

---

# ***Economic Assessment of the Film and Television Production Industry in Nova Scotia***

April 13, 2016



---

# Contents

---

1. Executive Summary	2
2. Introduction	4
2.1 Mandate	4
3. Scope of Review	5
4. The Role of Cultural Industries in Creating and Maintaining Growth and Prosperity	6
5. Demographics and Economy of Nova Scotia	8
5.1 Summary of Key Trends for the Nova Scotia Demographics and Economy	8
5.2 The Implications for Nova Scotia	9
6. Overview of the Screen Industry in Nova Scotia	10
6.1 Industry Overview	10
6.2 Funding	12
7. Economic Impact of Screen Industry in Nova Scotia	16
7.1 Employment	17
7.1.1 Direct Jobs	17
7.1.2 Indirect and Induced Jobs	18
7.2 Labour Income	18
7.3 GDP	18
7.4 Government Funding	18
8. Characteristics of the Individuals Involved in the Screen Industry in Nova Scotia	21
9. Additional Benefits of the Screen Industry to Nova Scotia	25
Appendix A: Limitations	1
Appendix B: Background on the Economy of Nova Scotia	2
Appendix C: Survey Questions	7
Appendix D: List of Articles	8

---

# 1. *Executive Summary*

PwC has been retained by the Canadian Media Producers Association and Screen Nova Scotia to provide an independent assessment of the role of the Screen Industry in the economy of Nova Scotia. In doing so, our mandate (described in Section 2) focused on considering the economic benefits created by the Screen Industry, its economic footprint, positive externalities and specific characteristics of its work force.

We note that our assessment was limited to identifying the benefits provided by the Screen Industry to Nova Scotia and has not attempted to analyse whether there are other viable alternatives for the provincial government funding (i.e., tax credits and provincial incentives) provided to the Screen Industry elsewhere in the economy of Nova Scotia, the benefits of such alternatives and how they compare to benefits provided by the Screen Industry. Our Assessment should therefore not be seen as policy advice as to how the government of Nova Scotia should deal with the Screen Industry in the future.

The following is a summary of our principal findings subject to the nature of our mandate, scope of review and the limitations noted in Appendix A of this report.

The Film and Television Production Industry (“Screen Industry”) is an integral and important component of the rapidly developing international creative economy. In Nova Scotia, the Screen Industry enjoys access to a cluster of skilled labour, access to the most educated young people in Canada and unique natural scenery, which has helped it grow and develop over the past two decades. It has become a significant part of the province’s “cultural industries” and an important contributor to the provincial creative economy.

In fiscal 2014, the Screen Industry had an economic footprint<sup>1</sup> in Nova Scotia of \$180 million in GDP; 3,200 employees; and \$137 million in labour income<sup>2</sup>. This impact was achieved by a combination of work by local entrepreneurs and supported by, among other things, labour based tax credits from the provincial government. Nova Scotia local production - as a percentage of total production activity - has increased from 56% in 2010, to 88% in 2014.

Our research, as outlined in this report, shows that individuals employed by the Screen Industry in Nova Scotia can be generally characterized as:

- More highly educated than the overall Nova Scotian labour force;
- Younger, on average, than the overall Nova Scotian labour force;
- Nearly as likely to have migrated to Nova Scotia from elsewhere as to have grown up in the province and highly mobile, willing to leave the province temporarily or permanently to seek work if they are unable to find a job in the Nova Scotian Screen Industry; and
- Generally employed as freelancers or on a contract basis.

One of the main drivers for maintaining growth and prosperity in developed countries is a successful transition from an economy based primarily on the production of goods and services, to a creative economy with a greater focus on innovation. As recognized in the “Now or Never” report from the Nova Scotia Commission on Building Our New Economy, chaired by Ray Ivany (the “Ivany Report”)<sup>3</sup> and by many others, cultural industries are one of the

---

<sup>1</sup> Includes direct, indirect and induced impacts, as explained in Section 7 of this report.

<sup>2</sup> In arriving at these estimates we have relied, amongst other things, on an assumption provided to us regarding labour cost. See Section 7 for details.

<sup>3</sup> The Report of the Nova Scotian Commission on Building our New Economy”, February, 2014, p.40 (“Recent studies link the arts, culture and the creative sectors to positive impacts in employment, community development

---

main pillars of a creative economy. The Screen Industry plays an important role in Nova Scotia's cultural industry and hence the development of a creative economy.

Our review of the economic data of Nova Scotia shows relatively weak economic performance in recent years, when compared to other provinces in Canada. This performance is in stark contrast to the fact that young people in Nova Scotia are the most educated in Canada, which may suggest that Nova Scotia's educated young people have not been sufficiently utilized, which increases the potential for net out-migration of this group

As the Screen Industry in Nova Scotia has matured over the years, it has trained local individuals and attracted talent from elsewhere to create a cluster of skilled producers, cast and crew in the province. This is evidenced in the increasing share of local productions in Nova Scotia over the past few years. That said, Nova Scotia's Screen Industry cluster is considerably smaller than other major centres of film and television production in Canada, such as Toronto and Vancouver. Given the advantages that Ontario and British Columbia have over Nova Scotia, such as larger Screen Industry clusters, one might expect that the Screen Industry in Nova Scotia would require proportionally higher provincial financing, but that does not appear to be the case. The ratio of tax credits to Screen Industry production spending in Nova Scotia has been generally in line with that of Ontario and British Columbia.

Moreover we have estimated the net cost of the funding provided by the Government of Nova Scotia (before the recent reduction in provincial incentives) and our calculations suggest that when considering the direct and indirect impacts, we estimate that tax revenues in Nova Scotia created by the FITC program are higher than the tax credits provided by the government.

Recent changes to the provincial tax incentives for the Screen Industry have reduced the amount of provincial funding available to Nova Scotian live-action productions, and increased uncertainty for productions seeking to obtain that funding. We were advised that as a result, members of Nova Scotia's Screen Industry are reporting that while some continue to work on productions that began prior to the change, future business prospects have declined significantly due to the change in incentives.<sup>4</sup> We understand that at least one important supplier has left the province as a result of the change in incentives,<sup>5</sup> and we understand from our discussions with industry participants that other companies involved in the Screen Industry may be considering closing or leaving Nova Scotia. There is the potential for this to become a self-reinforcing process - as production companies close or leave the province, they leave suppliers with fewer customers, potentially causing them to leave the province as well, leaving the remaining producers to face higher costs. However, we note that the recent decline in the Canadian Dollar may offset some of these potential negative impacts by reducing the cost of production relative to the United States.

As noted above, the Screen Industry's labour force is relatively young, educated and entrepreneurial. As such and as supported by research studies, the cultural industries in Nova Scotia, including the Screen Industry, are agents of creativity and innovation.

Based on our research survey, this labour force is highly mobile and willing to move elsewhere if opportunities are not available in the province. Thus, a reduction in production activity in the province could persuade these individuals to leave for Toronto, Vancouver or beyond.

---

and social inclusion and well-being. Nova Scotia's creative industries — film and television, music, ... have grown significantly in recent years...The creation of Film and Creative Industries Nova Scotia in 2012 reflects the acknowledged and growing importance of creative industries to the province, and the need for a more strategic approach to grow the sector.”).

<sup>4</sup> See, for example, “Figures suggest NS film industry workers earning, working less,” Global News, March 30, 2016 (<http://globalnews.ca/news/2607821/figures-suggest-ns-film-industry-workers-earning-working-less/>);

<sup>5</sup> See, for example, “SIM Group blames changes to N.S. film tax credit for Halifax closure,” CBC News, August 27, 2015 (<http://www.cbc.ca/news/canada/nova-scotia/sim-group-blames-changes-to-n-s-film-tax-credit-for-halifax-closure-1.3206315>)

---

## 2. Introduction

### 2.1 Mandate

We have been retained by the Canadian Media Producers Association (“CMPA”) and Screen Nova Scotia (“SNS”) to provide an independent assessment of the role of the Screen Industry in the economy of Nova Scotia (the “Assessment”).

In this regard, our work included estimating the level of economic activity (as measured by employment, labour income and GDP) created by the Screen Industry. Measures of economic activity included direct spending on suppliers and employees, indirect activity being activity of suppliers, and induced activity being spending by industry employees. We utilised an input-output analysis using data from a variety of sources including but not limited to Statistics Canada, and information gathered from industry interviews.

We also assembled information with respect to the Screen Industry workforce including age, education, mobility, home province, basis of employment and entrepreneurial tendencies. This information was collected through a survey of 584 people working in the industry<sup>6</sup>.

We note that our Assessment was limited to identifying the benefits provided by the Screen Industry to Nova Scotia and has not attempted to analyse whether there are other viable alternatives for the resources used in the Screen Industry elsewhere in the economy of Nova Scotia, the benefits of such alternatives and how they compare to benefits provided by the Screen Industry. Our Assessment should therefore not be seen as a policy advice of how should the government of Nova Scotia deal with the Screen Industry in the future.

For the purpose of our Assessment, the Nova Scotia Screen Industry includes the activity in Nova Scotia of two categories of live-action and animated film and television production:<sup>7</sup>

- **Local production:** involves productions led by Nova Scotian companies.
- **Service production:** involves production led by firms from outside Nova Scotia (i.e., either elsewhere in Canada or from around the world), but involve some activity by Nova Scotian companies providing production and/or post-production services to the non-Nova Scotian producers.

PwC’s compensation is not contingent on any action or event resulting from the use of the Assessment. This Assessment is subject to the limitations noted in Appendix A to this report.

---

<sup>6</sup> The survey was intended to present an overview of individuals working in the sector and is not purported to be a statistically representative survey.

<sup>7</sup> In-house production by broadcasters (e.g., news and sports reporting) and commercial productions are excluded from our definition.

---

## ***3. Scope of Review***

To prepare this Assessment, we have reviewed and, where appropriate, relied upon various documents and sources of information.

By general classification, these sources include:

- Desktop research regarding the Screen Industry in Canada and Nova Scotia;
- Interviews and discussions with producers (live-action and animation) and broadcasters in Nova Scotia;
- Survey of members of the Screen Industry in Nova Scotia and their employees; and
- Data from Statistics Canada.

A list of articles used for the purpose of this Assessment is available in Appendix C.

We note that PwC relied upon the completeness, accuracy, and fair presentation of all information, data, advice, opinions or representations obtained from various sources which were not audited or otherwise verified by us.

# 4. The Role of Cultural Industries in Creating and Maintaining Growth and Prosperity

*One of the main drivers for maintaining growth and prosperity in developed countries is a successful transition from an economy based on the production of goods to a creative economy that is based on innovation.*

*Cultural industries are one of the main pillars of a creative economy. In this regard, the contribution of the cultural industries to the economy goes well beyond their economic footprint, as is traditionally measured by economists.*

Cultural industries include activities such as film and television production, music and sound recording, performing and visual arts, publishing and architecture.<sup>8</sup>

One frequently cited definition for the creative economy defines it as “those industries which have their origin in individual creativity, skill and talent which have a potential for wealth and job creation through the generation and exploitation of intellectual property.”<sup>9</sup> The creative economy includes cultural industries, as well as other types of businesses, such as those involved in software design and information technology.

One of the main drivers for maintaining growth and prosperity in developed countries is a successful transition from an economy based primarily on the production of goods and services, to a creative economy with a greater focus on innovation.<sup>10</sup> As such, jurisdictions that want to maintain a high standard of living for their population need to develop a culture of creativity by, among other things, placing a high value on expressive content.

As a pillar of creative economies, the contribution of the cultural industries to the economy goes well beyond their economic footprint, as is traditionally measured by economists. In a study published in 2008, the Conference Board of Canada states:<sup>11</sup>

*“Creative communities are important drivers in Canada’s economy. They project unique identities that act as magnets for skilled and creative people and for business investment. An important challenge for all levels of government is to ensure that communities have the means necessary to support creativity and diversity, and to build a thriving culture sector...”*

*While the culture sector constitutes a distinct sphere of economic activity in its own right, generating substantial wealth domestically and through international trade and investment, it also plays a much*

<sup>8</sup> See, for example, “Valuing Culture Measuring and Understanding Canada’s Creative Economy”, Conference Board of Canada, August 2008, p.3.

<sup>9</sup> “Creative Industry Mapping Documents 2001,” UK Department for Culture, Media & Sport, Foreword, p.5.

<sup>10</sup> See, for example, “The Creative Economy: Key Concepts and Literature Review Highlights,” Canadian Heritage, Government of Canada, May 2013, p.3.

<sup>11</sup> “Valuing Culture Measuring and Understanding Canada’s Creative Economy”, Conference Board of Canada, August 2008, pp.52-53.

---

*more expansive role in Canada’s social, cultural, and economic well-being. Increasingly, Canada and other countries around the world are recognizing the importance of valuing culture in its multiple dimensions, as well as the capacity of arts and culture industries to fuel other sectors in unique ways.”*

There is a large body of research suggesting that arts and culture also provide social benefits such as:<sup>12</sup>

- Encouraging community identity, innovation and creativity;
- Acting as a driving force for human development and economic growth;
- Helping to instil self-confidence, pride, and personal well-being;
- Promoting social cohesion and reducing isolation;
- Providing creative mechanisms for individuals to express their individuality, engage with others, and celebrate diversity;
- Improving communication skills and promoting creative thinking; and
- Helping to develop information technology skills critical for employment in the knowledge economy.

---

<sup>12</sup> A list of literature in this regard can be found in Appendix D. See for example, “Culture: Nova Scotia’s Future,” Creative Nova Scotia Leadership Council, 2014; and “The Creative Economy: Key Concepts and Literature Review Highlights,” Canadian Heritage, May 2013.

