



OXFORD
ECONOMICS



ECONOMIC IMPACTS OF *THE UMBRELLA ACADEMY*

SEASON TWO IN ONTARIO

**A REPORT FOR THE MOTION
PICTURE ASSOCIATION - CANADA**

JUNE 2022



TABLE OF CONTENTS

Executive summary	3
1. Introduction	5
2. Production spending	7
3. Economic impacts	11
3.1 Channels of impact	11
3.2 Total impact	12
3.3 Direct impact	14
3.4 Indirect impact	16
3.5 Induced impact	16
4. Wider impacts	19
4.1 Facilities and infrastructure	19
4.2 Film-induced tourism	19
4.3 Personal spending from out-of-province cast and crew	19
Appendix: methodology	21



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EXECUTIVE SUMMARY

"The Umbrella Academy" is a live-action series that follows the estranged siblings of a dysfunctional family with extraordinary powers based on comic books created and written by Gerard Way. The UCP production of Season Two employed hundreds of people across Ontario, generating considerable economic activity locally. The show's production also supported activity in a wide range of industries through its procurement, and as those employed by the production itself and in its supply chain spend money in the wider economy.

This study, commissioned by the Motion Picture Association - Canada, analyzes the production's total economic impacts in Ontario around the time of filming in 2019. The study also considers the wider impact on Ontario by boosting film-induced tourism and temporarily attracting workers from other parts of the world.

In 2019, **production of Season Two of *"The Umbrella Academy"* resulted in total spending in Ontario of over C\$77.3 million.¹** Spending on wages and salaries for local production crew and other labor was the main expenditure item, making up 59% of the total expenditure. The remaining **C\$31.9 million was spent with at least 980 Ontario-based suppliers of goods and services**, with Toronto, Mississauga, Ajax and Hamilton being the cities that received the largest amounts in business spending.

We calculate that expenditure by **the production of Season Two of *"The Umbrella Academy"* stimulated a C\$111 million contribution to Ontario's GDP in 2019.** This result equates to 1% of Prince Edward Island's GDP in that same period. We find that for every C\$1 million that the production's own activities contributed to the economy, its expenditure supported a further C\$1.4 million along its supply chain and through the payment of wages.

We find that the expenditure undertaken by **the show's production stimulated a total of 1,120 FTE jobs in Ontario in 2019.** This is equivalent to 2% of all FTE employment in the agriculture sector in Ontario. For every 100 people the production directly employed, its expenditure stimulated another 80 jobs across the province.

C\$111m

Total contribution to Ontario GDP supported by Season Two of *"The Umbrella Academy"*

