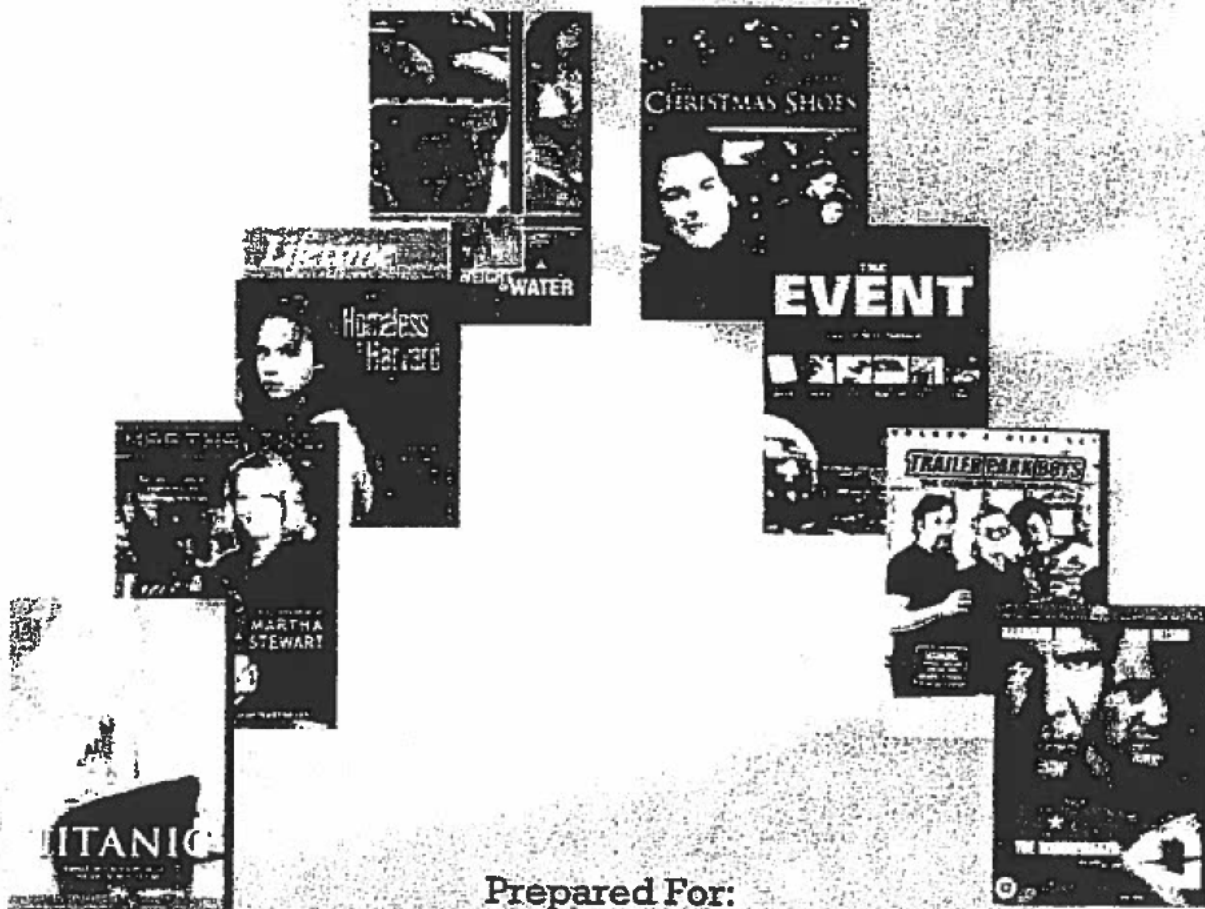


# **SOCIO-ECONOMIC IMPACT ASSESSMENT**

## **Nova Scotia Film and Television Cluster**



Prepared For:  
Film Nova Scotia  
Prepared By:  
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## Executive Summary