# 5. Demographics and Economy of Nova Scotia

*Nova Scotia has experienced relatively weak economic performance and a low level of entrepreneurial activity in recent years, when compared to other provinces in Canada. This performance is in stark contrast to the fact that young people in Nova Scotia are the most educated in the country, which may suggest that Nova Scotia's educated young people are not being sufficiently utilized, which may be contributing to a net out-migration of this group. One way, among others, that developed economies facing similar challenges to Nova Scotia seek to improve their economies is by encouraging growth in the cultural industries that drive innovation and act as a catalyst for broader growth across the economy.*

## 5.1 Summary of Key Trends for the Nova Scotia Demographics and Economy

Appendix B provides a detailed description of the economy of Nova Scotia. The following is a summary of our key findings in this regard:

- 1) Nova Scotia is Canada's seventh largest province with a population of approximately 943,000, or 2.6% of the Canadian population. The population of Nova Scotia grew by a total of 0.5% between 2005 and 2015, compared to 11.2% growth in Canada as a whole. Nova Scotia experienced a negative natural increase (i.e., more deaths than births) and negative net interprovincial migration in 2015, mainly of the relatively young. As a result, over the last 10 years, the under 65 segment of the population decreased by 4.9%, compared to an increase of 7.3% for Canada.
- 2) In 2014, Nova Scotia represented 2.0% of Canada's GDP while being home to 2.6% of the country's population. From 2010 to 2014, the province's economy grew at a slower rate than the country as a whole. As a result of these changes in GDP and population, GDP per capita in Nova Scotia fell from 80% of the Canadian average in 2010, to 75% in 2014.
- 3) Average employment compensation in Nova Scotia was 15.8% lower than the Canadian average in 2014, consistent with the historical gap. However, this difference increases to approximately 22.5% when considering the non-government sectors. The average compensation in the non-government sectors in Nova Scotia in 2014 was approximately \$42,320 compared to \$55,000 in Canada. The smaller compensation gap across all sectors reflects the fact that the government sector in Nova Scotia is relatively large (comprising 25.2% of all jobs in the province compared to 18.4% for Canada) and that average compensation in the government sector in Nova Scotia is only 6.3% lower than the average in Canada.
- 4) Information and cultural industries, as defined by Statistics Canada, (which the Screen Industry is a part of), represent 1.7% of jobs in Nova Scotia (compared to 1.8% in Canada) and have an average compensation of \$66,844 which is only 7.8% below the average for Canada (\$72,468). This relatively small compensation gap reflects the quality of jobs available in those industries.

- 
- 5) University degree attainment among young people (aged 25-34) in Nova Scotia is the highest in Canada at 34% compared to 31% nationally.<sup>13</sup> However, a lack of employment opportunities may have contributed to migration of young and educated people out of Nova Scotia.
  - 6) The unemployment rate in Nova Scotia has ranged from 1.5 and 2.1 percentage points higher than the Canadian average between 2010 and 2015
  - 7) According to the Canada's Venture Capital and Private Equity Association, between 2007 and 2011, average annual per-capita venture capital investment in Nova Scotia was \$24.80 compared to \$41.10 in Canada.<sup>14</sup> This data suggests that Nova Scotia has a relatively low level of entrepreneurial activity.

## ***5.2 The Implications for Nova Scotia***

Cultural industries, and the Screen Industry in particular, have an important role to play in encouraging the development of the creative economy and improving economic performance in Nova Scotia. As the Ivany Report observed, "Recent studies link the arts, culture and the creative sectors to positive impacts in employment, community development and social inclusion and well-being...The creation of Film and Creative Industries Nova Scotia in 2012 reflects the acknowledged and growing importance of creative industries to the province, and the need for a more strategic approach to grow the sector."<sup>15</sup>

For a variety of reasons, Nova Scotia has experienced relatively weak economic performance in recent years, as discussed in Section 5.1 above. One way that developed economies facing similar challenges to Nova Scotia seek to improve their economies is by encouraging growth in the cultural industries that drive innovation and act as a catalyst for broader growth across the economy. By improving its economic outlook and establishing the basis for the creation of higher paying jobs, Nova Scotia stands a greater chance of retaining many of the well-educated young people already in the province as well as attracting young and educated immigration into the province.

---

<sup>13</sup> University Attainment - Education Provincial Rankings - How Canada Performs, Conference Board of Canada, June 2014

<sup>14</sup> Ivany Report, p.21.

<sup>15</sup> Ivany Report, p.40.

## 6. Overview of the Screen Industry in Nova Scotia

*Nova Scotia's Screen Industry production activity was the fifth-largest in Canada in 2014, representing \$139 million in production activity in the province. With exception of 2009, 2014 was the most active year for the Screen Industry in Nova Scotia over the past 15 years. Furthermore, local productions have been on an increasing trend, amounting to 88% of total production in 2014 compared to 56% in 2010.*

*Between 2010 and 2014, the Government of Nova Scotia provided tax incentives to film and television productions averaging approximately \$21 million per year. In April 2015, the province announced that it was changing the funding program available to film and television productions and reducing the funding available to the Screen Industry. While the long-term impact of this change is not yet known, we were advised that some businesses in the industry have recently closed their Nova Scotia operations and others are contemplating it.*

### 6.1 Industry Overview

Between 2000 and 2014, production activity in the Nova Scotia Screen Industry averaged \$118 million per year, ranging from a low of \$75 million in 2008, to a high of \$150 million in 2009, as shown in Figure 1 below. The Screen Industry in Nova Scotia was the fifth-largest in Canada in 2014, behind Ontario, British Columbia, Quebec, and Alberta.<sup>16</sup> Film and Creative Industries Nova Scotia reported \$139 million in production activity in Nova Scotia in 2014, consisting of \$122 million in local production and \$17 million in service production.<sup>17</sup>

PwC conducted a survey of Screen Industry production companies in Nova Scotia (the “PwC Economic Impact Survey for Producers”), and based on the survey responses and our research, the development of a successful Screen Industry in Nova Scotia to date has been based on several factors, including:

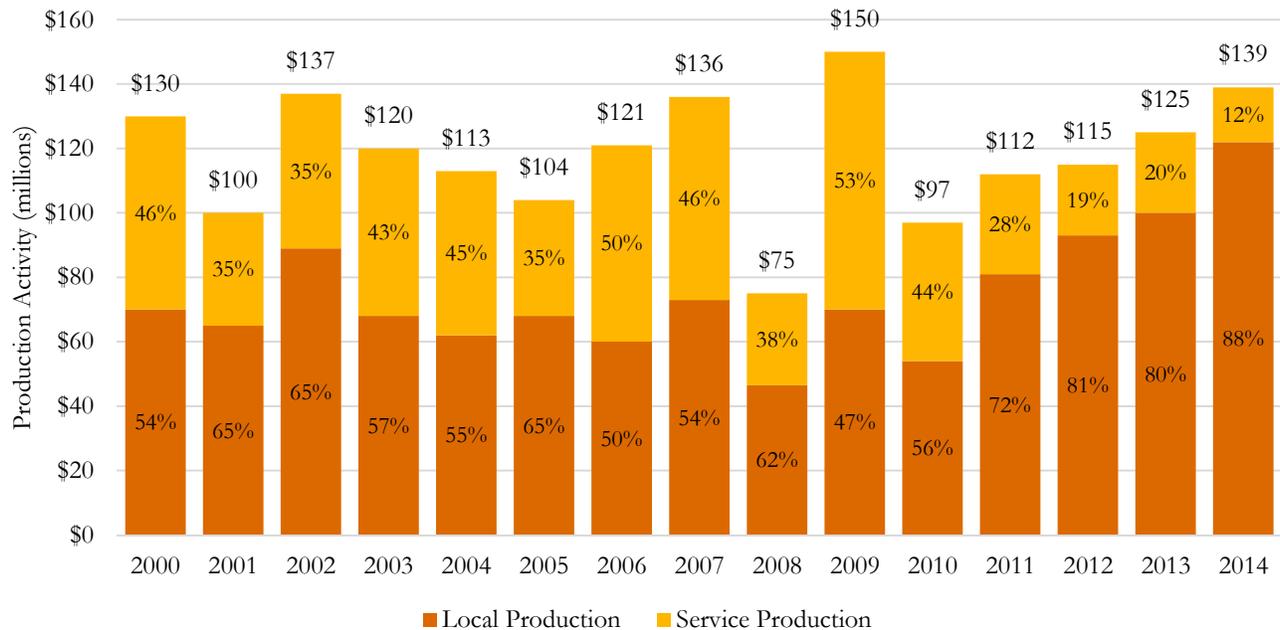
- The availability of funding from the provincial and federal government comparable to that in other jurisdictions;
- A cluster of skilled labour with experience developed over more than two decades;
- Programs to train a new generation of workers, both at local colleges (e.g., Nova Scotia College of Art & Design and Nova Scotia Community College, which provide students with a foundation in the skills required for employment in the Screen Industry, and through the Atlantic Filmmakers Cooperative);
- Young people with the highest university attainment in Canada;

<sup>16</sup> CMPA Profile 2014 – Economic Report of the Screen-based Media Production Industry in Canada (“CMPA Profile 2014”), p.11.

<sup>17</sup> Film and Creative Industries Nova Scotia, Annual Report, p.11. This activity includes feature films and television programs, but excludes in-house production by broadcasters (e.g., news and sports reporting) and commercial productions.

- Relative proximity to New York and Europe; and
- A mild climate, scenery and locations that provide impressive ocean views, urban and rural settings within a short drive of one another, and scenery that also resembles Maine and New England, allowing for stories set in those locations to be filmed in the province.

Figure 1: Local and Service Production Activity in Nova Scotia<sup>18</sup>



Because local production carries with it greater risks, the proportion of local production to service production typically grows as the Screen Industry in a jurisdiction develops.<sup>19</sup> Indeed, this has been the experience of Nova Scotia. Between 2000 and 2010, local production’s share of total activity averaged of 57%, but that share has been climbing steadily since 2011, reaching 88% in 2014.

Nova Scotian firms generally retain the intellectual property (“IP”) rights in local production, which means that their revenues are earned from selling the final productions to content distributors. In contrast, Nova Scotian firms involved in service production are typically paid a fee for their services, while the IP rights are retained by the non-Nova Scotian co-producers. Thus, in general, producers take on greater financial risk with local production compared to service production because local firms bear the risk that costs of production may exceed revenues. However, local production also has the potential for greater rewards when a production is successful in the marketplace.

<sup>18</sup> Annual Report of Nova Scotia Film and Development Corporation for fiscal year 2006/2007; Annual Reports of Film Nova Scotia for fiscal years 2007/2008 to 2011/2012; and Accountability Report of Film & Creative Industries Nova Scotia for fiscal year 2013/2014. We understand that these estimates of activity were collected by the organizations cited with the goal of isolating activity actually occurring in Nova Scotia, but, due to limitations in the data available to them, a portion this production activity may relate to spending outside of Nova Scotia.

<sup>19</sup> Davis, Charles and Janice Kaye (2010), “International Film and Television Production Outsourcing and the Development of Indigenous Capabilities: The Case of Canada”, In G. Elmer, et al. Editor, *Locating Migrating Media* (pp.57-78). Lexington Books.

Our research suggests that a certain level of service production is desirable, as it allows Screen Industry participants in Nova Scotia to interact with those from other jurisdictions and learn new techniques to remain at the leading edge of technology.

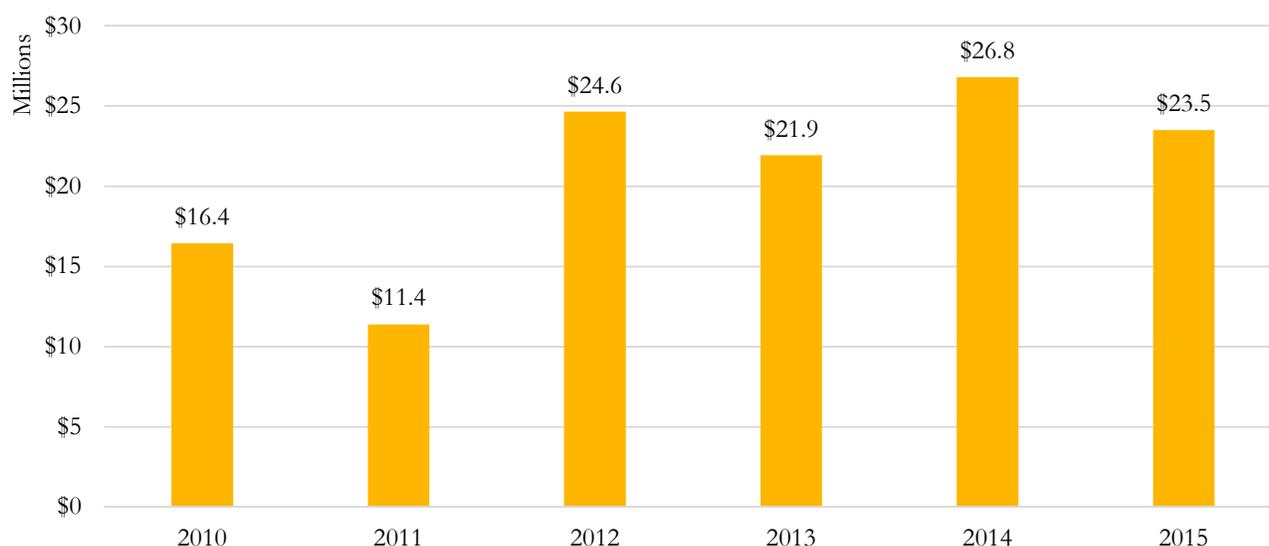
The level of production activity shown in Figure 1 above represents an estimate of the production activity taking place in Nova Scotia in a given year.<sup>20</sup> We estimate that 50% of these budgets go to labour (i.e., salaries, wages and benefits), while the remaining 50% goes towards expenditures such as cast and crew accommodations, equipment and location rental, and post-production services.<sup>21</sup>

As indicated above, the Screen Industry in Nova Scotia has matured over the years and, in the process, has trained local individuals and attracted talent from elsewhere to create a cluster of skilled producers, cast and crew in the province. That said, Nova Scotia’s Screen Industry cluster is considerably smaller than other major centres of film and television production in Canada, such as Toronto and Vancouver

## 6.2 Funding

Nova Scotia introduced the Film Industry Tax Credit (“FITC”) in 1995. The FITC provided productions with a refundable tax credit applicable to a portion of Nova Scotian labour costs, with no set limit to the value of tax credits available annually. Over the past six years, the annual value of the FITC ranged from \$11.4 million in 2011 to \$26.8 million in 2014.

Figure 2: Annual Value of Nova Scotia Film Industry Tax Credit<sup>22</sup>



<sup>20</sup> These data were gathered by Film Nova Scotia and, later, Film & Creative Industries Nova Scotia

<sup>21</sup> This estimate is based on information obtained from survey participants in the PwC Economic Impact Survey for Producers, as well as the assumption made in the CMPA Profile 2014 (p.120).