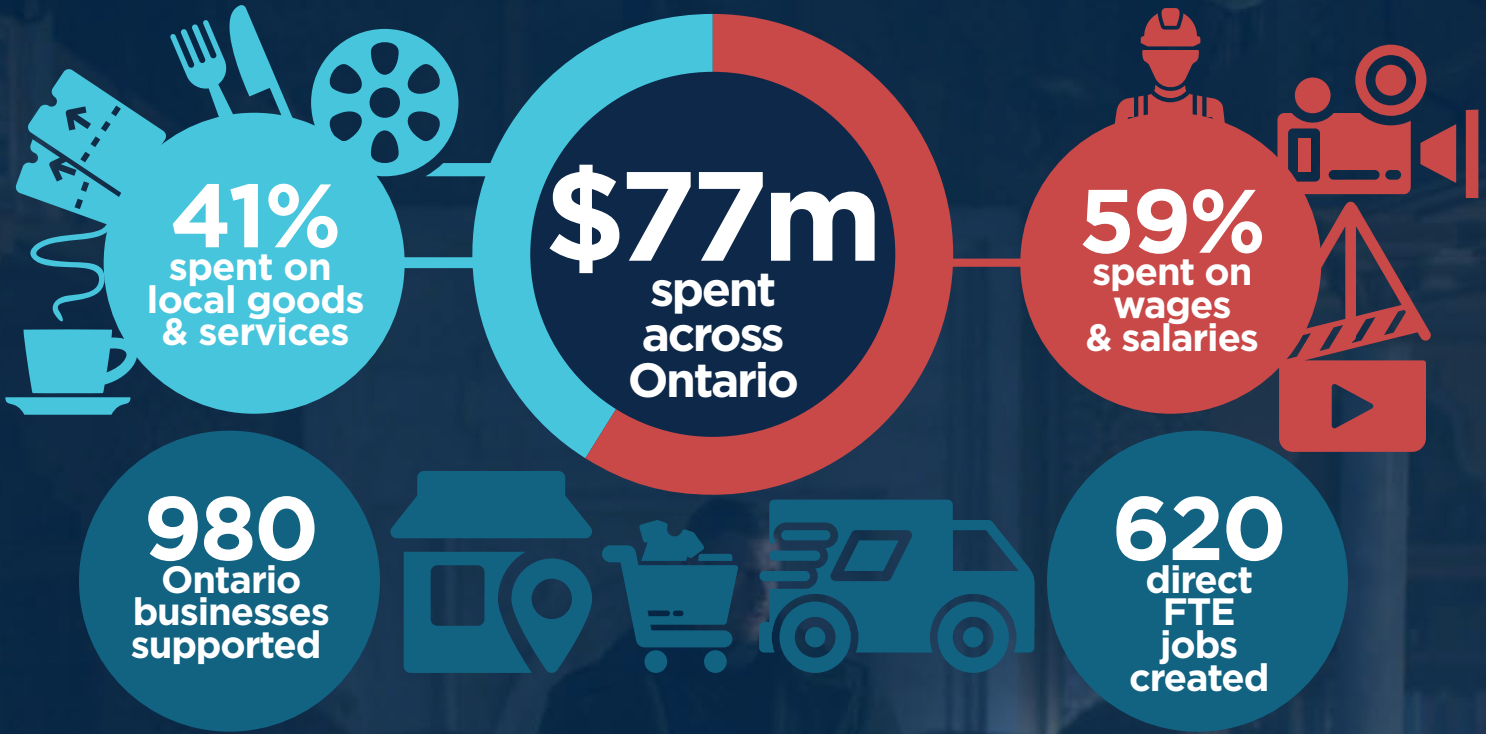
1,120 FTE

Jobs supported across Ontario as a result of Season Two of *"The Umbrella Academy"*

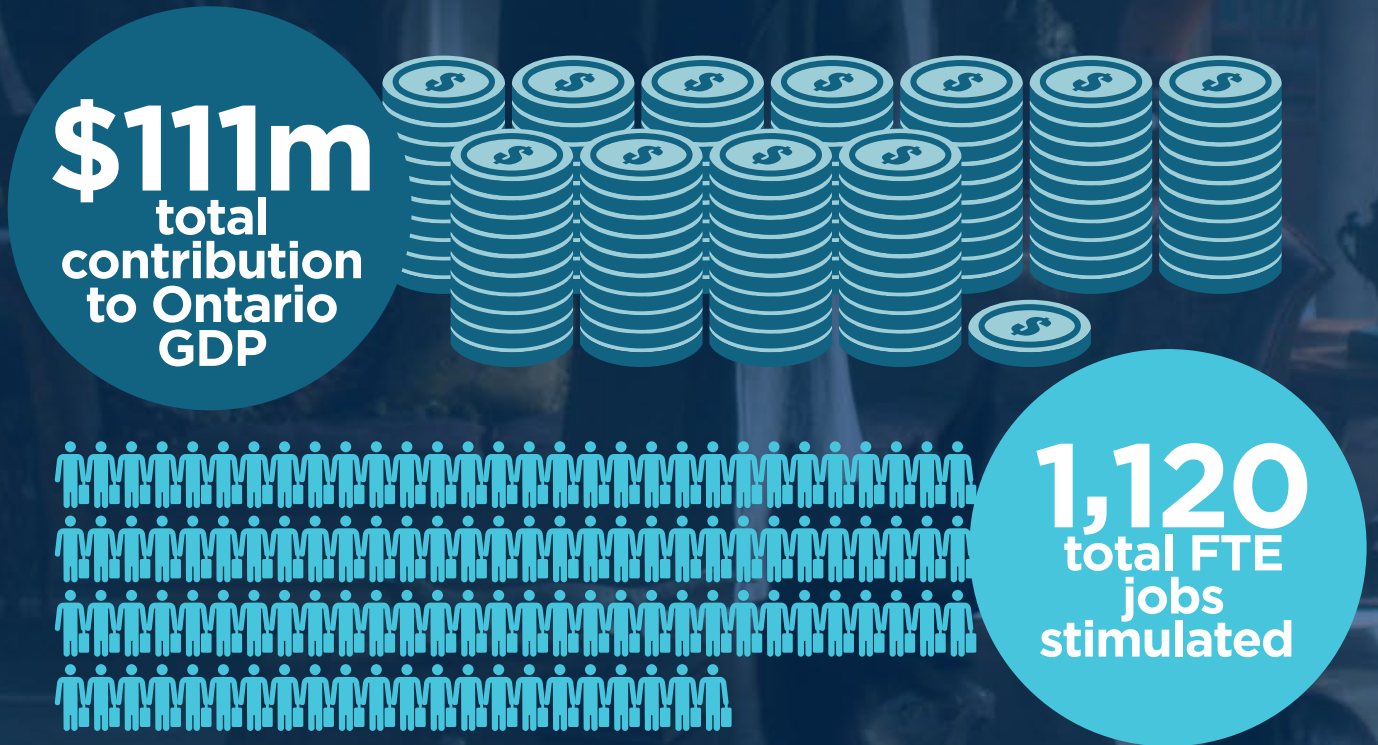
¹ Throughout this report, the currency unit is Canadian Dollars (C\$).

THE ECONOMIC IMPACT OF THE UMBRELLA ACADEMY SEASON TWO IN ONTARIO

DIRECT IMPACT OF PRODUCTION



INDIRECT IMPACT OF PRODUCTION



1. INTRODUCTION

“The Umbrella Academy” is a live-action series that follows a group of reunited siblings with special powers. The storyline is based on comic books written by Gerard Way, illustrated by Gabriel Bá, and published by Dark Horse Comics. The second season of the show continues from the first season as a time jump scatters the Umbrella Academy who must find a way to reunite, figure out what caused doomsday, put a stop to it, and return to the present timeline to stop that other apocalypse.

