an attractive location for the industry.

5.2 ECONOMIC IMPACT

The economic impact assessment aims to illustrate the additional benefit and effect on the Canterbury economy if the region attracts investment in the screen entertainment industry. This will be achieved by promoting Canterbury and Christchurch as an attractive business location for the industry.

The impact assessment considers two strategic interventions for Canterbury namely,

1. The increase in attractiveness of Canterbury (Christchurch) as a business location for the screen entertainment industry which will result in an increased share of industry investment.
2. Attract a portion of the investment to Canterbury for the recently announced Lord of the Rings series by Amazon.

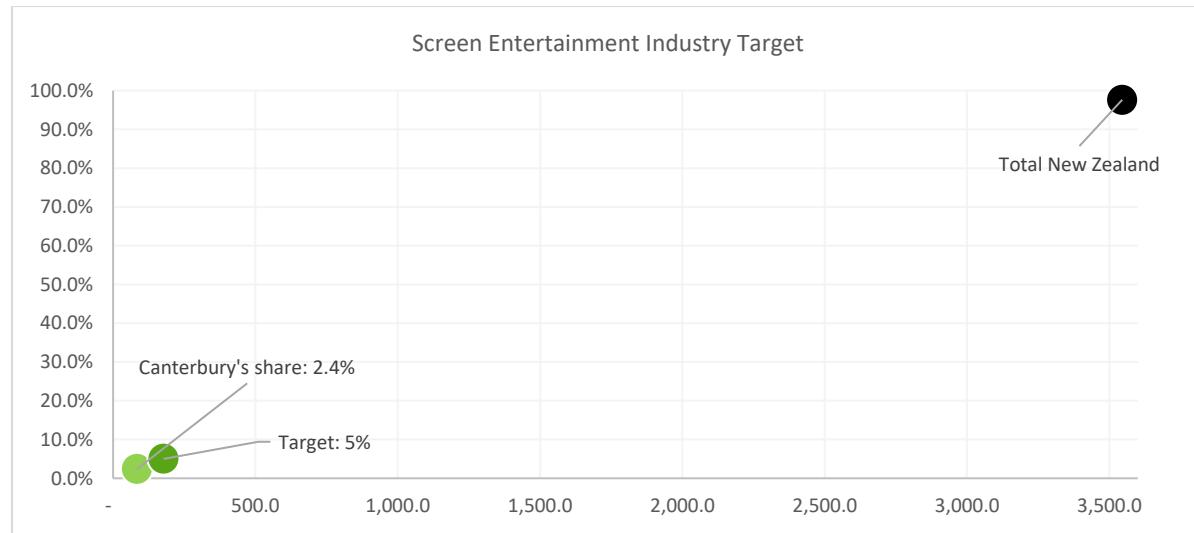
5.2.1 Increased Canterbury Attractiveness

The assessment considers the following specific assumptions:

- The 2017 economic structure of the Canterbury economy is used to quantify the impact.
- The impact represents additional investment in the economy i.e. additional to what the economy 'normally' produce.
- Screen industry
 - Attract a share of 5%, up from 2.4%, of national industry investment to Canterbury.
- Gaming industry
 - Attract an additional 5% of new business sales of New Zealand to Canterbury to increase the national share to 15%. It is assumed that Canterbury is currently contributing around 10% of production of the gaming industry.

Figure 4 shows the current share of the Canterbury.

Figure 4: Target: Canterbury Screen Entertainment Industry



Source: ChristchurchNZ, 2019

The value of the economic impact is summarised below.