<sup>22</sup> 2010 to 2012 obtained from the Annual Reports of Film Nova Scotia for fiscal years 2009/2010 to 2011/2012. We requested production activity in later years from Nova Scotia Business Inc., the current entity in charge of administering the Incentive Fund, but we understand that this information was not reported in later years. We have obtained estimates for 2013, 2014 and 2015 from alternative sources: 2013 is an estimate obtained from the Government of Nova Scotia Budget Assumptions and Schedules for the fiscal year 2012-2013, Schedule 1E; 2014 and 2015 figures were obtained from information produced by the Government of Nova Scotia.

In 2012 (the most recent year for which this information was available) 48 productions in Nova Scotia received tax credit financing, including TV series, movies and specials/documentaries, and feature films.<sup>23</sup>

*Table 1: Number of Productions in Nova Scotia Receiving Provincial Tax Credits<sup>24</sup>*

	TV Series	Feature Film	TV Movie	TV Special/ Documentary	Other	Total
<b>2006</b>	17	3	2	12	3	37
<b>2007</b>	17	6	8	15	6	52
<b>2008</b>	16	3	5	18	-	42
<b>2009</b>	21	8	9	25	2	65
<b>2010</b>	27	3	4	14	3	51
<b>2011</b>	18	5	4	16	5	48
<b>2012</b>	25	3	2	17	1	48

In April 2015, Nova Scotia announced that it was ending the FITC program (which applied to both live-action and animation productions) and, in its place, introducing the Film and Television Production Incentive Fund (the “Incentive Fund”) for live-action productions, and adding a new animation incentive (the Digital Animation Tax Credit) to the existing Digital Media Tax Credit.<sup>25</sup> While there continues to be no set limit to the value of tax credits available to animation productions in each year, the province has budgeted \$10 million for the Incentive Fund.<sup>26</sup>

<sup>23</sup> Film Nova Scotia 2011/12 Annual Report, p.9.

<sup>24</sup> Annual Report of Nova Scotia Film and Development Corporation for fiscal year 2006-2007; and Annual Reports of Film Nova Scotia for fiscal years 2007/2008 to 2011/2012.

<sup>25</sup> “Clarification on July 1st 2015 – Animation for Film Industry Tax Credit and New Animation Incentive for Digital Media Tax Credit” Finance & Treasury Board, 2015. [http://www.novascotia.ca/finance/site-finance/media/finance/Clarification\\_on\\_July\\_1st\\_2015-Animation.pdf](http://www.novascotia.ca/finance/site-finance/media/finance/Clarification_on_July_1st_2015-Animation.pdf)

<sup>26</sup> Nova Scotia Film & Television Production Incentive Fund (<http://novascotia.ca/business/filmfund>). We note that the government has recently indicated that this budgeted amount could be adjusted if the need arises. See the Government of Nova Scotia’s News Release of April 1, 2016, “Government, Film Industry Continue to Make Progress”: (“...representatives from government and industry will meet regularly to closely track the fund spending, commitments and potential new productions. If eligible productions come forward when the fund is approaching or has reached its \$10 million budget allocation, government will consider more resources on a case-by-case basis.”)

A brief comparison of the funding available under the FITC and Incentive Fund is set out in Figure 3 below.<sup>27</sup>

*Figure 3: Comparison of Nova Scotia Film Industry Tax Credit with Nova Scotia Film and Television Production Incentive Fund<sup>28</sup>*

Nova Scotia Film Industry Tax Credit	Nova Scotia Film and Television Production Incentive Fund
<p><b>Amount:</b> 50% of eligible Nova Scotia labour, and up to a total of 65% if additional credits and bonuses apply:</p> <ul style="list-style-type: none"> <li>• Regional credit: 10% of eligible Nova Scotia labour if principal photography is outside metro Halifax</li> <li>• Frequent filming bonus: 5% of eligible Nova Scotia labour on third film produced within two years</li> </ul> <p>No Maximum</p>	<p><b>Amount:</b> 25% of eligible Nova Scotia expenditures, and up to a total of 32% depending on:</p> <ul style="list-style-type: none"> <li>• Nova Scotia ownership</li> <li>• head of department positions</li> <li>• content</li> <li>• residence of actors and performers</li> <li>• location of principal photography in Nova Scotia</li> <li>• duration of shoots</li> </ul> <p>Maximum: \$4 million per project</p>

While the full impact of the change in funding model from FITC to the Incentive Fund on the Nova Scotia Screen Industry is unclear, as it was only introduced in July 2015, industry participants believe that the new program has reduced the amount of provincial funding available to Nova Scotian live-action productions, and increased uncertainty for productions seeking to obtain that funding.

One source of uncertainty with the Incentive Fund is the requirement that applications be submitted to the government prior to the start of production, and approval may be granted only for a portion of the requested expenses, which we understand was not the case under the FITC.<sup>29</sup> Producers that want to operate in Nova Scotia may now spend time and effort in developing a new production only to find out that their application was declined or that the budgeted funds have already been allocated to other productions. Since the existence of government financing is an important consideration for other investors in the production, including the Canadian Media Fund and equity investors, the increased uncertainty in obtaining financing from the Incentive Fund may deter producers from operating in Nova Scotia.

We are advised that members of Nova Scotia’s Screen Industry are reporting that while some continue to work on productions that began prior to the change, future business prospects have declined significantly due to the change in incentives.<sup>30</sup> We understand that at least one important supplier has left the province as a result of the change in incentives,<sup>31</sup> and other companies involved in the Screen Industry may be considering closing or leaving Nova

<sup>27</sup> In addition to the Nova Scotia Film and Television Production Incentive Fund, the province introduced the Digital Animation Tax Credit (“DATC”) in 2015. The DATC provides an incentive of up to 60% of the labour associated with a qualifying project (source: <http://www.novascotiabusiness.com/en/home/businesssupport/resourcesandfunding/default.aspx>).

<sup>28</sup> PwC, The big table: Film and video incentives in Canada 2015.

<sup>29</sup> We also understand that tax credits in Ontario and British Columbia that are similar to the FITC do not require that applications be submitted prior to the start of production.

<sup>30</sup> See, for example, “Figures suggest NS film industry workers earning, working less,” Global News, March 30, 2016 (<http://globalnews.ca/news/2607821/figures-suggest-ns-film-industry-workers-earning-working-less/>);

<sup>31</sup> See, for example, “SIM Group blames changes to N.S. film tax credit for Halifax closure,” CBC News, August 27, 2015 (<http://www.cbc.ca/news/canada/nova-scotia/sim-group-blames-changes-to-n-s-film-tax-credit-for-halifax-closure-1.3206315>)

---

Scotia. Given the above, there may be a potential for a self-reinforcing process, as production companies close or leave the province, they leave suppliers with fewer customers, potentially causing them to leave the province as well, leaving the remaining producers to face higher costs. However, we note that the recent decline in the Canadian Dollar may offset some of these potential negative impacts by reducing the cost of production relative to the United States.

# 7. *Economic Impact of Screen Industry in Nova Scotia*

*We have calculated a range of values for the economic footprint of the Screen Industry in Nova Scotia. Our calculations indicate that the industry had an economic footprint in 2014 that supported 1,616 direct jobs and generated 69.5 million in direct labour income for Nova Scotians. Considering the wider impacts of the industry on the province, the economic footprint of the Screen Industry is estimated to support 3,216 jobs and generate \$179.4 million in GDP.*

The fundamental philosophy behind economic impact analysis is that spending on goods and services has attendant impacts throughout the economy. For instance, film production will generate demand for goods and services (including labour) that in turn generates additional demand that extends beyond the initial spending.

The input-output model used for the purpose of this report estimates the relationship between a particular “demand shock” for a given good or service and the resulting impacts throughout the economy (including demand for other goods and services and tax revenues). For the purpose of this report economic impacts were estimated for the following measures of economic activity:

- **Employment** – the number of jobs created or supported. It is expressed as the number of full-time equivalent (“FTE”) jobs indicated in person years.
- **Labour Income** – the wages and benefits received by employees on an annual basis.
- **GDP (Value Added)** – the value added to the economy, or the unduplicated total value of goods and services. GDP includes only final goods to avoid double counting of products sold during a certain accounting period.

Economic impacts are typically estimated at the direct, indirect and induced levels:

- **Direct impacts** result from the Screen Industry’s spending on suppliers and employees.
- **Indirect impacts** arise from the activities of the firms providing inputs to the Screen Industry’s suppliers (in other words, the suppliers of its suppliers).
- **Induced impacts** are the result of consumer spending by employees of the businesses stimulated by direct and indirect expenditures.

We note that the estimated footprint of an industry does not necessarily mean that if that industry were to disappear, that all of the jobs and economic output that it currently produces, directly and indirectly, would be lost permanently. Rather, it is possible that resources released as a result of the elimination of that industry will be employed elsewhere in the province in which the industry operates. While this issue has not been quantified by us, industry participants have expressed concern that given the characteristics of the Screen Industry, including the lack of job opportunities and relatively high unemployment in Nova Scotia, there is a risk that a significant portion of the economic footprint measured in this report will not be replaced if the Screen Industry in Nova Scotia was eliminated. As noted previously, the recent decline in the Canadian dollar may reduce the negative impacts on the Screen Industry.

The **total economic impact** equals the sum of the direct, indirect, and induced economic impacts.

For the purposes of this Assessment, we have estimated a range of values for the economic footprint of the Screen Industry in Nova Scotia based upon two alternative assumptions regarding the amount of direct labour income associated with the industry.

As shown in Figure 3 above, tax credits were issued for 50% of eligible labour expenses under the FITC, and up to a total of 65% if additional credits and bonuses applied. At the same time, we understand that certain portions of Nova Scotian labour expenses may not have been eligible for the tax credit (e.g., wages and benefits paid to employees for work prior to the final script stage and after the end of post-production). For the purposes of our calculation, we have assumed that the additional credits and bonuses are offset by any non-eligible labour expenses, such that the tax credits issued represent 50% of wages and benefits paid to Nova Scotian labour.

Further, we understand that tax credits are issued after a production has completed (often more than a year after production has ended), such that tax credits issued in any particular year are reasonably representative of the labour expenses incurred in the prior year. To this end, we have assumed that the tax credit payment of \$23.5 million paid in 2015 is representative of production activity in 2014. On the basis of this assumption, we have estimated that labour cost incurred by the Screen Industry in Nova Scotia during 2014 that was eligible for tax credit was approximately \$47 million. As noted previously, in 2014 total production of the Screen Industry in Nova Scotia amounted to approximately \$139 million. For the purposes of our calculations, we have estimated employee wages and benefits to be 50% of production activity, which is consistent with information obtained from survey participants in the PwC Economic Impact Survey for Producers.<sup>32</sup> This results in an estimated direct labour income of approximately \$69.5 million, which is over \$20 million higher than the amount of labour estimated to be eligible for a tax credit. We were advised that there are two main sources for this difference. One being activities performed outside Nova Scotia in relation to production based in Nova Scotia and the other being activities in Nova Scotia for which no tax credit have been received. We were advised that the large majority of the said discrepancy is the result of activities in Nova Scotia for which no tax credit has been received. On the basis of this assumption<sup>33</sup> we calculated the amounts showing in Figure 4 below.

*Figure 4: Summary of the Economic Impact of the Screen Industry in Nova Scotia in 2014*

	Direct	Indirect	Induced	Total
Employment (FTE)	1,616	1,196	404	3,216
Labour Income	\$69.5 million	\$50.6 million	\$17.1 million	\$137.2 million
GDP (Value Added)	\$78.5 million	\$75.4 million	\$25.5 million	\$179.4 million

## 7.1 Employment

We have estimated the total number of direct, indirect, and induced jobs in Nova Scotia supported by the provincial Screen Industry to be approximately 3,216.<sup>34</sup>

### 7.1.1 Direct Jobs

The number of direct jobs is calculated as the estimated labour income to direct employees under Alternatives 1 and 2 described above, divided by the average full-time salary in the Screen Industry in Nova Scotia.

<sup>32</sup> This is also consistent with the calculations of the CMPA Profile 2014, p.120.

<sup>33</sup> We have not verified the accuracy of this assumption.

<sup>34</sup> Includes only jobs supported in Nova Scotia. For the purposes of this report, we have not considered the extent to which production activity within Nova Scotia leads to jobs and economic activity in other provinces.

---

According to Statistics Canada, the average full-time compensation in the Screen Industry in Nova Scotia was \$43,000 in 2014,<sup>35</sup> resulting in an estimate of 1,616 direct FTEs.<sup>36</sup>

### **7.1.2 Indirect and Induced Jobs**

Indirect and induced jobs are estimated by applying Statistics Canada’s 2010 provincial multipliers (the most recent year available) for Motion Picture and Video Industries (excluding exhibition) of 0.99 to the direct jobs estimate, resulting an estimate of approximately 1,600 indirect and induced jobs within Nova Scotia.<sup>37</sup>

## **7.2 Labour Income**

The amount of labour income generated as a result of the operation of the Screen Industry in Nova Scotia is estimated to be \$137.2 million. This calculation is based on the direct labour income estimate described in Section 7.1 above, plus labour income generated by the indirect and induced jobs supported by the Screen Industry, assuming that compensation for these jobs is the same as the provincial average across non-government sectors of \$42,320, as discussed in Section 5.1 above.

## **7.3 GDP**

We estimate that GDP generated as a result of the operation of the Screen Industry in Nova Scotia totals \$179 million, based on the relationship between labour income and GDP.<sup>38</sup>

## **7.4 Government Funding**

We have assessed the net cost of the FITC to the provincial government by comparing the value of tax credits provided to the Nova Scotia Screen Industry in 2014, to an estimate of the revenue (i.e., taxes and user fees) that the government would be expected to generate from the industry’s activity.

In 2014, the government of Nova Scotia’s own-source revenues (i.e., amounts collected through taxation or user fees) amounted to 17.0% of GDP.<sup>39</sup> This is a measure of how much revenue Nova Scotia generates, on average, from a given level of GDP.

Applying this ratio to our estimate of total GDP generated as a result of the operation of the Screen Industry in Nova Scotia (\$179.4 million), yields a provincial government revenue estimate of \$30.5 million. Similarly, if we apply this ratio only to the Screen Industry’s estimated direct and indirect GDP of \$153.9 million (i.e., excluding induced impacts), the resulting provincial government revenue estimate is \$26.2 million.