The purpose of this report is to document the socio-economic importance of the Nova Scotia Film and Television Cluster. Creating sustainable growth in the Nova Scotia Film and Television cluster is a Nova Scotia government priority. The Nova Scotia government created the Nova Scotia Film Development Corporation (Film Nova Scotia) with a mandate to:

*Grow Nova Scotia's film, television, and new media industries with our partners by stimulating investment and employment and by promoting Nova Scotia's producers, productions, locations, skills and creativity in global markets.*

Our impact analysis assesses the impact of the Nova Scotia Film and Television Cluster. The cluster is defined as the economic impact of the Nova Scotia Film and Television Sector plus the impact from forward linkages such as firms that work in the commercial sector but have important links to the Film and Television Sector and visitor tourism plus backward support linkages in education, government agencies and union head offices.

Canmac's approach to this assignment involved two major activities. First, a quantitative economic impact assessment that measures the total economic impact of the sector. The second activity involved a more qualitative assessment of the sector's overall contribution to social prosperity.

Our impact analysis was conducted using the Nova Scotia Input-Output Model. The major results are as follows:

- The Nova Scotia Film and Television Cluster created direct GDP of \$81.1 million dollars and total GDP of \$150.5 million dollars in 2006/07.
- The Nova Scotia Film and Television Cluster created \$53.4 million in direct household income and \$97.1 million in total household income.

- The Nova Scotia Film and Television Cluster created 1,213.8 direct jobs (FTE) and 2,797.1 total jobs (FTE).
- The sector creates \$13.6 million in provincial fiscal revenues.

The Nova Scotia Film and Television Cluster contribution to Nova Scotia's social cluster is equally important to Nova Scotia's continued prosperity. This emerging knowledge-based cluster is a key driver for Nova Scotia future prosperity and an attractor for other knowledge-based firms. Furthermore, the goods and services provided by this creative, innovative cluster directly contributes to an improved quality of life for Nova Scotians.

In conclusion, the Nova Scotia Film and Television Cluster has experienced successful growth to date. The further sustainable development of this cluster will increasingly become an anchor for Nova Scotia's general economic and social prosperity and require continued government support to meet its future challenges and opportunities.

## Chapter 1 – Introduction

### *1.1 Introduction*

The purpose of this report is to document the socio-economic importance of the Nova Scotia Film and Television Production Cluster. Creating sustainable growth in the Nova Scotia Film and Production Sector is a priority of the Nova Scotia government. The Nova Scotia government created the Nova Scotia Film Development Corporation (Film NS) with a mandate to:

*Grow Nova Scotia's film, television, and new media industries with our partners by stimulating investment and employment and by promoting Nova Scotia's producers, productions, locations, skills and creativity in global markets.*

Benchmarking the socio-economic importance of the Nova Scotia Film and Television Cluster provides vital information to the sector's stakeholders and enables Film Nova Scotia to more effectively deliver its mandate.

### *1.2 Methodology Overview*

Our impact analysis assesses the impact of the Nova Scotia Film and Television Cluster. The cluster is defined as the economic impact of the Nova Scotia Film and Television Sector plus the impact from forward linkages such as firms that work in the commercial sector but have important links to the Film and Television Sector and visitor tourism plus backward support linkages in education, government agencies and union head offices.

Canmac's approach to this assignment involved two major activities. First, a quantitative economic impact assessment that measures the total economic impact of the sector. The second activity involved a more qualitative assessment of the sector's overall contribution to social prosperity.