The second season is set in Dallas, Texas, but was filmed in Ontario, Canada, and in Toronto and Hamilton specifically. Although filming was concentrated to a few localities, the series employs businesses and individuals across Ontario, contributing to the larger provincial economy.

Season Two of the show was filmed from June 2019 through to November 2019 and was released on July 31, 2020. Through the production of the full season, significant economic impacts were created for Ontario residents and businesses.

Oxford Economics was engaged by the Motion Picture Association - Canada to conduct an independent economic impact assessment of the production of the show on Ontario’s economy. For the study, Oxford Economics used data from NBC Universal to estimate the economic impacts in Ontario arising from the production of Season Two. Season Three of the series has wrapped up filming. Assuming that the level and pattern of production spending for Seasons One and Three were similar to Season Two, the estimated economic impacts generated over the life of the series (i.e., Seasons One through Three) could be expected to total roughly three times that from Season Two.



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2. PRODUCTION SPENDING

When a TV show shoots on location, it brings with it jobs, revenue, and related infrastructure development. Physical productions provide an immediate boost to the local economy, fostering job creation and innovation in other industries across the production supply chain. In 2019, production of Season Two of *“The Umbrella Academy”* resulted in **total spending in Ontario of just over C\$77.3 million.**

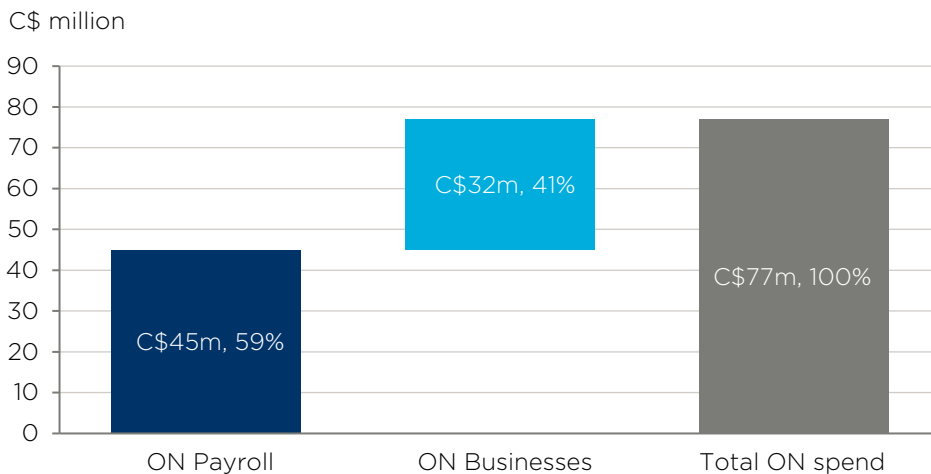
Spending on wages and salaries for local production crew and other labour was the main expenditure item, making up 59% of the total expenditure (Fig. 1). The remaining C\$31.9 million was spent with Ontario-based suppliers of goods and services.

C\$77m

Direct production expenditure in Ontario

Spending on Ontario production crew and qualifying labour was C\$45 million, while local spending on goods and services was C\$32 million

Fig. 1: Production spend of Season Two of *“The Umbrella Academy”* in Ontario, by type



Source: NBC Universal, Oxford Economics

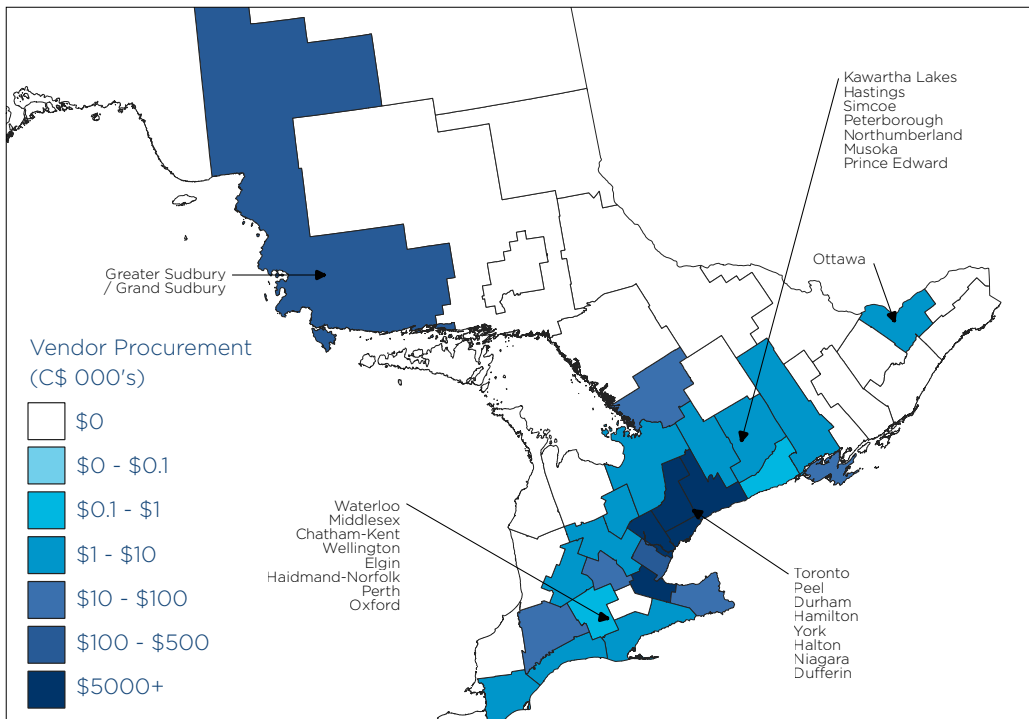
Season Two production spending engaged over 980 businesses from communities across all of Ontario. The localities that received the largest amounts in business spending were in Toronto, Peel, Durham, and Hamilton as shown in Fig. 2 below. A more detailed breakdown of the specific census subdivisions within those localities that received the most spending are in Fig. 3.