These estimates compare to the \$23.5 million value of tax credits provided under the FITC program related to 2014.<sup>40</sup> We note that there may be other net municipal revenues that may be created from the Screen Industry activity in Nova Scotia, which we have not quantified.

---

<sup>35</sup> Statistics Canada, CANSIM Table 383-0030 (see industry BS5121A - “Motion picture and video industries (except exhibition)”).

<sup>36</sup>  $1,616 \text{ direct jobs} = (\$139.0 \text{ million} * 50\%) / \$43,000$ .

<sup>37</sup> Statistics Canada, Catalogue number 15F0046XDB. Note that we have used the within province multiple to estimate the number of jobs supported in Nova Scotia.

<sup>38</sup> The CMPA Profile 2014 report (p.122) estimates a GDP multiple of 1.13 times direct labour income, and 1.49 times indirect and induced labour income.

$\$179.4 \text{ million} = 1.13 * \$69.5 \text{ million} + 1.49 * (\$50.6 \text{ million} + \$17.1 \text{ million})$ .

<sup>39</sup> Province of Nova Scotia Public Accounts, Volume 1 – Consolidated Financial Statements for the fiscal year ended March 31, 2014, p.24.

---

This suggests that when considering the direct and indirect impacts, we estimate that tax revenues in Nova Scotia created by the FITC program are higher than the tax credits provided by the government. We note that this observation, assumes that the funding the government provides is necessary to maintain the entire Screen Industry in Nova Scotia and the spin-off activity it generates.<sup>41</sup>

To compare the level of tax credit funding provided to the Screen Industry by the Nova Scotia Government to the tax credit funding provided by other provincial governments, we have calculated the ratio of tax credit funding to Screen Industry production spending created in each province.<sup>42</sup> A smaller ratio, all other things being equal, tends to indicate that the government funding is more effective and/or the Screen Industry has been putting to use the funding it receives in a more efficient manner.

As shown in Figure 2, the ratio of tax credits to Screen Industry production spending in Nova Scotia is generally in line with that of Ontario and British Columbia. Given the advantages that Ontario and British Columbia have over Nova Scotia, such as larger Screen Industry clusters, one might expect that the Screen Industry in Nova Scotia would require proportionally higher provincial financing, but that does not appear to be the case. This indicates the importance of the other factors described in Section 6.1 to Nova Scotia's Screen Industry.

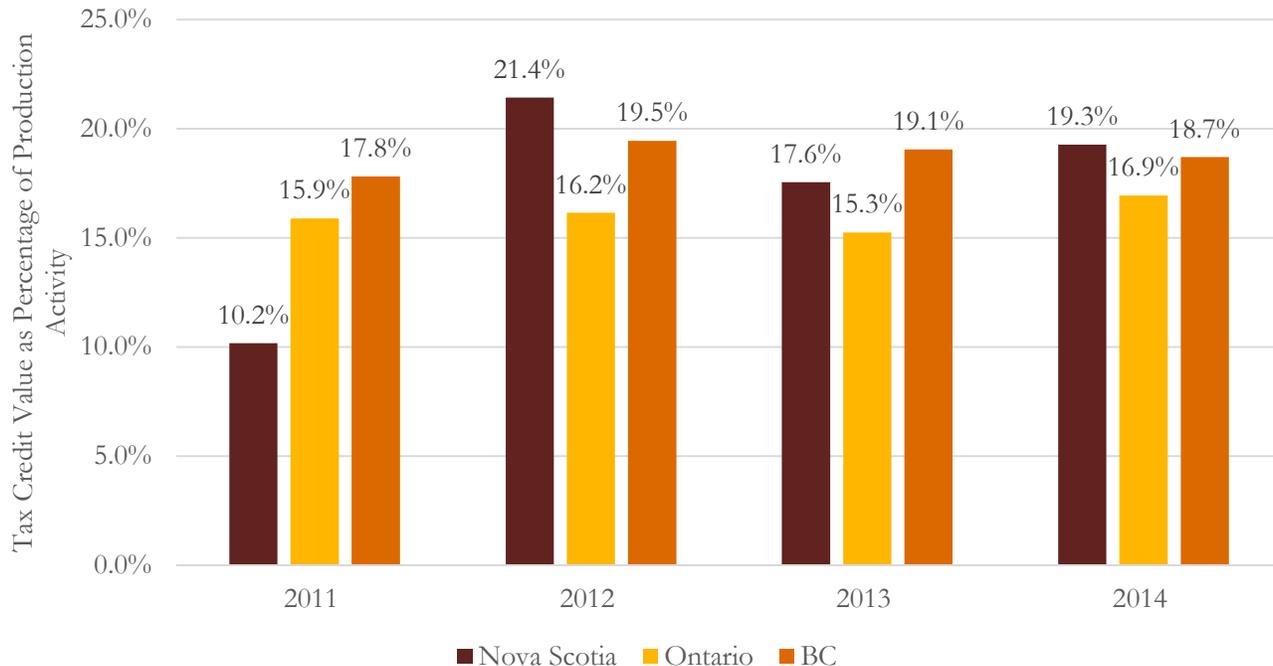
---

<sup>40</sup> As discussed above with regards to Alternative 1, we understand that tax credits are issued after a production has completed (often more than a year after production has ended), such that tax credits issued in any particular year are representative of the labour expenses incurred in the prior year.

<sup>41</sup> It was not in the scope of our mandate to estimate the impact to the Screen Industry from the announced changes to government funding, nor the potential loss of tax revenues if government support to the Screen Industry was eliminated

<sup>42</sup> We note that individual provinces have various programs and methods of funding which are not fully captured in this analysis.

Figure 5: Comparison of Tax Credit Funding of the Screen Industry by Province<sup>43</sup>



<sup>43</sup> Shows the value of provincial tax credits issued in a particular year (i.e., Nova Scotia’s Film Industry Tax Credit, Ontario’s Film and Television Tax Credit, and British Columbia’s Film Incentive BC Tax Credit) as a percentage of estimated provincial production spending. Note that in some cases there may be a timing mismatch, where tax credits issued in a particular year relate to production in prior years. Sources: Film Nova Scotia and Film and Creative Industry Nova Scotia Annual Reports (see footnote 26 above); Ontario Media Development Corporation, Tax Credit Statistics; and Creative BC Annual Activity Reports.

## 8. Characteristics of the Individuals Involved in the Screen Industry in Nova Scotia

*Based on responses to an online survey that we conducted, individuals employed in the Nova Scotia Screen Industry are younger, more educated, and more likely to have moved to the province from elsewhere compared to the overall provincial labour force. These individuals are also characterized by a relatively high level of entrepreneurial inclination and willingness to move elsewhere in order to fulfil their aspirations.*

Based on the data available to us, we estimate the Nova Scotia Screen Industry to have directly employed 1,616 FTEs in 2014 (see Section 7).

In September 2015, PwC conducted an online survey of individuals employed in Nova Scotia's Screen Industry to better understand the characteristics of people employed in the industry. A total of 584 responses were received.<sup>44</sup> Based on the responses received, individuals employed in the Screen Industry in Nova Scotia are:<sup>45</sup>

- More highly educated than the overall Nova Scotian labour force;
- Younger, on average, than the overall Nova Scotian labour force;
- Nearly as likely to have migrated to Nova Scotia from elsewhere as to have grown up in the province and are highly mobile, willing to leave the province temporarily or permanently to seek work if they are unable to find a job in the Nova Scotian Screen Industry; and
- Generally employed as freelancers or on a contract basis.

The respondents to the survey represent a broad sample of roles available within the Screen Industry. The roles of the respondents are set out in Figure below.<sup>46</sup>

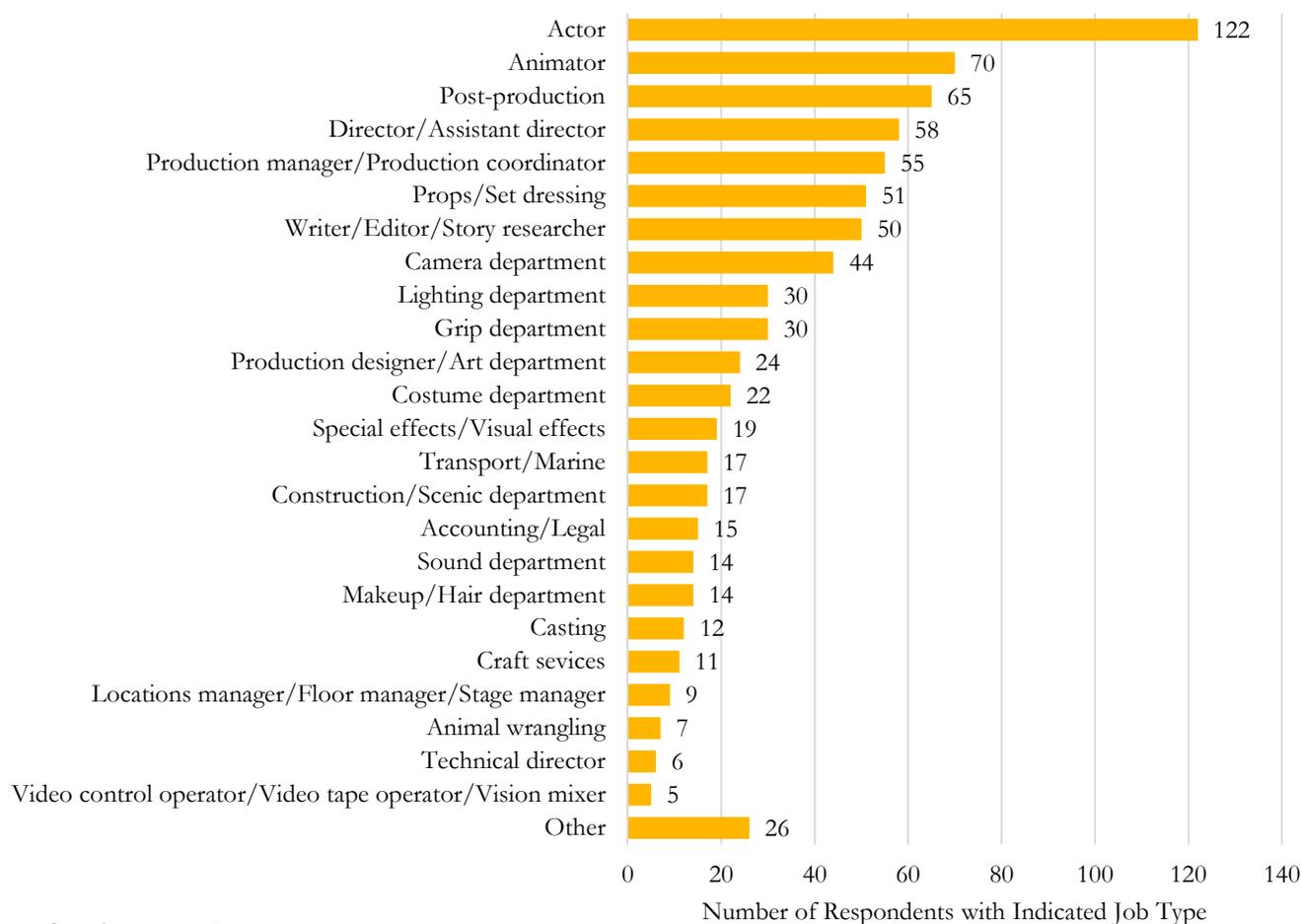
---

<sup>44</sup> However not every respondent answered every question.

<sup>45</sup> The survey targeted individuals employed by members of Screen Nova Scotia. For the purpose of our Assessment, we assumed that the characteristics of individuals employed by non-members firm of the Screen Industry are not significantly different.

<sup>46</sup> Some respondents indicated more than one job type.

Figure 6: Respondents by Job Type



Number of responses: 582

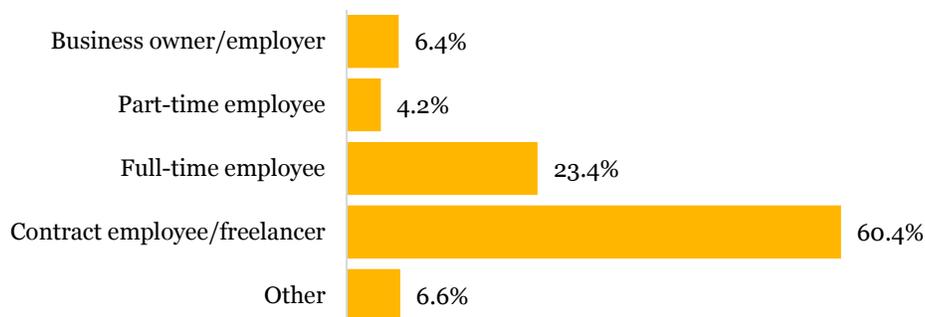
Average compensation in the Screen Industry in Nova Scotia was approximately \$43,000 in 2014.<sup>47</sup> This is comparable to the average compensation across non-government sectors of \$42,320, as discussed in Section 5.1 above.