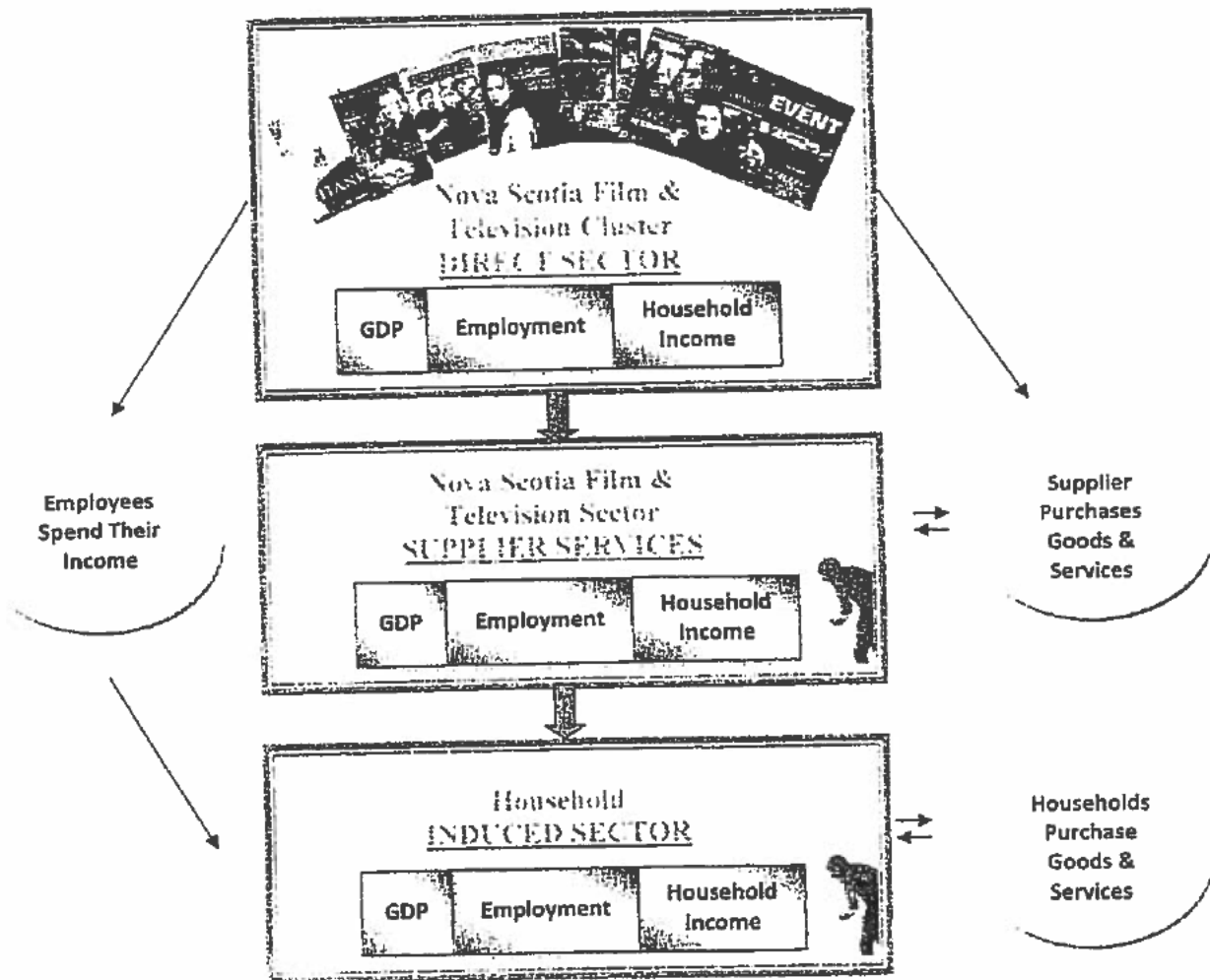
An economic impact statement provides measures of a sector's total contribution to the provincial economy. The measures include Nova Scotia Gross Domestic Product, Nova Scotia household income and employment. The economic impact is conducted via simulations of the Nova Scotia Input-Output Model. Figure 1.1 provides a schematic of the model's process. The total economic impact of a sector such as the Nova Scotia Film and Television Sector is defined as the sum of the direct, indirect and induced impacts. The direct impact is the output (GDP), income and employment directly produced, paid and employed by the sector firms. The indirect impact refers to the economic impact by suppliers that provide goods and services to the direct sector. The induced effect refers to the economic impact due to the responding by households of the income earned at the direct and indirect phases.

Our assessment of the sector's contribution to the region's economic and social prosperity involved a review of government documents, studies conducted elsewhere, plus the experience of the project team.