ChristchurchNZ™

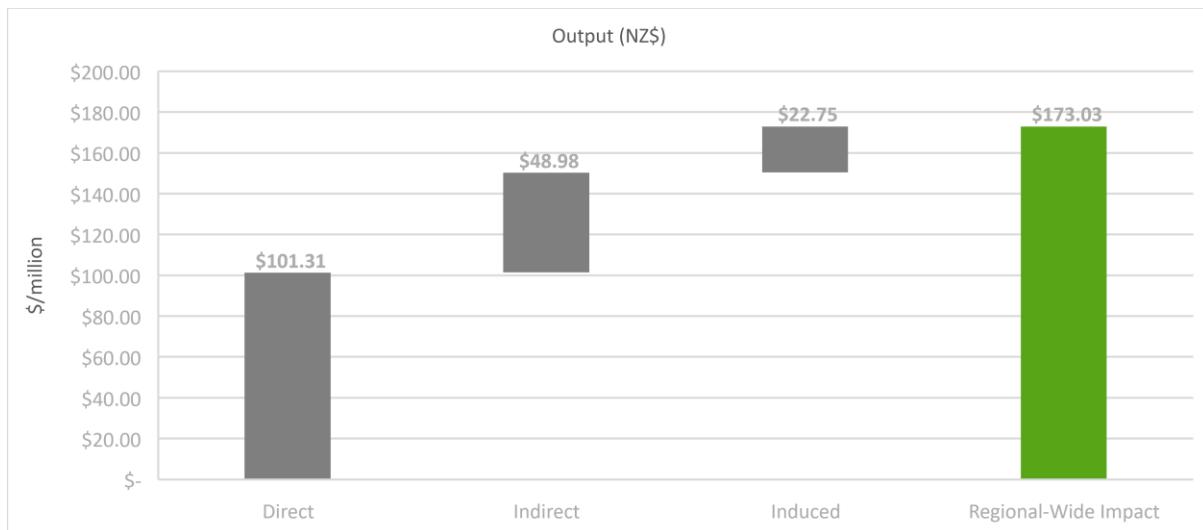
Table 1: Total Economic Impact, 2017 Values

Target for Canterbury	Total Impact	
Screen Industry share of 5% (+\$75 mil)	\$173 million	Output/Sales
Gaming industry share of 15% (+\$4.7 mil)	\$78 million	Gross Value Added
	703	jobs

Source: ChristchurchNZ, 2019

Table 1 shows that an increase in the share of Canterbury to the screen entertainment industry would create \$173 million in additional sales, \$78 million in additional GVA and 703 new jobs throughout the region. Figures 5 to 7 shows a detailed breakdown of the impact for the Canterbury economy.