The production of TV shows typically relies on a wide range of goods and services that are required for production, from the

procurement of props and costumes to transportation and accommodation for cast members. Production of Season Two of *“The Umbrella Academy”* engaged a wide variety of Ontario-based businesses, including local retailers, production facilities, security companies, equipment rental companies, dry cleaners, hotels and restaurants, catering companies, automobile rental companies, alteration and repair companies, legal services, healthcare services, and utilities and waste management businesses. Close to 36% of the local

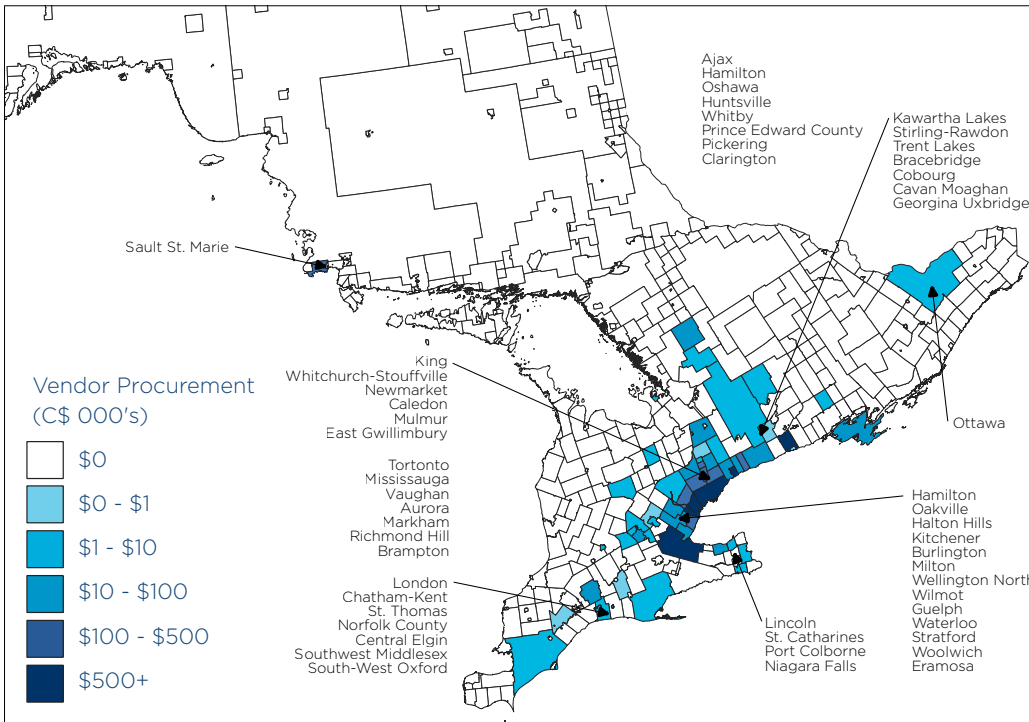
spending went to suppliers in the rental and leasing industry (C\$11.4 million) while 21% of production expenditure included suppliers in the information and cultural sector (C\$6.7 million).

Fig. 2: Map of spending with Ontario-based businesses by census division



Source: NBC Universal, Oxford Economics

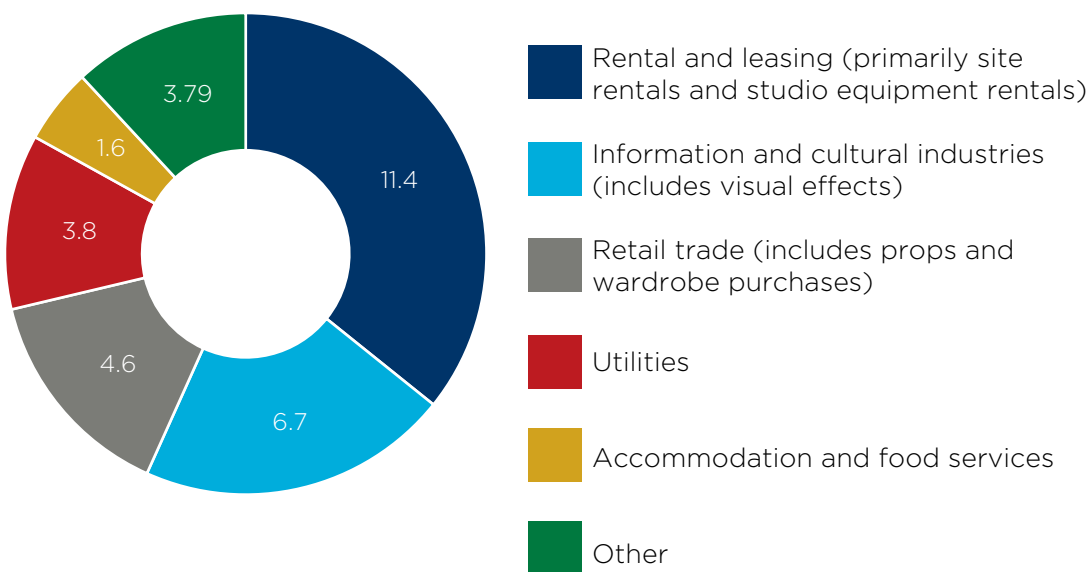
Fig. 3: Map of spending with Ontario-based businesses by census subdivision