### *1.3 Report Outline*

The research findings are provided in four (4) chapters including the present one plus supporting appendices. Chapter 2 provides the analytical impact results. Chapter 3 provides a more qualitative impact plus a fiscal impact. Chapter 4 provides the summary and conclusions.

Figure 1.1 - Model Process





## Chapter 2 – Nova Scotia Film Sector Economic Cluster

### *2.1 Introduction*

This chapter assesses the economic impact of the Nova Scotia Film and Television Economic Cluster. The cluster approach more properly measures the total economic importance of the film and television firms producing in Nova Scotia. A cluster approach measures the economic importance of the Nova Scotia Film and Television Sector and its major linkages.

The Nova Scotia Film and Television production cluster represents an emerging knowledge based cluster of the Nova Scotia economy. The cluster is comprised of the following core industry sectors:

- Nova Scotia domestic production of film and TV production.
- Nova Scotia visitor production of film and TV production.

In addition to the core industry sector, there are key forward linkages and backward support linkages. Forward linkages include:

- Visitor Tourism and the Atlantic Film Festival
- Commercial Production

Support activities include Nova Scotia Unions regional headquarters, education support activity at the Nova Scotia Community College and NSCAD University and government organizations such as Film Nova Scotia, Telefilm Canada and the National Film Board.

Each of the cluster components generates an economic impact in the provincial economy through their supplier chains and forward linkages. The sum of the economic impacts represents the total economic impact of the Nova Scotia Film and Television Production Sector.

In what follows we set out the economic impact of the Nova Scotia Film and Television Cluster for the fiscal year 2006/07. Section 2.2 to 2.4 presents the impact measures. Section 2.5 provides a summary.

## *2.2 Economic Impact - Nova Scotia Film and Television Economic Cluster*

In what follows, we discuss each of the major cluster components in turn. We provide first an estimate of the annual output of the cluster component followed by an estimate of the economic impact (direct, total) as measured by GDP, household income and employment.

### **Nova Scotia Film and Television Sector**

In fiscal 2006/07, we estimate that the Nova Scotia Film and Television Sector produced \$148.2 million in total output. This production came from four major sub-sectors:

- Nova Scotia Visitor Film and TV Production;
- Nova Scotia Domestic Film and TV Production;
- Nova Scotia Produced CBC Production, and
- Other film and television production.

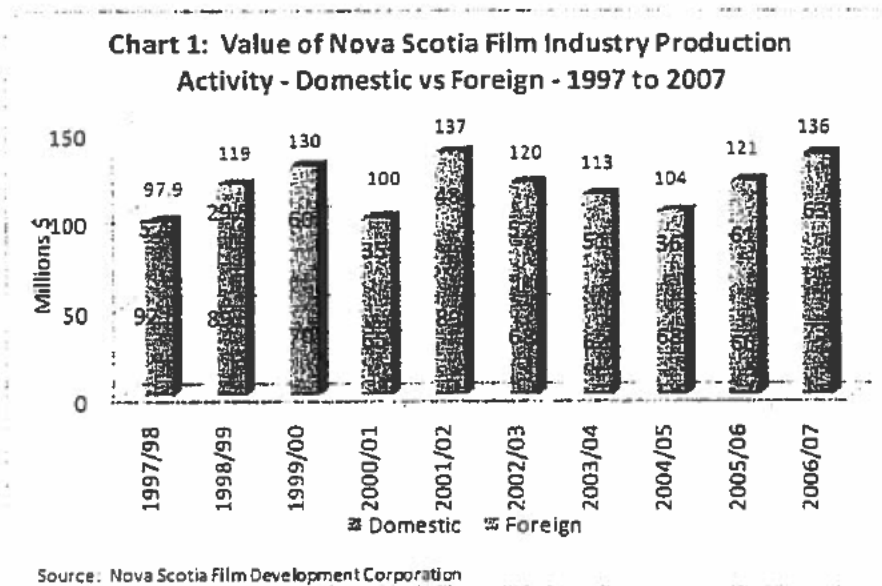
Our estimates are derived from several sources including Film Nova Scotia's data files and various secondary sources. Appendix B provides a more comprehensive assessment of data sources and data quality.