Much of the work in the Screen Industry is project-based, with individuals being employed for months at a time on a particular production, and then moving on to work on a different production. In general, this work is done on a contract basis, though nearly a quarter of respondents indicated that they are employed full-time in the industry. The dynamic nature of the Screen Industry means that employees can be exposed to new skills and techniques on each new project, but it also means that employment can be somewhat unstable. This indicates that individuals

<sup>47</sup> Statistics Canada, CANSIM Table 383-0030 (see industry BS5121A - “Motion picture and video industries (except exhibition)”). We note that Statistics Canada calculated this average based on only approximately 585 individuals from this industry in Nova Scotia. Based on our survey the average salary as reported by production companies appears to be significantly higher than that calculated by Statistics Canada. However, since we were not able to verify the accuracy of estimates made by employers regarding the hours worked by their part time employees, we opted to base our calculations on Statistics Canada.

employed by the Screen Industry possess relatively high level of entrepreneurial inclination, an essential ingredient for the development of a creative economy.<sup>48</sup>

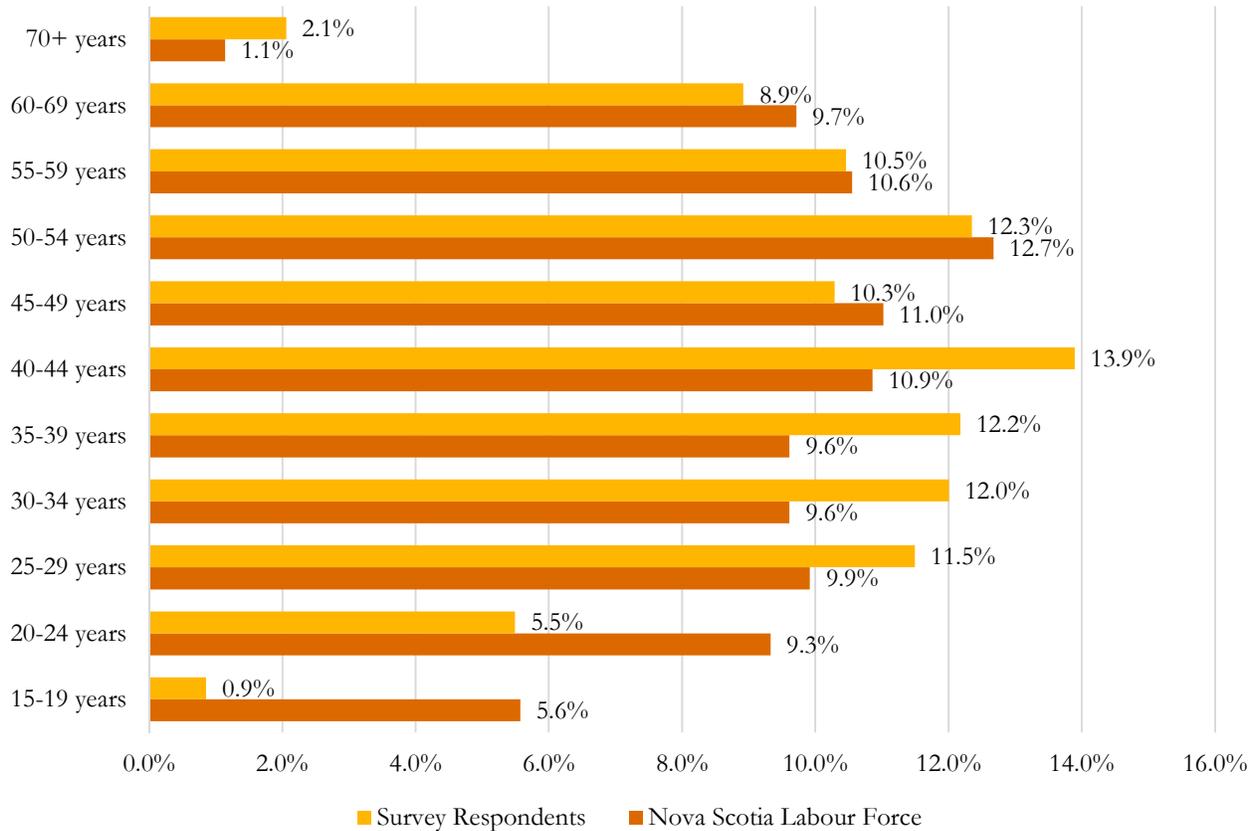
*Figure 7: Nature of Work in the Screen Industry*



Individuals in the Screen Industry are generally younger than the overall provincial labour force. Nearly 50% of respondents indicated that they were between the ages of 25 and 44, compared with 40% of the overall provincial labour force. On the other hand, approximately 15% of the provincial labour force is under 25, while only 6.4% of the survey respondents indicated that they are in this age group. This is consistent with the higher levels of education of the workforce employed in the Screen Industry, as set out in Figure . Individuals in the below 25 age group in the labour force are generally characterized by low levels of post-secondary education and more likely to be employed in lower paying jobs.

<sup>48</sup> The importance of entrepreneurs to the economy is highlighted in the Ivany Report at p.169: “The consensus from our research and public discussions is that we need to...Attract more people, especially immigrants and entrepreneurs, to live in Nova Scotia.”

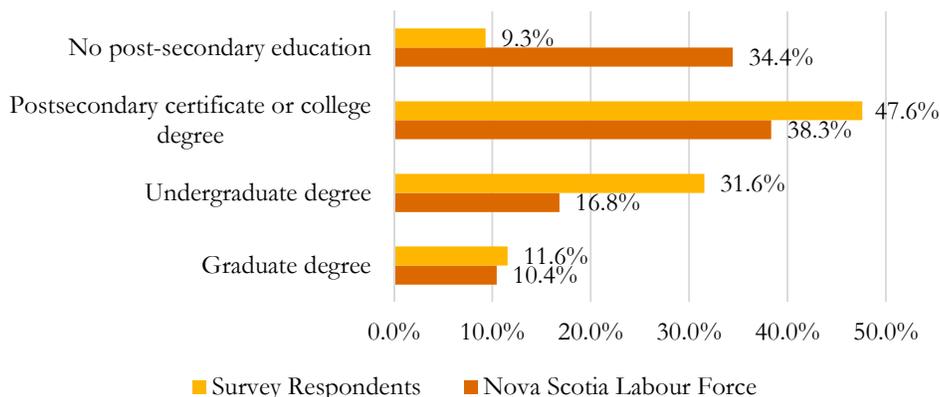
Figure 8: Age of Individuals Employed in the Nova Scotia Screen Industry



According to our survey, individuals employed in the Nova Scotia Screen Industry are generally more educated than the overall population: over 90% of respondents indicated that they had some form of post-secondary education. This compares with the provincial average of 66% of the labour force possessing a post-secondary education.<sup>49</sup>

<sup>49</sup> Statistics Canada, CANSIM Table 282-0003.

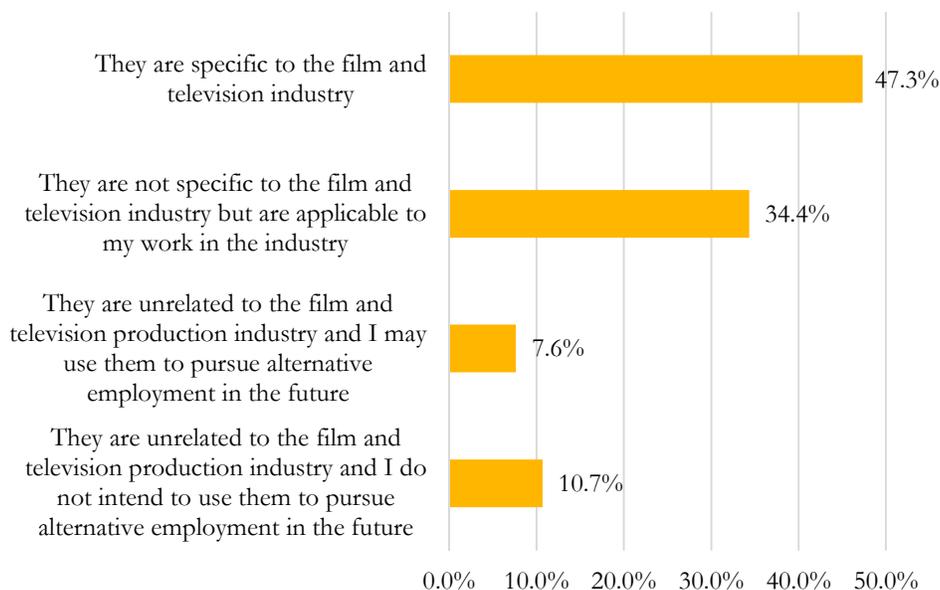
Figure 9: Highest Level of Education Obtained



It also appears that opportunities in the Screen Industry in Nova Scotia are attracting and/or retaining young educated people in the province. 62% of respondents with a post-secondary education indicated that at least part of their education was completed in Nova Scotia, and of those, 29% are originally from outside of Nova Scotia.

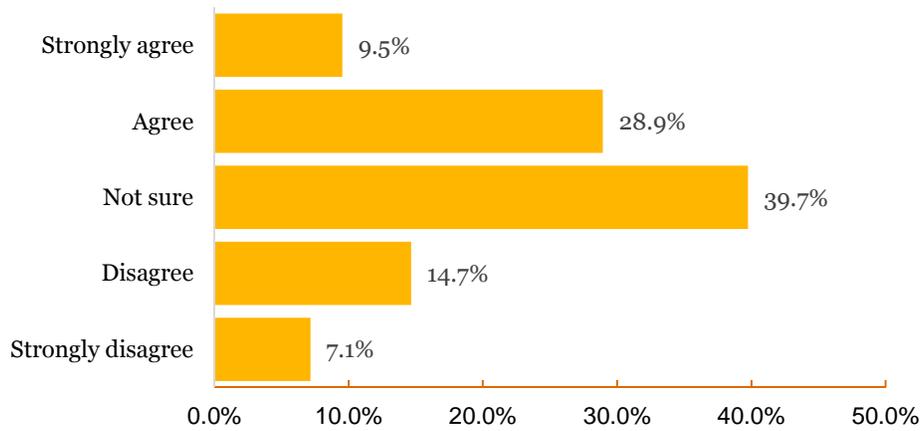
Additionally, 47% of respondents indicated that their education was specific to their work in the Screen Industry, and while 34% said that though it was not specific to the industry, it was nonetheless applicable to the work that they do.

Figure 10: How would you describe your post-secondary qualifications?



Further, more than a third of respondents (38%) agree or strongly agree that their work in the Screen Industry has equipped them with skills that would help in other industries or to start their own business. This is consistent with the notion that the knowledge and skills possessed/acquired by individuals in the cultural industries can be transformed to assist the development of other creative industries such as information technology. It also further supports the assertion that individuals employed in the Screen Industry have a relatively high entrepreneurial inclination.

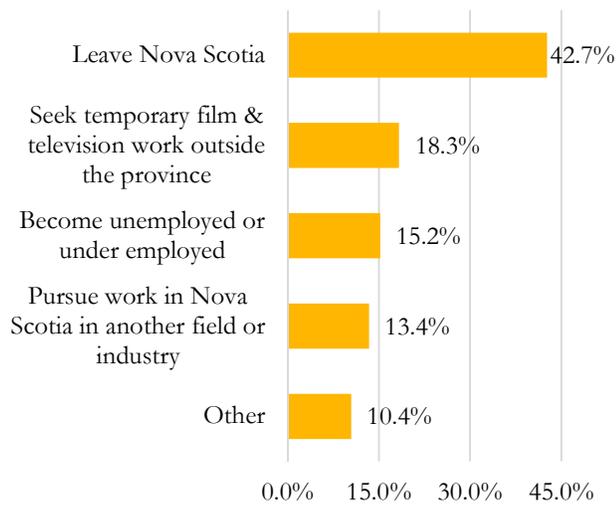
*Figure 11: To what extent do you think your work in the Screen Industry has equipped you with skills that would allow you to pursue work in other sectors or start your own business?*



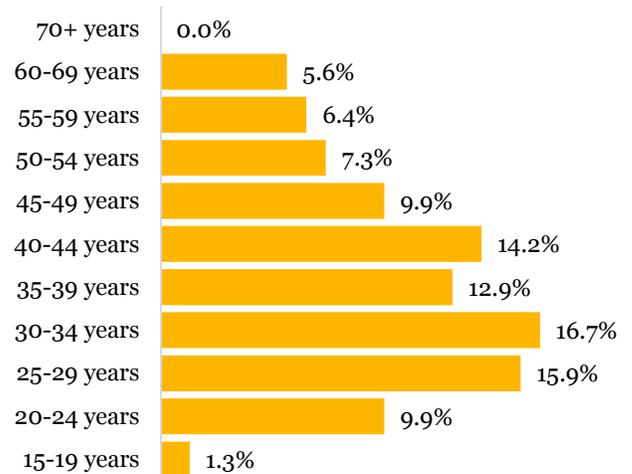
When asked what they would do if they could not find a job in the Screen Industry in Nova Scotia, most respondents indicated that they would either leave the province permanently (42%) or temporarily (17%) in search of work within the Screen Industry, while 14% would stay in Nova Scotia but pursue work in another industry. The remaining 15% indicated that they would become unemployed or underemployed, which could create additional costs for the province in the form of unemployment benefits and income assistance.

The level of an individual mobility is negatively correlated with young age (i.e. younger people are generally more inclined to move than older people) and positively correlated with entrepreneurial inclination and education. Thus, the above results reinforce the profile of the individuals employed by the Screen Industry as young, educated and entrepreneurial.

*Figure 12: In the event that you are unable to find a job in the Screen Industry in Nova Scotia in the future, would you likely...*



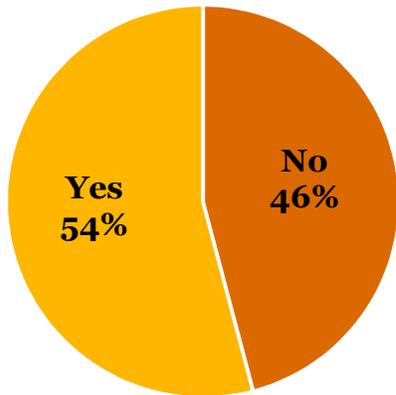
*Figure 13: Age ranges of all respondents who would "Leave Nova Scotia" if they were unable to find a job*



Note: Number of responses - 233

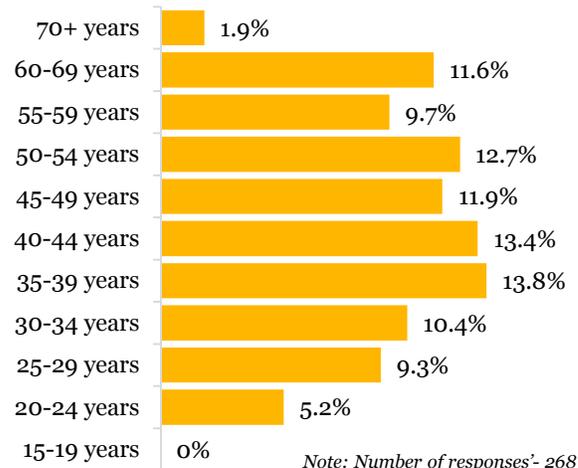
Nearly half of respondents (46%) indicated that they are not originally from Nova Scotia. In contrast to the negative net interprovincial migration that the province has been experiencing generally, the Screen Industry in Nova Scotia appears to have attracted newcomers to the province.