Source: NBC Universal, Oxford Economics

Fig. 4: Spend on goods and services with Ontario-based suppliers, by industry

C\$ Million



Source: NBC Universal, Oxford Economics

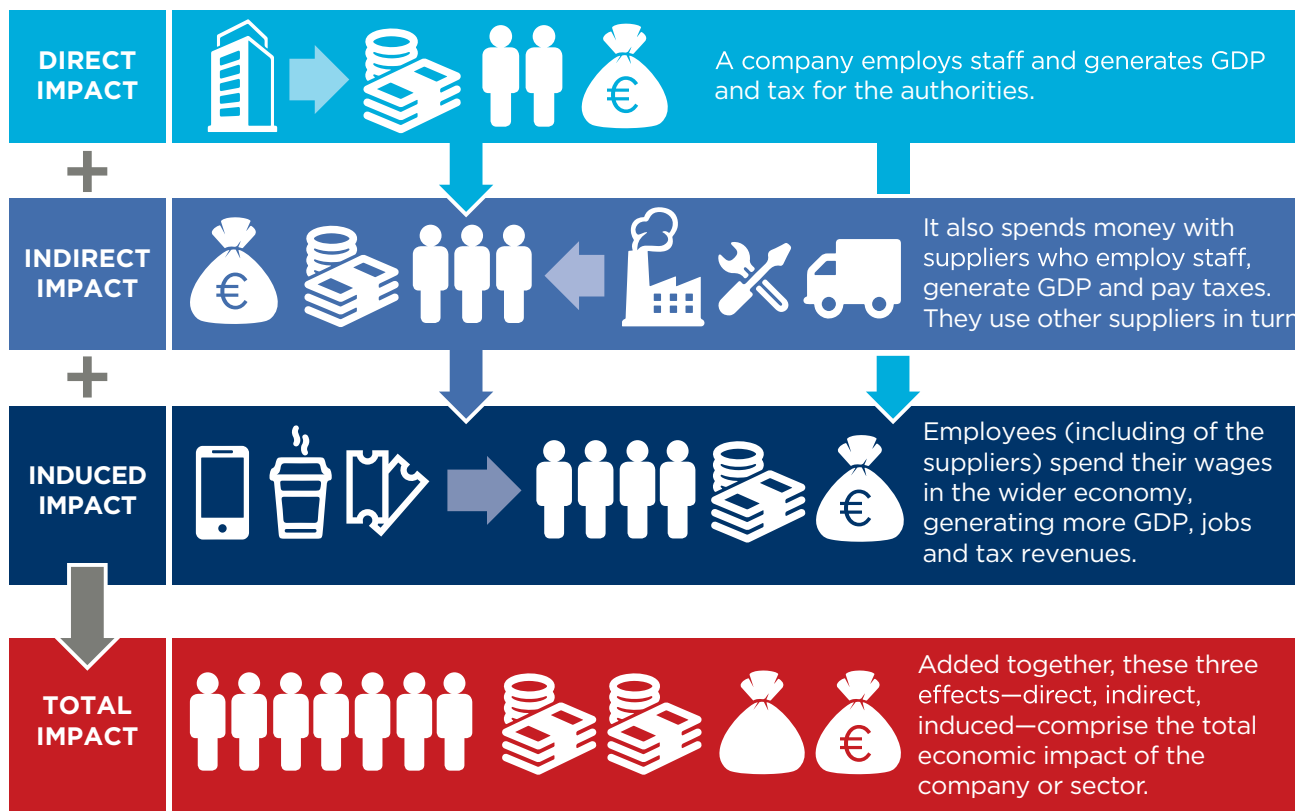


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3. ECONOMIC IMPACTS

3.1 CHANNELS OF IMPACT

The impact of the filming of Season Two of *“The Umbrella Academy”* on the Ontario economy is calculated using an economic impact assessment. This involves quantifying the production’s economic contribution to Ontario across three channels of expenditure, where the total impact is the sum of the three channels.