In 2006/07, Film Nova Scotia supported \$136.1 million in expenditures in independent film and television production.

Approximately \$73 million, or 54% of total production was domestic production. An additional \$63.1 million representing 46% of total production, was comprised of guest production. Guest

production includes films and television programs developed outside of Nova Scotia by non-Nova Scotia producers, but shot in the Province.

During the last decade, total annual film and television production in Nova Scotia was either equal to, or well above \$100 million. Both domestic and guest production has made a significant contribution to the sector during this period. Chart 1 presents the value of the Nova Scotia film industry production activity from 1997/98 to 2006/07 broken down by foreign (guest) and domestic production receiving Film Nova Scotia's support.



Data on production expenditures for Film Nova Scotia supported projects was provided at a very detailed level. Table 2.2.1 presents the 2006/07 production statistics broken down by foreign and domestic producers receiving Film Nova Scotia's support by expenditure type. TV series are the largest domestic activity and features the largest foreign activity. The data was separated both into expenditure categories and expenditures made in Nova Scotia and those

expenditures which were spent elsewhere for impact simulation. From a provincial impact perspective, it is only provincial expenditures that create a provincial impact.

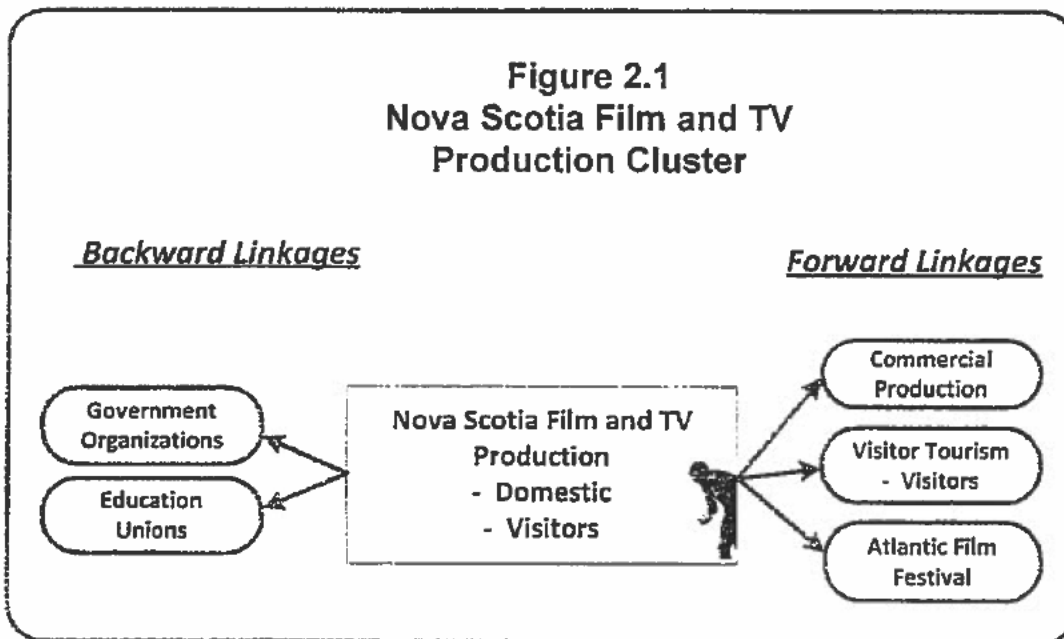
Type of Production	Foreign Activity Total Value	Domestic Activity Total Value	Total Value
Features	\$38,294,101	\$18,797,024	\$57,091,125
TV Series <sup>(1)</sup>	--	\$45,033,364	\$45,033,364
Movie of the Week	\$24,846,501	--	\$24,846,501
TV Special/Other <sup>(2)</sup>	--	\$9,154,445	\$9,154,445
New Media	--	--	--
<b>Total</b>	<b>\$63,140,602</b>	<b>\$72,984,833</b>	<b>\$136,125,435</b>

In addition to Film Nova Scotia sponsored activity, the Nova Scotia Film and Television Sector includes in-house television production. In-house television production in Canada can be separated into three key segments: (1) Canadian Broadcasting Corporation (CBC), (2) privately owned conventional (over-the-air) television broadcasters, and (3) privately-owned pay and specialty television networks. We collected data for each segment and made estimates of the levels of production in Nova Scotia.