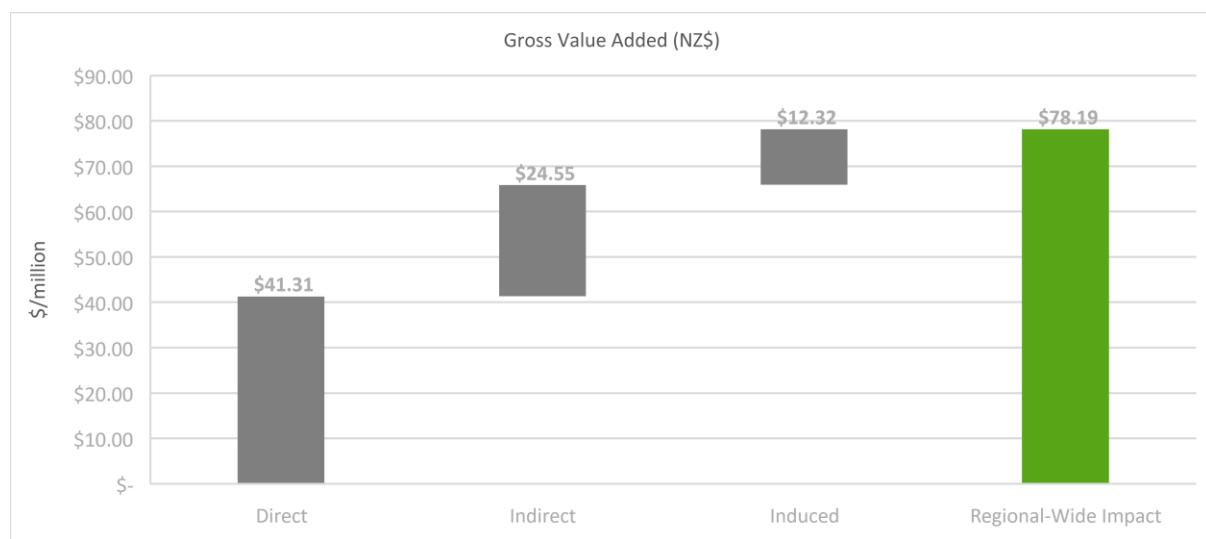
Figure 5: Additional Output/Sales



Source: ChristchurchNZ, 2019

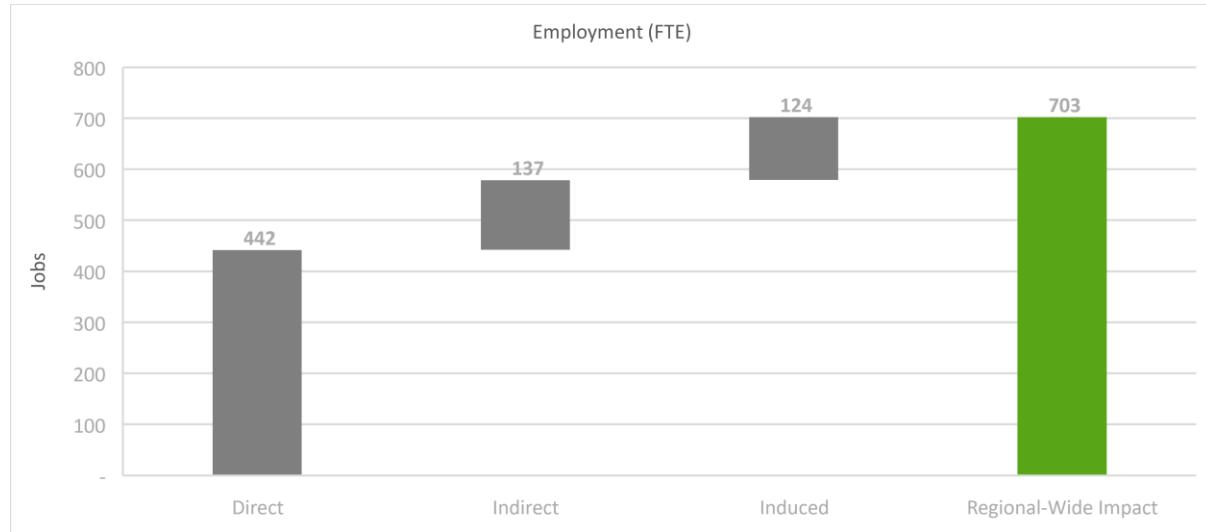


Figure 6: Additional Gross Value Added (GVA)



Source: ChristchurchNZ, 2019

Figure 7: Additional Employment



Source: ChristchurchNZ, 2019



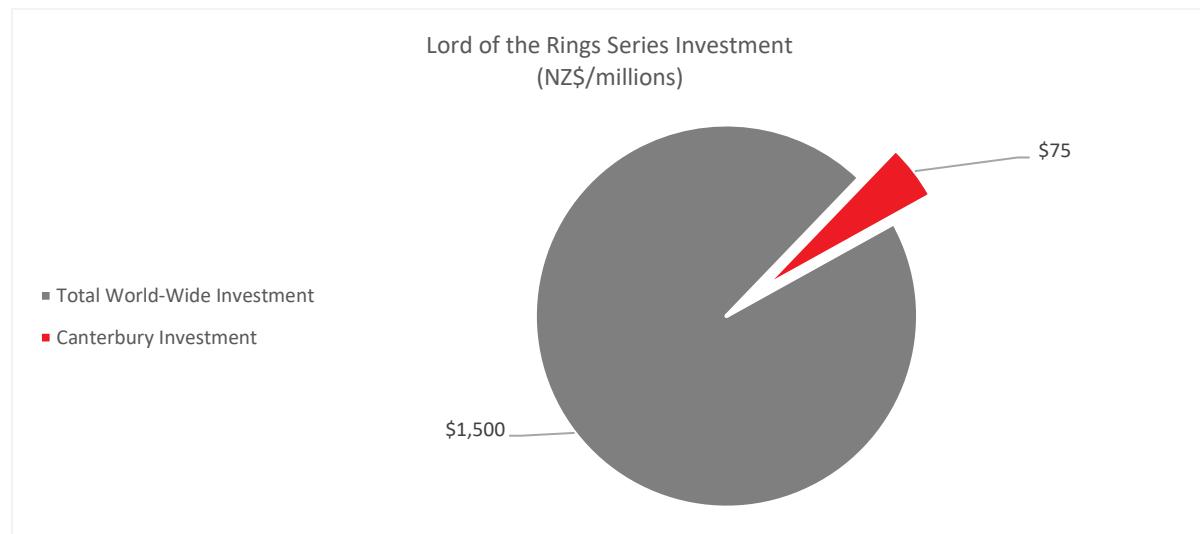
ChristchurchNZ™

5.2.2 The Lord of the Rings Series

The assessment considers the following specific assumption:

- Attract a total of 5% share of the total investment value from Amazon earmarked to be spent in for the Lord of the Rings series. This value is in line with recent screen industry expenditure in the Canterbury region.
- The distribution of spending on the various activities is apportioned to align with the economic impact assessment report of The Last Samurai that was partially filmed in Taranaki (Venture Taranaki, 2004).
- The economic value represents a once-off value impact i.e. only for the duration of the project.