Figure14: Are you originally from Nova Scotia?



Note: Number of responses'- 584

Figure15: Age Range of Respondents Not Originally from Nova Scotia



Note: Number of responses'- 268

# 9. Additional Benefits of the Screen Industry to Nova Scotia

*When compared to the Nova Scotia economy as a whole, the Screen Industry has shown an ability to employ younger, more educated and potentially more entrepreneurial individuals to Nova Scotia. This is true for both the live-action production and animation segments of the Screen Industry. The animation segment is closely related to other forms of digital and interactive media, such as video game and mobile app development. We understand from industry participants that there has been cooperation and resource sharing between the production and animation segments of the Screen Industry in Nova Scotia and that there are opportunities to increase such activities. This suggests that a weaker live-action production segment may also weaken the animation segment. Overall, the creative contributions that the Screen Industry makes to the province enrich the cultural fabric of Nova Scotia and add to the development of a creative economy in Nova Scotia.*

As discussed in Section 8 above, the Nova Scotia Screen Industry’s labour force is generally younger and more educated than that of Nova Scotia in general, and is composed of individuals who are more likely to have moved to the province from elsewhere. This appears to be particularly true among the animation segment of the Screen Industry.

Figure16: Age Distribution of Animators

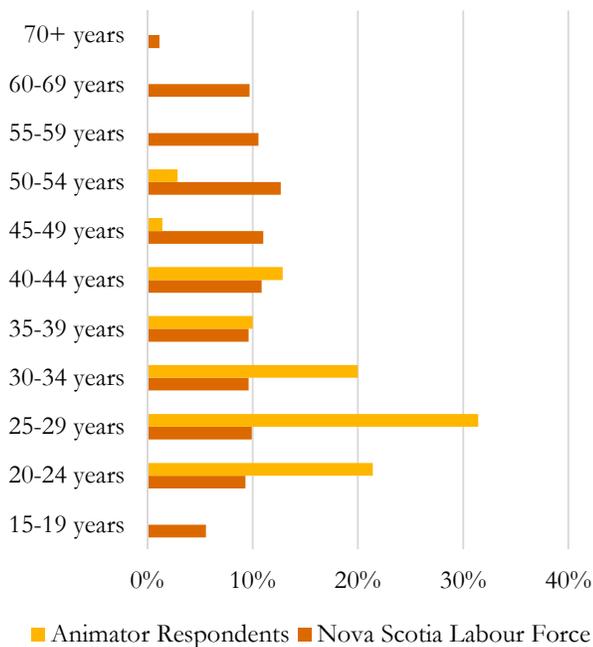
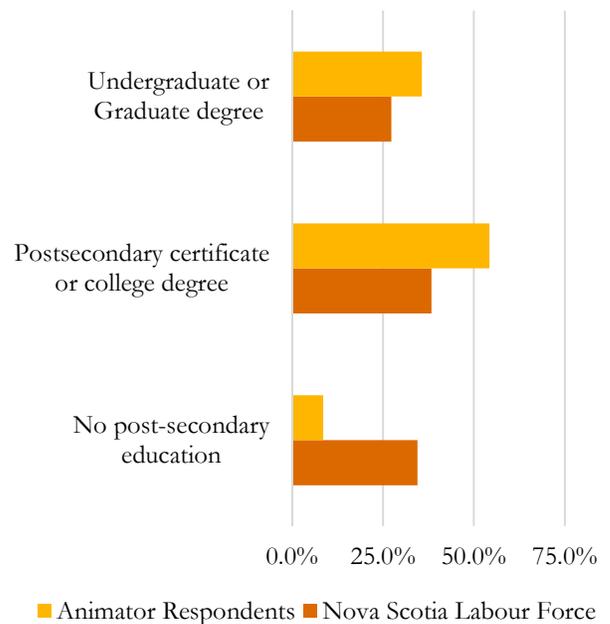


Figure17: Education of Animators



---

Historically, Canadian producers have had particular success selling animated programs for children and youth to international markets.<sup>50</sup> Indeed, the children and youth genre accounted for 87% of the production activity in Canada in 2014.<sup>51</sup>

As technology has progressed, animation studios have increasingly relied on employees skilled in programming, 3D rendering and texture art to create digitally animated productions. We understand that these skills are very similar to those used in other forms of digital and interactive media, including video games and mobile app development, such that many employees working in film and television animation have skills transferable to these other forms of creative media.

We understand that there has been historically some cooperation and resource sharing between the production segment and animation segment of the Screen Industry in Nova Scotia. Some industry participants believe that there is a potential to increase this synergy by, among, other things, creating spin-off media based on their intellectual property created by a production (e.g., games and apps related to their productions).

From interviews with animation industry participants, we understand that geographic proximity (i.e. the ability to get people into the same room on a timely basis) is an important factor in attracting productions that take advantage of local animation resources. For this reason, future growth in the animation segment depends, to some extent, on the cooperation between itself and the live-action production segment.

As noted previously, the individuals employed by the Screen Industry appear to possess a relatively high level of entrepreneurial spirit. Moreover, we understand that the majority of firms in the Screen Industry in Nova Scotia are relatively small and run by passionate individuals, allowing them to be nimble and innovative, responding quickly to opportunities and changes. This entrepreneurial spirit is an essential ingredient in developing a culture of innovation and creativity in Nova Scotia.

Our discussion with a broadcaster operating in Nova Scotia reveals that this broadcaster benefits from the talent available in the Screen Industry. According to this broadcaster, they get higher quality content from local producers than they would if they relied exclusively on in-house production. This helps Nova Scotians to tell their own stories in interesting and creative ways, which helps to solidify their identity and raise their profile.

Further, as indicated previously, many of the skills employees acquire in the Screen Industry can be transferred to other industries, or help them in starting their own business.

Additionally, the Screen Industry, being an integral part of the cultural industries, makes important, though less direct, social and economic contributions. Those benefits were discussed in Section 4 of this report. As an example, the Atlantic Film Festival has exhibited films from the Atlantic Provinces and around the world in Halifax for the past 35 years.<sup>52</sup> For the 2007 festival, an estimated 33,500 people attended the festival. While little information is available regarding the relationship between the Screen Industry and tourism in Nova Scotia, we were advised by industry participants that many of the films and television programs produced tell the stories of Nova Scotians, enriching the cultural fabric of the province

---

<sup>50</sup> CMPA Profile 2014, p.21.

<sup>51</sup> CMPA Profile 2014, p.34.

<sup>52</sup> <http://www.atlanticfilm.com/about-us>

---

# *Appendix A: Limitations*

To conduct this Assessment, PwC relied upon the completeness, accuracy, and fair presentation of all information, data, advice, opinions or representations obtained from various sources which were not audited or otherwise verified. These sources (collectively, the “Information”) are listed in the Scope of Review Section of this report.

The findings of this Assessment are conditional upon such completeness, accuracy and fair presentation of the Information, which has not been verified independently by PwC. Accordingly, we provide no opinion, attestation or other form of assurance with respect to the results of this Assessment.

This Assessment has been prepared for the CMPA and SNS for their exclusive use. PwC disclaims any contractual or other responsibility to other persons who may use or rely on this Assessment.

**Receipt of new data or facts:** PwC reserves the right at its discretion to withdraw or make revisions to this Assessment should we receive additional data or be made aware of facts existing at the date of the Assessment that were not known to us when we prepared this Assessment. The findings are as of January 15, 2016 and PwC is under no obligation to advise any person of any change or matter brought to its attention after such date, which would affect our findings.

**Input-output analysis:** Input-output analysis (a model used to estimate GDP and employment footprint) does not address whether the inputs have been used in the most productive manner or whether the use of these inputs in this industry promotes economic growth by more than their use in another industry or economic activity. Nor does input-output analysis evaluate whether these inputs might be employed elsewhere in the economy if they were not employed in this industry at the time of the analysis. Input-output analysis calculates the direct, indirect and induced economic impacts that can reasonably be expected to affect the economy based on historical relationships within the economy. This analysis does not take into account fundamental shifts in the relationships within the economy that may have taken place since the estimation of multipliers by Statistics Canada, nor shifts that may take place in the future.

**Assessment Limitation:** Our Assessment was limited to an examination of the role of the Screen Industry in the economy of Nova Scotia. We have not assessed whether there are viable alternatives for the resources used in the Screen Industry in the economy of Nova Scotia, the benefits of such alternatives and how they compare to benefits provided by the Screen Industry.

**Our Report must be considered in its entirety by the reader,** as selecting and relying on only specific portions of the analyses or factors considered by us, without considering all factors and analyses together, could create a misleading view of the processes underlying this review and the conclusions there from. The preparation of an economic analysis is a complex process and it is not appropriate to extract partial analyses or make summary descriptions. Any attempt to do so could lead to undue emphasis on a particular factor or analysis.

**Use limitations:** Any use that a third party makes of this report or reliance thereon, or any decision made based on it, is the responsibility of such third party. PwC accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken, based on this report.

This report related analysis must be considered as a whole. Selecting only portions of the analysis or the factors considered by us, without considering all factors and analysis together, could create a misleading view of our findings. The preparation of our analysis is a complex process and is not necessarily susceptible to partial analysis or summary description. Any attempt to do so could lead to undue emphasis on any particular factor or analysis.

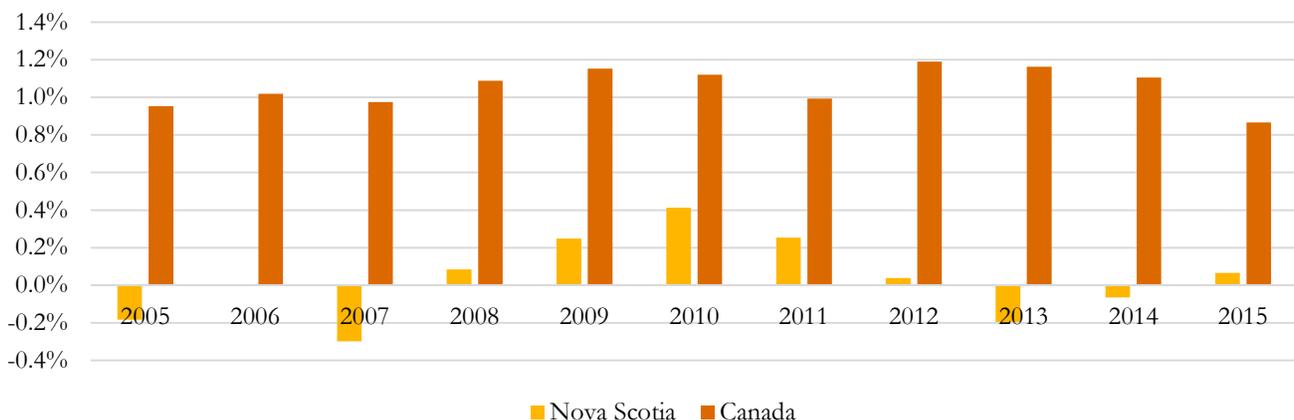
# Appendix B: Background on the Economy of Nova Scotia

*Nova Scotia represented 2.6% of the Canadian population in 2014, but only 2.0% of Canadian GDP. The province's economy has been growing at a slower rate than the rest of the country while its population has been aging at a faster rate. Additionally, Nova Scotia's unemployment rate has been approximately 2 percentage points higher than the national average over the past five years. The province relies heavily on the government sector for employment, with 25.2% of the province's workforce employed by the government sector compared to 18.4% for the Canadian workforce. The average compensation in the non-government sector of Nova Scotia lags 22.5% behind the Canadian non-government workforce. This relatively weak performance is in stark contrast to the fact that young people in Nova Scotia are the most educated in the Canada. However, the economic and demographic data suggest that Nova Scotia's educated young people are not being sufficiently utilized, which may be contributing to a net out-migration of this group.*

## Demographics

Nova Scotia is Canada's seventh largest province with a population of approximately 943,000, or 2.6% of the Canadian population.<sup>53</sup> The population of Nova Scotia grew by a total of 0.5% between 2005 and 2015, compared to 11.2% growth in Canada as a whole. Nova Scotia experienced a negative natural increase (i.e., more deaths than births) and negative net interprovincial migration in 2015, but this was offset by positive net international immigration, leading to a small population increase.<sup>54</sup>

Figure 1: Nova Scotia and Canada Annual Net Population Change, 2005 to 2015

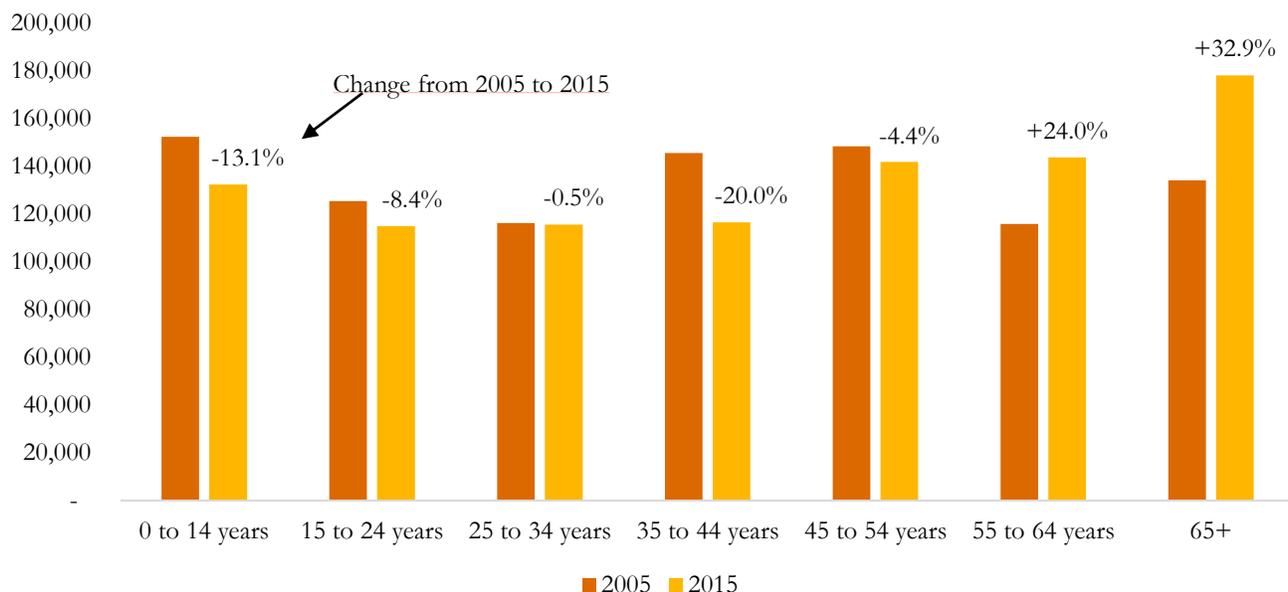


<sup>53</sup> Statistics Canada. Population estimate as at July 1, 2015.