CBC considers that the existence of an active production community in Nova Scotia was a necessary condition for Halifax to be deemed one of the three national English-language production centres in Canada. For over 30 years since the inception of television service, regional centres like Halifax and St. John's produced regional as well as local programming. Due to budget cuts, CBC changed its policy in the mid 1990s and phased out regional production. Only Toronto, Vancouver, and Halifax remain as production centres for the network. We estimate that in 2006/07, CBC production in Nova Scotia totalled \$10.4 million.

In addition to the CBC, we estimate Private Conventional Broadcaster's In-house Television Production at \$757,611 and Pay and Speciality Television Network In-house television Production at \$963,430.

We use the Nova Scotia Department of Finance Input-Output Model to measure the total economic impact on the provincial economy of expenditures by the Nova Scotia Film and Television Sector. Figure 2.1 provides a schematic of the simulation process for the I-O Model. The direct expenditures of \$148.9 million is comprised of direct expenditures on household income creating direct employment opportunities plus indirect expenditures to suppliers creating further household income and employment opportunities. The respending of the income earned at the direct and indirect stages is then respent by households to induce further household income and employment opportunities.



The total output of the Nova Scotia Film and Television Sector's production of \$148.9 million provides a significant economic impact in the Nova Scotia economy. Simulations with the Nova Scotia Input-Output model reveal this production provided in 2006/07 with an economic impact of :

- Direct GDP of \$66.9 million and total GDP including spinoff impacts of \$123.4 million.
- Direct household income of \$42.8 million and total household income of \$78.9 million.
- Direct employment (FTE's) of 986.8 and total employment (FTE's) of 2,284.7.

### *2.3 Economic Impact Forward Linkages*

The Nova Scotia Film and Television Economic Cluster's second component is the forward linkages associated with the sector. Forward linkages include firms that produce primarily to the commercial sector but also have a significant link to the film and television sector. Other linkages include visitor tourism, merchandising and distribution.

Merchandising sales refers to the creation of products linked to the film and television series success. Nova Scotia firms have several successful products in this area. However, they are not produced in Nova Scotia and hence have minimal impact.

Recoupment distribution is broadly defined as additional revenues recouped from the additional sales of film production in new markets. Each year the films produced generate additional recoupment revenues. Film Nova Scotia estimates that in the 2006-07 fiscal year recoupment revenues amounted to \$3.5 million, Nova Scotia's share was \$1.5 million including \$462,774 to Film Nova Scotia. Hence recoupment revenues represent a significant source for additional revenues to finance future activity. For impact purposes, we have included Nova Scotia recoupment revenues as part of the gross margin.

### **Commercial Sector with Strong Ties to Nova Scotia Film and Television**

Besides the CBC, Private Conventional Broadcasters and Pay/Speciality Television Networks there is film, TV and Video Production taking place by a number of firms throughout Nova Scotia. Based mainly in Halifax, these companies produce television commercials, training videos, web content (videos), equipment rentals, crews for location shooting, sound crews and feature documentaries and television shows. Much of this work is done independent of Film Nova Scotia and adds a significant contribution to Nova Scotia film production.

Canmac Economics Limited conducted a survey of a number of these industry participants to gather information on their level of involvement with the film industry, percentage of their output that was directly related to Film Nova Scotia, either directly or through clients, employment level, market information and opinions on Film Nova Scotia and the industry. From our survey we estimate this sector of the industry produced over \$11 million of film, TV, video, etc. in 2006/07 of which \$7.5 million or 67% was independent of Film Nova Scotia or Film Nova Scotia projects. The sector paid wages of \$3.7 million and employed close to 50 people on a full time equivalent basis. On average, over 44% of their output is exported, mainly within Atlantic Canada and nationally but increasingly this sector is servicing the global market.