Source: Oxford Economics

C\$111m

Total contribution to Ontario's GDP supported by Season Two of "The Umbrella Academy"

3.2 TOTAL IMPACT

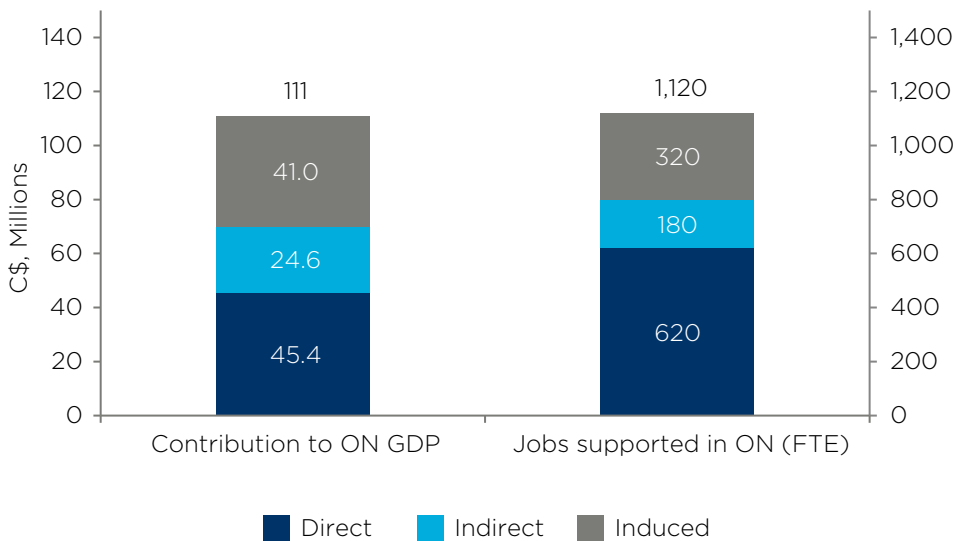
Combining all channels of impact, we find that Season Two of "The Umbrella Academy" supported a C\$111 million contribution to Ontario's GDP in 2019. Some C\$45.4 million, or 41%, of this was generated by the production itself (direct). The local spending on goods and services supported another C\$24.6 million along the Ontario supply chain (indirect), which represented 22% of the total. The payment of wages by the production studios and the Ontario-based firms in the show's supply chain (induced) stimulated a further C\$41 million contribution to GDP, or 37% of the total (Fig. 4). To put the scale of the show's total

economic impact into context, this \$111 million contribution is equivalent to 1% of Prince Edward Island's GDP or to 91% of the size of the entire computer and peripheral equipment manufacturing sector in Canada for the same period.

For Season Two of "The Umbrella Academy", for every C\$1 million in direct GDP generated by the production's own activities, its expenditure supported a further C\$1.4 million around Ontario through its expenditure at the province level.

The production of the show also had a significant impact on employment in Ontario. In 2019, Season Two of "The Umbrella Academy" supported

Fig. 5: The total GDP and employment contribution supported by Season Two of "The Umbrella Academy" in Ontario, by channel of impact



Source: Oxford Economics

a total of 1,120 FTE jobs across Ontario. The production itself employed an estimated 620 FTE workers, or 55% of the total. The local spending on goods and services supported another 180 FTE jobs along the Ontario supply chain or 16% of the total. A further 320 FTE jobs, or 29% of the total, were supported by the spending of wages by production crews and employees at the show's suppliers in the province.

To give a sense of scale, the total employment supported by Season Two of *"The Umbrella Academy"* in Ontario was equivalent to 2% of all FTE employment in the agriculture sector in Ontario.

In 2019, for every 100 people employed in the production itself, a further 80 jobs were supported across the province through secondary effects.

According to NBC Universal, Season Two of *"The Umbrella Academy"* is estimated to have benefitted from nearly C\$5.7 million in federal tax incentives and \$18.5 million in provincial tax incentives. The incentives provided by the Government of Ontario are estimated to have produced C\$6 in provincial GDP per dollar of Ontario tax incentive received by the production.

The remainder of this section describes the three channels of impact in more detail.

3.3 DIRECT IMPACT

During the production period, Season Two of *"The Umbrella Academy"* directly employed an estimated 620 full-time equivalent (FTE) workers in Ontario.

We estimate that *"The Umbrella Academy"* production made a C\$45.4 million direct contribution to Ontario GDP in 2019, which came from the payment of employee compensation to Ontario-based staff.²

1,120 FTE

**Jobs supported across Ontario
as a result of Season Two of
*"The Umbrella Academy"***

² The contribution to GDP generated by a company or a project can be calculated as the sum of its surplus (profits) and employee compensation. This approach, known as the income approach, is consistent with the principles of national accounting. In this case, we assume that the profits do not accrue as GDP in Ontario because NBC Universal is headquartered in the US and is therefore likely to repatriate its profits. Employee compensation of local workers, instead, directly contributes to Ontario and Canada's GDP.

3.4 INDIRECT IMPACT

The production's positive contribution to Ontario's economy, however, extends past the contribution it makes directly through its own operations. This is related to the purchases of goods and services made from other firms in order to produce the show. This spending stimulates additional economic activity along the Ontario supply chain. This is referred to as the indirect impact.