<sup>54</sup> Annual Demographic Estimates: Canada, Provinces and Territories (2015), Statistics Canada, p.77.

While the overall population of Nova Scotia has not grown significantly over the past 10 years, the population aged 65 years and over increased by 32.9% (37.5% for Canada), and made up 18.9% of the population in 2015 (16.1% for Canada), while the under 65 segment decreased by 4.9% (compared to an increase of 7.3% for Canada). As a result, the median age in Nova Scotia increased from 40.6 in 2005 to 44.4 in 2015 (compared to 38.6 to 40.5 for Canada).<sup>55</sup>

*Figure 2: Nova Scotia Population Change by Age Group, 2005 to 2015*



According to population projections, the provincial population is expected to continue to grow relatively slowly, with total growth of 1.3% between 2013 and 2025, compared to 12.0% growth in Canada overall.<sup>56</sup> The population aged 65 years and over is also expected to continue to increase in Nova Scotia, reaching 25.4% of the population in 2025 (compared to 20.6% in Canada).

Since older people are less likely to be working, an aging population means that there are proportionally fewer workers participating in the economy. Indeed, the labour force participation rate for Nova Scotia has declined from 64.3% in 2010 to 62.4% in 2015 (compared to a decline from 66.9% to 65.8% across Canada).<sup>57</sup> The federal government has noted that without increases in labour productivity, population aging will slow economic growth and growth in the federal and provincial tax bases at the same time that pension and health care expenditures are expected to increase.<sup>58</sup>

## **Economy**

In 2014, Nova Scotia represented 2.6% of the Canadian population and 2.0% national GDP. From 2010 to 2014, the province's economy grew at a slower rate than the country as a whole, as shown in Figure 3 below. Over the same period, the population level of Nova Scotia remained virtually unchanged, exhibiting declines in 2013 and 2014.

<sup>55</sup> Statistics Canada, CANSIM Table 051-0001.

<sup>56</sup> Statistics Canada, CANSIM Table 052-0005. Population projections from medium growth scenario (M1).

<sup>57</sup> Statistics Canada, CANSIM Table 282-0002.

<sup>58</sup> Canada's Aging Population and Public Policy: 2. The Effects on Economic Growth and Government Finances, Library of Parliament (2011), p.4.

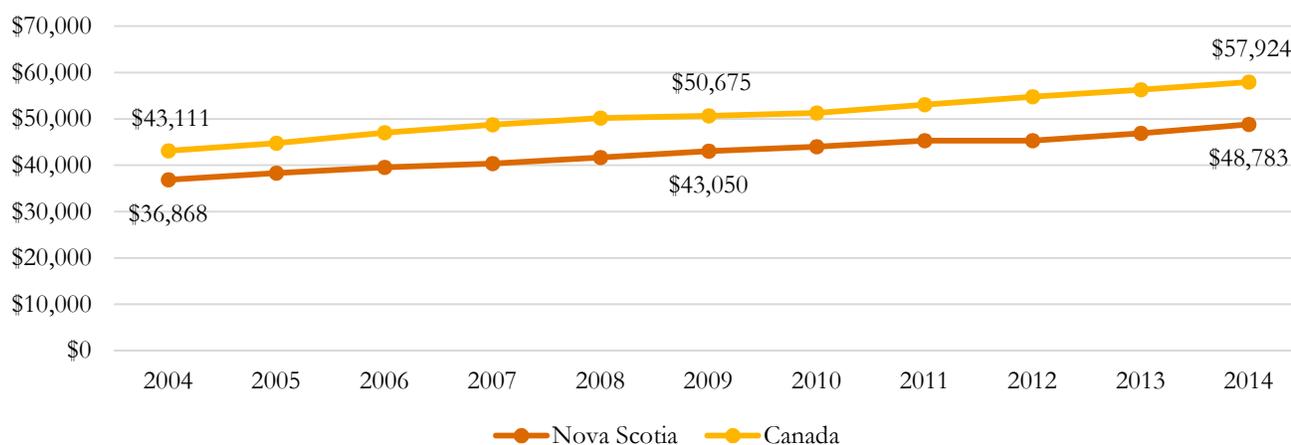
As a result of these changes in GDP and population, GDP per capita in Nova Scotia fell from 80% of the Canadian average in 2010, to 75% in 2014.

Figure 3: GDP and Population<sup>59</sup>

	2010	2011	2012	2013	2014
<b>GDP (\$millions)</b>					
Canada	\$ 1,662,130	\$ 1,769,921	\$ 1,822,808	\$ 1,892,193	\$ 1,973,043
Nova Scotia	\$ 36,849	\$ 37,652	\$ 37,835	\$ 38,576	\$ 39,077
<b>GDP Growth</b>	2.2%	2.1%	2.1%	2.0%	2.0%
Canada	6.0%	6.5%	3.0%	3.8%	4.3%
Nova Scotia	5.5%	2.2%	0.5%	2.0%	1.3%
<b>Population</b>					
Canada	34,005,274	34,342,780	34,751,476	35,155,499	35,543,658
Nova Scotia	942,073	944,469	944,835	942,991	942,387
<b>Population Growth</b>	2.8%	2.8%	2.7%	2.7%	2.7%
Canada	1.1%	1.0%	1.2%	1.2%	1.1%
Nova Scotia	0.4%	0.3%	0.0%	-0.2%	-0.1%
<b>GDP Per Capita</b>					
Canada	\$ 48,879	\$ 51,537	\$ 52,453	\$ 53,824	\$ 55,510
Nova Scotia	\$ 39,115	\$ 39,866	\$ 40,044	\$ 40,908	\$ 41,466
Nova Scotia to Canada Ratio of GDP per Capita	0.80	0.77	0.76	0.76	0.75

Average employment compensation in Nova Scotia was 15.8% lower than the Canadian average in 2014, consistent with the historical gap, as shown in Figure 4 below.

Figure 4: Average Employment Compensation<sup>60</sup>

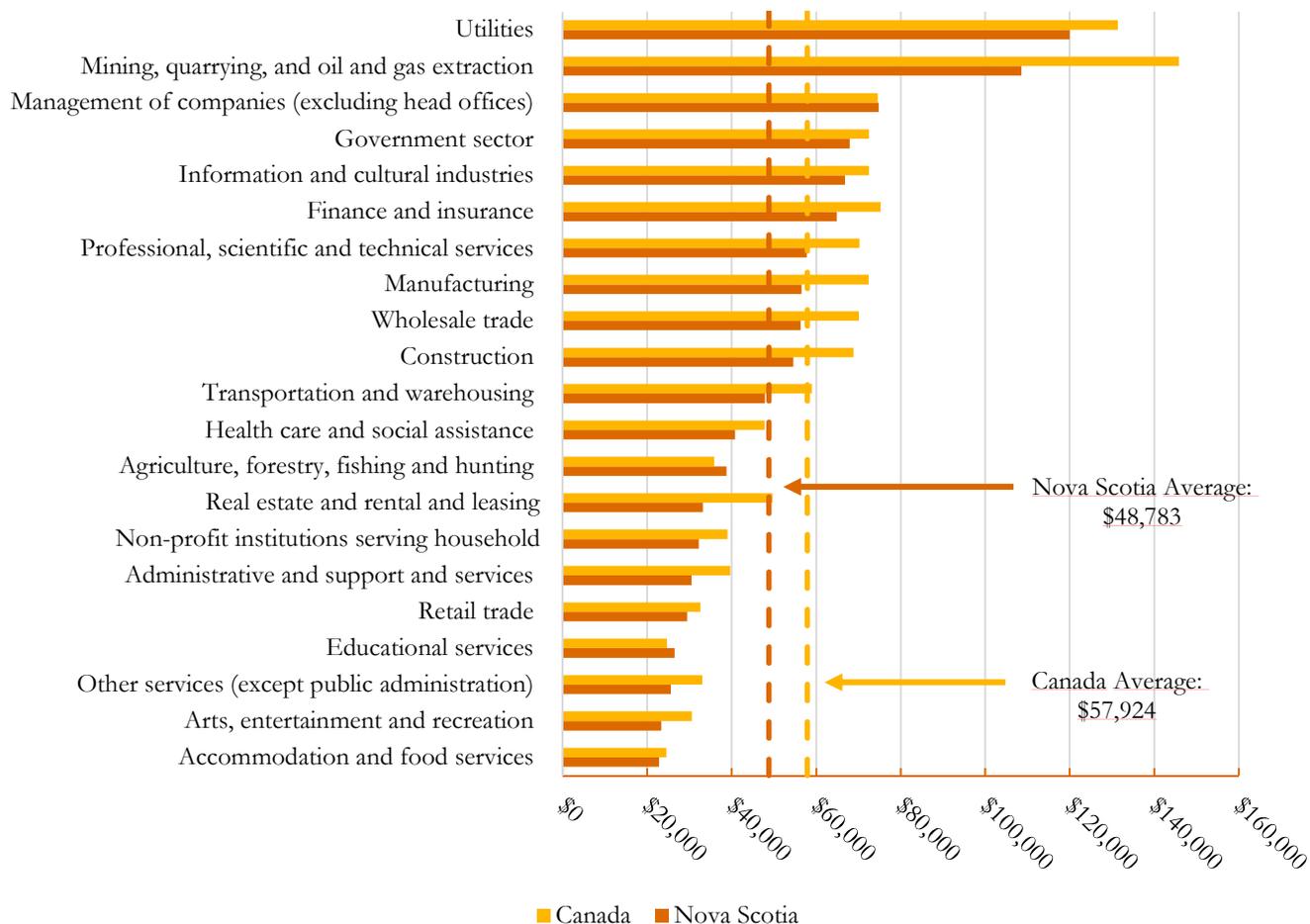


<sup>59</sup> Statistics Canada, CANSIM Tables 384-0038 and 051-0001

<sup>60</sup> Statistics Canada, CANSIM Table 383-0030.

This differential in compensation between Canada and Nova Scotia is generally consistent across industries, as shown in Figure 5.

Figure 5: Average Compensation by Industry, 2014<sup>61</sup>



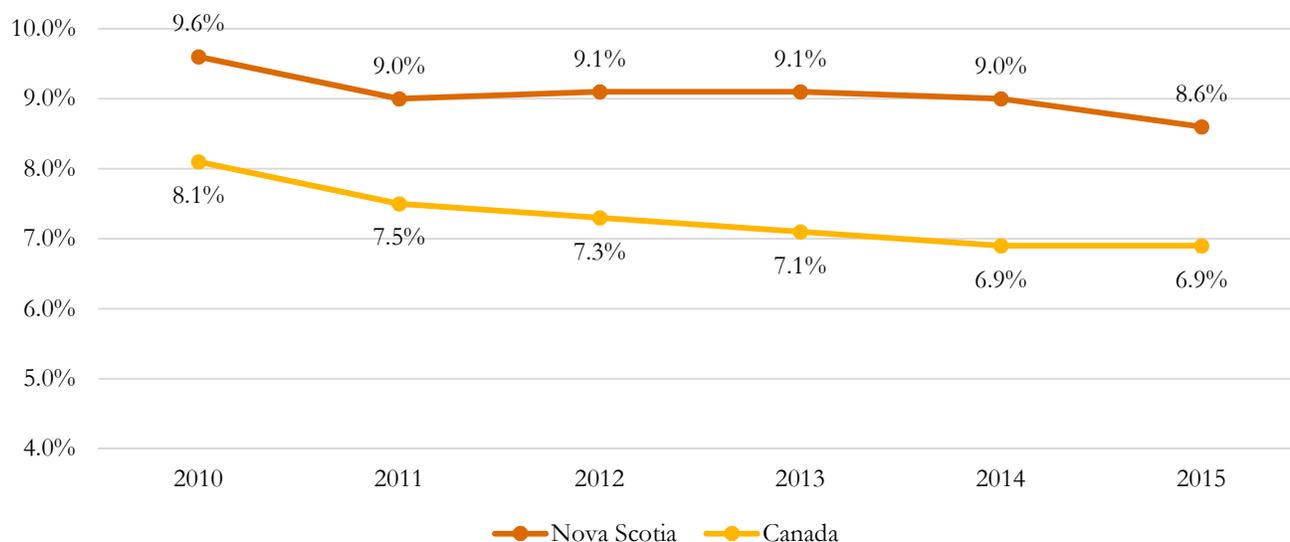
As noted above, the average compensation in Nova Scotia across all sectors is approximately 15.8% lower than the average compensation in Canada. However, this difference increases to approximately 22.5% when considering the non-government sectors. The average compensation in the non-government sectors in Nova Scotia in 2014 was \$42,320 compared to \$54,637 in Canada. The smaller compensation gap across all sectors reflects the fact that the government sector in Nova Scotia is relatively large (comprising 25.2% of all jobs in the province compared to 18.4% for Canada) and that average compensation in the government sector in Nova Scotia is only 6.3% lower than the average in Canada.

Information and cultural industries, as defined by Statistics Canada (which the Screen Industry is part of), represent 1.7% of jobs in Nova Scotia (compared to 1.8% in Canada) and have an average compensation of \$66,844 which is only 7.8% below the average for Canada (\$72,468).

<sup>61</sup> Statistics Canada, CANSIM Table 383-0030.

Additionally, the unemployment rate in Nova Scotia has ranged from 1.5 and 2.1 percentage points higher than the Canadian average between 2010 and 2015.

Figure 6: Unemployment Rate<sup>62</sup>



## Education and Job Opportunities

University degree attainment among youth (25-34 age group) in Nova Scotia is the highest in Canada at 34% compared to 31% for Canada<sup>63</sup>. However, lack of employment opportunities may have been an important driving force behind migration of young and educated people out of Nova Scotia. This may have contributed for a workforce that has a lower level of university degree attainment<sup>64</sup> than the Canadian workforce (26.9% in Nova Scotia versus 28.5% for Canada).