Figure 8: Economic Impact on Additional Output/Sales



Source: ChristchurchNZ, 2019

Table 2 shows that a 5% share of the Lord of the Ring series in Canterbury would create \$124.7 million in additional sales, \$59.8 million in additional GVA and 640 new jobs throughout the region. Figures 9 to 11 shows a detailed breakdown of the impact for the Canterbury economy.

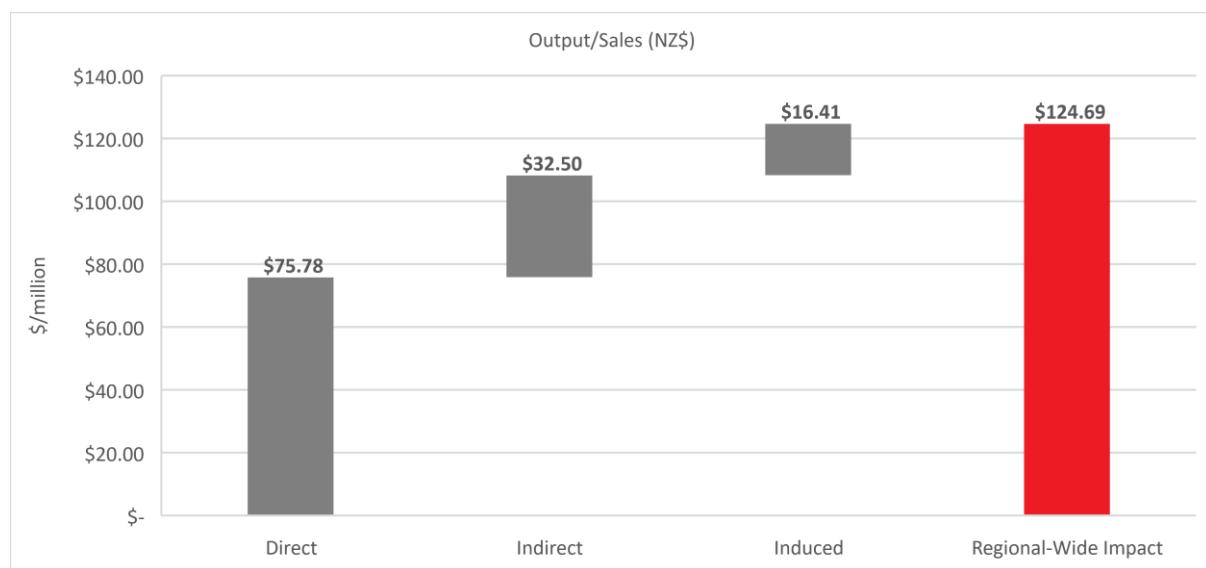
Table 2: Total Economic Impact, 2017 Values

Total World-Wide Investment	Target for Canterbury	Total Impact	
NZ\$1.5 billion	\$75 million (5%)	\$124.7 million	Output/Sales
		\$59.8 million	Gross Value Added
		640	jobs