### **Visitor Tourism**

Visitor tourism is difficult to quantify for 2006/07. We note however that visitor tourism can be significant, in particular if there is a major movie release. One study estimated that the Titanic brought in an extra \$11.7 million in spending in the year after its release.

#### ***"Incremental Spending Attributable to Titanic"***

*"Incremental spending that is attributable to the Titanic refers to any spending that occurs in Nova Scotia as a result of the Titanic initiative that would not have occurred otherwise. In other words, to what extent was the Titanic initiative a major influence on the decision to visit or travel to Nova Scotia?"*

To explore this, survey respondents were asked to rank on a scale of 0 - 10 (where 0 = no influence, and 10 = single main reason) the influence of the Titanic displays and attractions on the decision to visit Nova Scotia.

In relation to spending by visitors, the mean value of the influence coefficients can be interpreted as the influence proportion on spending: for example a mean value of 4.2 is interpreted as the Titanic initiative was responsible for 42% of the aggregate spending by visitors. The remaining 58% of the spending is regarded as being undertaken for other unidentified reasons. This allows for the adjustment of aggregate spending to identify the incremental portion as a result of the Titanic initiative."

Influence of Titanic on Decision to Take Trip	Aggregate Spending \$	Mean Response	Incremental Spending \$
Atlantic Provinces	\$4,600,000	4.2	\$1,900,000
Other Canada	\$27,500,000	1.5	\$4,100,000
International	\$40,600,000	1.4	\$5,700,000
Overall			\$11,700,000
Source: Icon Market Research Inc. Titanic Initiative Evaluation, Jan. 1999			

In 2006, the major film and television related visitor tourism impact occurred from the Atlantic Film Festival (AFF) and the Strategic Partners (SP) - an international co-production market for producers and financiers.

A recent study by Collins Management Consulting & Research Ltd. (2007) estimated that...

*"Direct spending by delegates to SP was an estimated \$285,400, which included spending directly related to the event and in tourist-type spending before and/or after the three-day SP event. This direct spending resulted in total (direct and spinoff) impact on household income of an estimated \$127,200 and on gross domestic product of an estimated \$197,000 in Nova Scotia."*



Unfortunately, economic data on visitor expenditures was not available for the AFF event. However, we can provide a conservative estimate given the number of visitors. We estimate that 26,500 attended the event with 800 being delegates. If we assume that 50% of attendees were non-Nova Scotians and that attendees were typical of Nova Scotia visitors in general (average party size 2.067, average length of stay 8.6 days and average expenditures of \$947), then an estimate of visitor expenditures for the event is \$6.1 million.

Simulations with the Nova Scotia Input-Output Model provide estimates of the economic impact for film and television production forward linkages as follows:

- Direct GDP of \$8.2 million and total GDP including spinoff impacts of \$16.5 million.
- Direct household income of \$5.9 million and total household income of \$10.4 million.
- Direct employment (FTE's) of 145.9 and total employment (FTE's) of 321.7.

#### *2.4 Economic Impact Support Linkages*

The economic impact emanating from support linkages is part of the Nova Scotia Film and Production Sector economic cluster. Our impact measurement includes three sub-sectors, 1) union operations, 2) education sector, and 3) Federal and Provincial Film Support.

##### **Union Operations**

Domestic production companies, as well as foreign (guest) production are supported by a wide array of talent from actors, costumes, lighting, make-up, props to special effects to mention a few. From a talent perspective, the various film related unions have the following membership counts: Alliance of Canadian Cinema, Television and Radio Artists (ACTRA) Maritimes has over 650 members, of which 576 or 88.6% are based in Nova Scotia. ACTRA Maritimes maintains an office in Halifax with a number of full time staff supporting its members. The Directors Guild of Canada (DGC) has representation in Atlantic Canada through the Atlantic Regional Council (ARC)

with its regional office located in Halifax. The DGC has 124 ARC members, of these 115 or 92.7% are based in Nova Scotia.