## Entrepreneurial Activity

According to the Canada's Venture Capital and Private Equity Association, between 2007 and 2011, average annual per-capita venture capital investment in Nova Scotia was \$24.80 compared to \$41.10 in Canada. This data suggests that Nova Scotia has a relatively low level of entrepreneurial activity.<sup>65</sup>

<sup>62</sup> Statistics Canada, CANSIM Table 282-0002

<sup>63</sup> University Attainment - Education Provincial Rankings - How Canada Performs, Conference Board of Canada, June 2014

<sup>64</sup> Nova Scotia Labour Market Statistics, by Government of Nova Scotia, 2014

<sup>65</sup> Ivany Report, p.21.

---

# ***Appendix C: Survey Questions***

# PricewaterhouseCoopers Economic Impact Survey for Producers

All information collected in this survey will be kept strictly confidential and will only be presented in the report on an aggregate basis (i.e., all industry participant data will be combined together).

## IMPORTANT NOTE FOR PRODUCERS:

In addition to submitting this survey, please complete the financial and employee data table in the spreadsheet (link below), save it as a new document and send to:

[jake.dwhyte@ca.pwc.com](mailto:jake.dwhyte@ca.pwc.com)

To assist PwC with context and comparability, please also provide them with your most recent annual financial statements. Note that the financial information requested in this table pertains to the sum of all of your production activity rather than, for instance, parent company financial statements without details of production costs incurred. ONLY the PwC managers assigned to this case will have access to this information.

The information provided by you in this spreadsheet is perhaps the most crucial piece of information PwC needs to complete their economic impact report. We are counting on the participation of ALL Nova Scotian producers - one missing production company could result in hundreds of thousands of dollars in unrecorded data. The provincial government is on record stating that our industry is a net economic loss to Nova Scotians. This PwC study is our best and perhaps only shot at testing the validity of this claim.

DOWNLOAD SPREADSHEET HERE: <http://www.screennovascotia.com/whats-new-1/2015/7/22/pwc-survey>

\* Required

1. **1.) What is your full name? \***

.....

2. **2.) What is your e-mail address? \***

.....

3. **3.) What is your company's name?**

.....

4. **4.) Please provide a brief summary of your business.**

.....

.....

.....

.....

.....

5. **5.) What type of content you produce? Select all that apply.**

*Check all that apply.*

- Live action television
- Live action film
- Documentary
- Animation/Digital
- Lifestyle/Reality
- Variety

6. **6.) Please list the approximate share of revenues generated for your business over the last three fiscal years in Nova Scotia through:**

A.) Indigenous productions (productions for which you own the IP)

.....

7. **B.) Service productions**

.....

8. **C.) Post-production**

.....

9. **7.) Which other jurisdictions do you operate in and/or receive tax credits in? Select all that apply.**

*Check all that apply.*

- Ontario
- British Columbia
- PEI/Newfoundland/New Brunswick
- Manitoba
- Alberta
- Saskatchewan
- Territories
- United States
- United Kingdom
- European Union

10. **8.) Identify other industry participants, including suppliers, collaborators, service providers, etc. with whom you engage in business (please describe briefly the nature of your relationship, including whether these participants are located in Nova Scotia)**

.....

.....

.....

.....

.....

11. **9.) Please provide details on any formal and/or informal training you are providing your employees.**

.....

.....

.....

.....

.....

12. **10.) Please provide comments on the trends facing your business that are specific to Nova Scotia with respect to:**

A.) Costs (comment on each major cost category; e.g. labour)

.....

.....

.....

.....

.....

**13. B.) Availability of skilled labour (comment on each major employee classification)**

.....  
.....  
.....  
.....  
.....

**14. C.) Changes in your ability to access public funding (both federal and provincial) over time**

.....  
.....  
.....  
.....

**15. D.) Competition from projects/firms located in other jurisdictions**

.....  
.....  
.....  
.....

**16. E.) Pressure to relocate operations to other jurisdictions**

.....  
.....  
.....  
.....

**17. F.) Challenges in securing permits/government administration**

.....  
.....  
.....  
.....

**18. G.) Challenges related to market access as a result of being located in Nova Scotia**

.....  
.....  
.....  
.....  
.....

**19. H.) Any other trends you have observed**

.....  
.....  
.....  
.....  
.....

**20. 11.) What factors other than the Nova Scotia film and television production tax credit are important in your decision to locate a certain production (or operate) in Nova Scotia? Put differently, what are the natural advantages that Nova Scotia provides your business in comparison to other jurisdictions (e.g., scenery, labour availability)?**

.....  
.....  
.....  
.....  
.....

**21. 12.) How would the departure of other productions (outside of your business) from Nova Scotia impact your activities, in terms of the availability of support services and skilled labour, among other things?**

.....  
.....  
.....  
.....  
.....

22. **13.) Can you provide your general observations regarding the development of the film and television production industry in Nova Scotia since the introduction of the tax credit?**

.....  
.....  
.....  
.....  
.....

23. **14.) Can you describe ways in which your business has had ancillary positive impacts on other industry participants and the creation of a creative cluster in Nova Scotia? For instance, has your business provided supplemental employment to staff that are involved in irregular employment in other types of productions?**

.....  
.....  
.....  
.....  
.....

24. **15.) Can you describe ways in which your business has had an ancillary positive impact on other industries in Nova Scotia? For example, have your former employees applied their skills and experience acquired with your company in other sectors of the Nova Scotia economy?**

.....  
.....  
.....  
.....  
.....



# PricewaterhouseCoopers Economic Impact Survey for Individuals

All information collected in this survey will be kept strictly confidential and will only be presented in the report on an aggregate basis (i.e., all industry participant data will be combined together).

The deadline to submit this survey is September 30th, 2015.

If you have any general questions about the survey, please contact Tara at Screen Nova Scotia ([tara@screennovascotia.com](mailto:tara@screennovascotia.com)) If you have specific questions about the survey's methodology or confidentiality, please contact Jake at PwC ([jake.dwhytie@ca.pwc.com](mailto:jake.dwhytie@ca.pwc.com)).

1. **1.) Please indicate your role on productions. Select all roles on which you spend at least 30% of your time.**

*Check all that apply.*

- Actor
- Animator
- Animal wrangling
- Camera department
- Casting
- Construction/Scenic department
- Costume department
- Makeup/Hair department
- Craft services
- Director/Assistant director
- Grip department
- Lighting department
- Locations manager/Floor manager/Stage manager
- Post-production
- Production designer/Art department
- Production manager/Production coordinator/Production assistant/Line producer
- Props/Set dressing
- Sound department
- Special effects/Visual effects
- Technical director
- Transport/Marine
- Video control operator/Video tape operator/Vision mixer
- Writer/Editor/Story researcher
- Other: .....

2. **2.) Please indicate your highest level of education:**

*Mark only one oval.*

- Graduate degree
- Undergraduate degree
- College degree
- Certificate
- No post-secondary education

3. **3.) If respond yes to post-secondary education question; how would you describe your post-secondary qualifications?**

*Mark only one oval.*

- They are unrelated to the film and television production industry and I do not intend to use them to pursue alternative employment in the future
- They are unrelated to the film and television production industry and I may use them to pursue alternative employment in the future
- They are not specific to the film and television industry but are applicable to my work in the industry
- They are specific to the film and television industry

4. **4.) Did you complete at least part of your post-secondary education in Nova Scotia?**

*Mark only one oval.*

- Yes
- No
- N/A

5. **5.) Are you originally from Nova Scotia, Canada?**

*Mark only one oval.*

- Yes
- No

6. **6.) Please indicate your age range:**

*Mark only one oval.*

- 15-19 years
- 20-24 years
- 25-29 years
- 30-34 years
- 35-39 years
- 40-44 years
- 45-49 years
- 50-54 years
- 55-59 years
- 60-69 years
- 70+ years

7. **7.) Please indicate the proportion of last year (2014) you spent working in the film and television production industry on a full-time equivalent basis (e.g., if you worked half time for six months, please enter 0.25; if you worked full time for three months, please enter 0.25)**

.....

8. **8.) Please indicate the proportion of last year (2014) you spent working in areas related to the skills you use in film and television production industry a full-time equivalent basis (e.g., if you worked half time for six months, please enter 0.25; if you worked full time for three months, please enter 0.25)**

.....

9. **9.) Please indicate the proportion of last year (2014) you spent working in areas unrelated to the skills you use in film and television production industry a full-time equivalent basis (e.g., if you worked half time for six months, please enter 0.25; if you worked full time for three months, please enter 0.25)**

.....

10. **10.) What is the nature of your work?**

*Mark only one oval.*

- Full-time employee
- Part-time employee
- Contract employee/freelancer
- Business owner/employer
- Other: .....

11. **11.) Describe any formal and/or informal training you have received from your employer**

.....

.....

.....

.....

.....

12. **12.) Has your employer provided you with training that would be useful in other industries?**

*Mark only one oval.*

- Strongly disagree
- Disagree
- Agree
- Strongly agree

13. **13.) Has your employer provided you with training that would be useful in other positions in the film and television production industry?**

*Mark only one oval.*

- Strongly disagree
- Disagree
- Agree
- Strongly agree

14. **14.) In the event that you are unable to find a job in the film and television production industry in Nova Scotia in the future, would you likely:**

*Mark only one oval.*

- Leave Nova Scotia
- Pursue work in Nova Scotia in another field or industry
- Become unemployed or under employed
- Seek temporary film & television work outside the province
- Other: .....

15. **15.) To what extent do you think your work in the film and television production industry has equipped you with skills or experience that would allow you to pursue work in other sectors of the economy or start your own business?**

*Mark only one oval.*

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

---

Powered by



---

# ***Appendix D: List of Articles***

1. The Creative Economy: Key Concepts and Literature Review Highlights by the Federal Government of Canada, May 2013
2. From Cultural to Creative Industries: Theory, Industry, and Policy Implications by Stuart Cunningham Director, Creative Industries Research and Applications Centre, Queensland University Of Technology, March 26, 2015
3. Exploring the Cultural and Creative Industries Debate, Culture Action Europe, 2015
4. The Cultural And Creative Industries in Europe, Entrepreneurial Assets and Capacities Need More Support, by Amsterdam Economic Board, Amsterdam, European Creative Business Network, Rotterdam, and Forum D' Avignon, Paris, 2015
5. Nova Scotia Labour Market Statistics, by Government of Nova Scotia, 2014
6. University Attainment - Education Provincial Rankings - How Canada Performs, Conference Board of Canada, June 2014
7. Charting a Path for Growth – Nova Scotia Tax and Regulatory Review, Laurel C. Broten, November 2014
8. Now or never: An Urgent Call for Nova Scotians, by the Nova Scotia Commission on Building Our New Economy (the “Ivany Report”), 2014
9. Statistics Canada CANSIM Tables
10. Annual Demographic Estimates: Canada, Provinces and Territories. Statistics Canada, 2015
11. Canada’s Aging Population and Public Policy: 2. The Effects on Economic Growth and Government Finances, Library of Parliament, 2011
12. “Valuing Culture Measuring and Understanding Canada’s Creative Economy Economic Performance and Trends”, August 2008
13. Film and Creative Industries Nova Scotia, Annual Report, 2015
14. Davis, Charles and Janice Kaye, “International Film and Television Production Outsourcing and the Development of Indigenous Capabilities: The Case of Canada”, In G. Elmer, et al. Editor, Locating Migrating Media. Lexington Books, 2010
15. Annual Report of Nova Scotia Film and Development Corporation for fiscal year 2006-2007
16. Annual Reports of Film Nova Scotia for fiscal years 2007-2008 to 2011-2012
17. Accountability Report of Film & Creative Industries Nova Scotia for fiscal year 2013-2014
18. Nova Scotia Film & Television Production Incentive Fund (<http://novascotia.ca/business/filmfund>)

- 
19. "SIM Group blames changes to N.S. film tax credit for Halifax closure," CBC News, August 27, 2015 (<http://www.cbc.ca/news/canada/nova-scotia/sim-group-blames-changes-to-n-s-film-tax-credit-for-halifax-closure-1.3206315>)
  20. Government of Nova Scotia Budget Assumptions and Schedules for the fiscal year 2012-2013, Schedule 1E
  21. Resources and Funding, Nova Scotia Business Inc. (<http://www.novascotiabusiness.com/en/home/businesssupport/resourcesandfunding/default.aspx>)
  22. PwC, The big table: Film and video incentives in Canada, 2015
  23. Profile 2014: Economic Report on the Screen-based Media Production Industry in Canada, CMPA ("CMPA Profile 2014")
  24. Statistics Canada. National and Provincial Multipliers (15F0046X)
  25. Fiscal Flash - Nova Scotia 2015-16 Budget, Scotia Bank
  26. Atlantic Film Festival (<http://www.atlanticfilm.com/about-us>)
  27. "The Report of the Nova Scotian Commission on Building our New Economy", February, 2014, p.40
  28. "Culture: Nova Scotia's Future," Creative Nova Scotia Leadership Council, 2014
  29. "Figures suggest NS film industry workers earning, working less ," Global News, March 30, 2016 (<http://globalnews.ca/news/2607821/figures-suggest-ns-film-industry-workers-earning-working-less/>)
  30. "Creative Industry Mapping Documents 2001," UK Department for Culture, Media & Sport
  31. "Clarification on July 1st 2015 – Animation for Film Industry Tax Credit and New Animation Incentive for Digital Media Tax Credit" Finance & Treasury Board, 2015. [http://www.novascotia.ca/finance/site-finance/media/finance/Clarification\\_on\\_July\\_1st\\_2015-Animation.pdf](http://www.novascotia.ca/finance/site-finance/media/finance/Clarification_on_July_1st_2015-Animation.pdf)
  32. Province of Nova Scotia Public Accounts, Volume 1 – Consolidated Financial Statements for the fiscal year ended March 31, 2014, p.24.
  33. Ontario Media Development Corporation, Tax Credit Statistics
  34. Creative BC Annual Activity Reports
  35. Government of Nova Scotia's News Release of April 1, 2016, "Government, Film Industry Continue to Make Progress"