Source: ChristchurchNZ, 2019



Figure 9: Additional Output/Sales



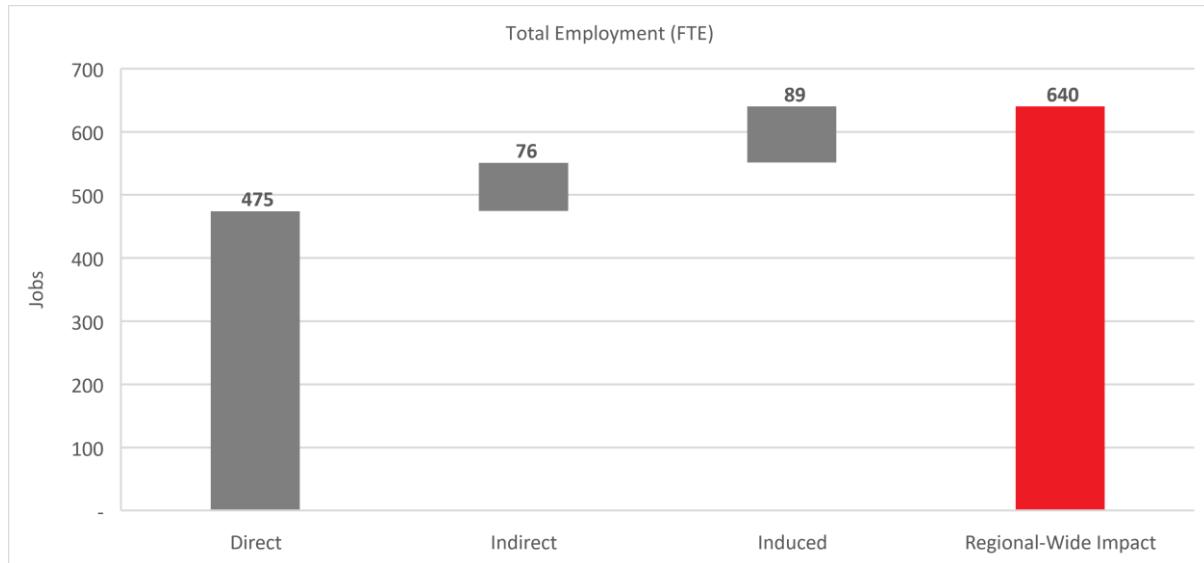
Source: ChristchurchNZ, 2019

Figure 10: Additional Gross Value Added (GVA)



Source: ChristchurchNZ, 2019

Figure 11: Additional Employment



Source: ChristchurchNZ, 2019

6. Conclusion

The screen entertainment industry shows signs of continued expansion driven by an increase in demand from consumers. New Zealand has, in the past, established itself as an ideal destination that can successfully attract and produce outputs in this industry. This provides an ideal opportunity for Canterbury to strengthen and increase its share and contribution in the market. The Canterbury region has successfully been used, recently, and in the past, as a destination for major filming. These examples include, Narnia, The Lord of the Rings and recently, Mulan (to be released in 2020). Providing the infrastructure to lure new screen entertainment industries to Christchurch would benefit the regional economy. This economic benefit of the two scenarios presented in this report namely, i) increasing Canterbury's industry spending share and ii) attracting a share of the LOTR series, is new employment totalling 1,343 and \$138 million of additional GVA that will follow. It is also well-known that the tourism benefit associated with filming has contributed significantly to the New Zealand economy and Canterbury can benefit from this.

References

New Zealand Game Developers Association (NZGDA). 2019. NZ Game Studio revenues grow 43% to a record \$143M, but new startups are missing out. <https://nzgda.com/category/news/> Accessed 16 July 2019.

New Zealand Institute of Economic Research (NZIER). 2017. The economic contribution of the screen industry. <https://nzier.org.nz/publication/the-economic-contribution-of-the-screen-industry>. Accessed 16 July 2019.

Statistics New Zealand (StatsNZ). 2019. Screen Industry 2017/2018. <https://www.stats.govt.nz/information-releases/screen-industry-201718> Accessed 17 July 2019.

Theunissen, M. 2019. 'Very high-level talks' secure filming for Lord of the Rings TV series. <https://www.rnz.co.nz/news/national/393416/very-high-level-talks-secure-filming-for-lord-of-the-rings-tv-series> Accessed 18 July 2019.

University of Canterbury (UC). 2019. UC's \$7.7m boost to NZ immersive gaming sector. <https://www.canterbury.ac.nz/news/2019/ucs-77m-boost-to-nz-immersive-gaming-sector.html> Accessed 16 July 2019.

Venture Taranaki. 2004. Economic impact assessment for the filming of The Last Samurai in Taranaki. *Unpublished*.

Walls, J. 2019. Announcement on Amazon producing the Lord of the Rings TV show in NZ is 'imminent'. https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12245833 Accessed 25 July 2019.

Watson, A. 2018. Statista. Film Industry - Statistics & Facts. <https://www.statista.com/topics/964/film/> Accessed 17 July 2019.

Weprin, A. 2018. Netflix, Amazon Streaming Content Spend To Double In 5 Years. <https://www.mediapost.com/publications/article/324949/netflix-amazon-streaming-content-spend-to-double.html> Accessed 19 July 2019.