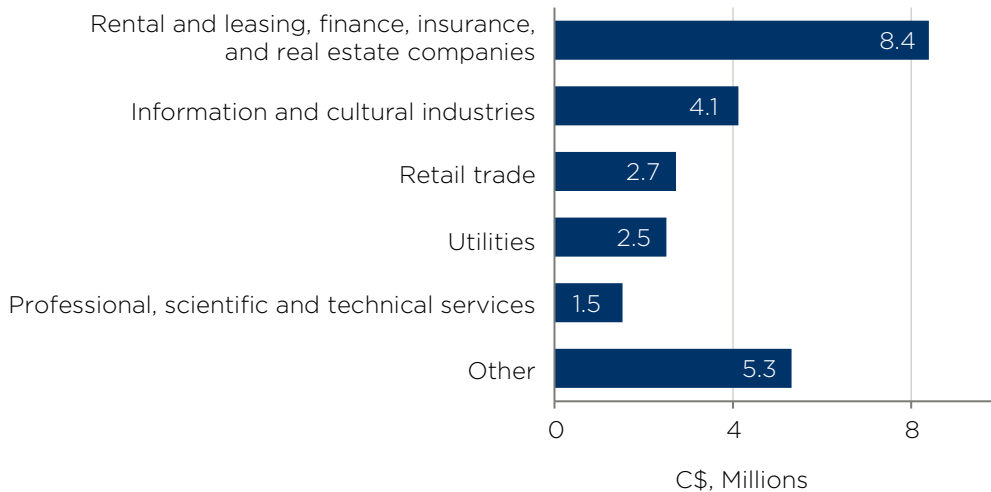
Using Statistics Canada's input-output table for Ontario and the Season Two production expenditure data (excluding payroll) provided by NBC Universal, Oxford Economics estimated that the procurement associated with "*The Umbrella Academy*" Season Two stimulated a C\$24.6 million contribution to Ontario GDP along the supply chain.

Over half of this indirect impact was in the rental and leasing and information

and cultural sectors, where the show's supply chain spending stimulated a GDP contribution of C\$8.4 million (34%) and C\$4.1 million (17%), respectively (Fig. 5).

The show's expenditure on inputs of goods and services from Ontario-based suppliers also stimulated 180 FTE jobs in the province.

Fig. 6: GDP contribution stimulated by the procurement of goods and services from Ontario suppliers, by industrial sector



Source: Oxford Economics

3.5 INDUCED IMPACT

During the production period, UCP paid local labor C\$45.4 million in gross wages and salaries. In addition to this, the people whose jobs are stimulated by the local spending on goods and services are also paid additional wages and salaries.

Production crews, and workers employed throughout the supply chain, spend a proportion of their wages at

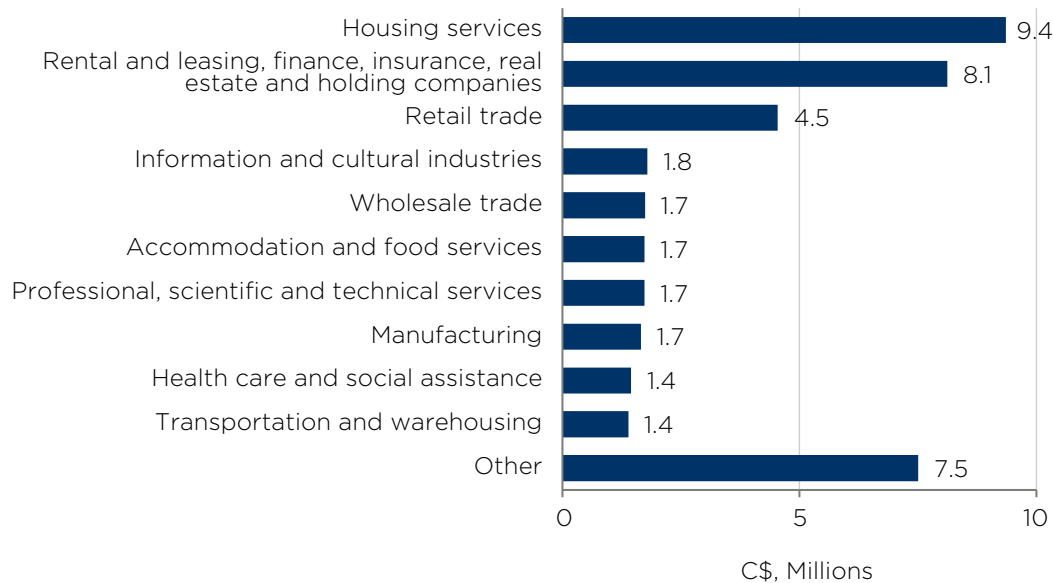
retail, leisure, and other outlets in Ontario. This stimulates economic activity and employment at these firms, but also along their supply chains. This is referred to as the show's induced impact.

We estimate the wage-financed spending of local production crews and workers at Ontario-based suppliers stimulated a C\$41 million contribution to Ontario GDP during the production period. Of this figure, a combined 43%

of this occurred in the housing and financial services sectors, where GDP contributions of C\$9.4 million and C\$8.1 million were stimulated, respectively (Fig. 6).³

We estimate the wage financed consumer spending of production crews and workers within the show's supply chain supported 320 FTE jobs across Ontario in 2019.

Fig. 7: GDP contribution stimulated by the payment of wages to Ontario-based workers, by industrial sector



Source: Oxford Economics

³ Housing services here include the housing costs paid to rent an accommodation, or the imputed rent if the household owns the dwelling it occupies.



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4. WIDER IMPACTS

In addition to the economic impacts that arise through production spending, television series such as *“The Umbrella Academy”* can produce impacts that extend beyond the jobs and GDP they support.

4.1 FACILITIES AND INFRASTRUCTURE

The burgeoning film industry in Canada, specifically in Ontario, has attracted increased job opportunities and investments outside of specific TV productions. Unused or vacant facilities and buildings can be converted into increased studio space, as can be seen in the case of one of the filming locations for *“The Umbrella Academy”*. For example, Cinespace Film Studios continues to grow its physical and economic presence and is expected to expand even further in the coming years.⁴

4.2 FILM-INDUCED TOURISM

As it is often the case when existing buildings and facilities are used as filming locations, many localities around Toronto may start attracting visitors and fans of the show as a result of the filming. Film induced tourism is a well-known phenomenon and it has increasingly been viewed as an important component of tourism marketing.⁵ City tourist guides often include filming locations of popular TV series.⁶

4.3 PERSONAL SPENDING FROM OUT-OF-PROVINCE CAST AND CREW

In addition, TV shows productions bring non-resident workers to a city/region. While this is not counted as part of the economic footprint of the show, it is important to acknowledge that this could support further economic impacts. For example, non-resident cast members may spend part of their compensation locally to visit local attractions or leisure outlets in their spare time. They may even receive visits from friends and relatives while in the region, thereby supporting further economic activity.

While we have not measured the wider impacts of the production of *“The Umbrella Academy”* in this study, it is worth observing that film and TV productions can also create additional economic, community and social benefits. These may comprise the creation of job openings for apprentices or students, the development of business ventures, the formation of spin-off firms, and contributions to community and culture.

⁴ See for example, Andrea Yu (2021) Toronto Life: The local film and TV industry is booming.

⁵ See for example, Jeeyeon (Jeannie) Hahn & Youcheng Wang (2011) Film-Induced Tourism as a Vehicle For Destination Marketing: Is it Worth the Efforts?, *Journal of Travel & Tourism Marketing*, 28:2, 165-179 or Beeton, Sue. “Understanding film-induced tourism.” *Tourism analysis* 11, no. 3 (2006): 181-188.

⁶ See for example, Tourism Hamilton: Umbrella Academy Hamilton Locations.



APPENDIX: METHODOLOGY

The impact of the filming of Season Two of *“The Umbrella Academy”* on the Ontario economy is calculated using an economic impact assessment. This involves quantifying the production’s economic contribution to Ontario across three channels of expenditure. The channels of impact are:

- **Direct impact** – relates to the employment and economic activity generated at the filming locations across Ontario.
- **Indirect impact** – captures the economic activity stimulated by the procurement of inputs of goods and services from Ontario-based supply chain.
- **Induced impact** – comprises the wider economic benefits that arise from the payment of wages by the television series, and the firms in its Ontario supply chains, to staff who spend a proportion of this income in local retail, leisure, and other outlets.

The total impact is the sum of the three channels.

This approach enables us to build a picture of the series’ overall contribution to Ontario across two key metrics:

- The gross value-added contribution to Ontario GDP.⁷
- Employment measured on a FTE basis.

The results are presented on a gross basis. They therefore ignore any displacement of activity from other firms or activities. Nor do they consider what the resources currently used by the show’s production, or stimulated by its expenditure, could alternatively produce in their second most productive usage.

Data on the direct impact of *“The Umbrella Academy”* Season Two—including the show’s contribution to GDP and jobs created—were provided directly by NBC Universal. Direct GDP contribution in Ontario is taken to be equal to local employee compensation.

To estimate the indirect and induced GDP impacts of the show, Oxford Economics used the 2017 Statistics Canada provincial input-output table for Ontario (the latest available). A basic domestic input-output table gives a snapshot of an economy at a given point in time. The model shows the major spending flows from “final demand” (i.e., consumer spending, government spending, investment, and exports to the rest of the world); intermediate spending patterns (i.e., what each sector buys from every other sector—the supply chain in other words); how much of that spending stays within the domestic/ provincial economy; and the distribution of income between employment income and other income (mainly profits). In essence, an input-output table shows who buys what from whom in the economy.

To estimate the indirect impact, we used vendor-level information on the amount spent and type of goods and services purchased from Ontario-based businesses over the course of the production of Season Two. In order to calculate the induced impact, we took the figures for wages paid to workers, as provided by NBC Universal, and then allocated those to the sectors where they would have spent those wages in line with the proportions in the Ontario input-output table. We then used those figures to show how many dollars of GDP the show’s production supported in the Ontario economy for every C\$1 of direct GDP contribution; and how many jobs were stimulated across the province for each 100 people directly employed on the production.

⁷ Where GDP is the main indicator of economic activity in Canada. It is used to measure the rate of growth or decline of the economy, and when it enters a recession.

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