The International Alliance of Theatrical Stage Employees (I.A.T.S.E.) is represented by two locals, Local 667 Cinematographers Guild in the Eastern Canada region which represents 841 members from Ontario East, of which only 41 or 4.9% are based in Nova Scotia. I.A.T.S.E. Local 667 does not maintain any office presence east of Montreal. The second I.A.T.S.E. union representation is Local 849, The Motion Picture Studio Production Technicians, Atlantic Region. Local 849 maintains a full time office presence in Halifax with numerous staff working on behalf of its 452 Atlantic members, of which 320 or 70.8% are based in Nova Scotia. In total, over 1,000 film and television related unionized professionals are based in Nova Scotia.

Based on our survey results, we estimate that in 2006/07, union operational expenditures in Nova Scotia total \$1.2 million dollars.

#### **Educational Sector**

Back in 1990 when Film Nova Scotia was created there were next to no visual media training or educational facilities in Nova Scotia. Since that time two distinct institutions have developed diploma and degree granting programs in support of film, television, radio, recording arts and new media such as internet video.

The Nova Scotia College of Art and Design (NSCAD University) founded in 1887 is one of Canada's oldest cultural institutions and continues to be regarded as a principal centre for education and research in visual arts in North America. In 2002, NSCAD University acquired the Alliance Atlantis Academy Building on Brunswick Street in Halifax which houses Canada's first degree granting film school east of Montreal. With over 25,000 square feet the facility houses edit suites and a 3,000 square foot professional sound stage, 16 mm film equipment, high end digital video cameras, lighting and grip equipment and a growing prop and set collection.

The university has close to 1,000 full time and part time students enrolled with approximately 120 enrolled in the Media Arts division. The Media Arts division offers a Bachelor of Fine Arts degree with majors in photography, film or media arts which includes courses in photography, film, sound, performance, video and web media to mention a few. The division has 14 full and part time faculty plus two sessionals in support of its under graduate students and at present are developing a graduate program offering a Masters Degree in Film.

**The Nova Scotia Community College (NSCC)** plays a pivotal role in building Nova Scotia's skilled workforce to fill the jobs of the future and is recognized as Nova Scotia's leading post-secondary occupational training institution. Over the years NSCC has developed a wide cross section of film and television (visual arts) and supporting disciplines (recording arts) diploma and certification program geared to the visual and audio production industry. At present NSCC offers programs in radio and television arts, recording arts and screen arts at its new waterfront campus in Dartmouth. The radio and television arts, along with the screen arts are 2 year diploma granting programs with the recording arts program being a one year certification program. All of these programs teach skills needed in film/video and television production.

With respect to new media, web based and animation, the college offers two year diploma programs in digital animation and interactive and motion graphics at the Truro campus. For 2007/08 more than 9,900 full time students enrolled at the NSCC of which approximately 265 or 2.7% are enrolled in the programs outlined above.

#### ***Federal & Provincial Support***

Support activities also include the economic activities associated with the provincial and federal support. These include Film Nova Scotia, National Film Board and Telefilm. For 2006, the total operation costs for these are estimated at \$1.79 million.

**Impact**

Simulations of direct expenditures with the Nova Scotia Input-Output Model provides impact estimates of 2006/07 associated support activities as follows:

- Direct GDP of \$6.0 million and total GDP including spinoff impacts of \$10.6 million.
- Direct household income of \$4.7 million and total household income of \$7.8 million.
- Direct employment (FTE's) of 81.1 and total employment (FTE's) of 190.7.

**2.5 Economic Impact Summary**

Table 2.5.1 provides a summary of the 2006/07 Nova Scotia Film and Television Cluster. Overall, the cluster provides a significant contribution to the provincial economy. The economic cluster provides \$150.5 million in Gross Domestic Product, \$97.1 million in household income, and 2,797.1 in employment. The major component of the cluster is the film and television production sector which accounts for 82.0% of total cluster impact. This is followed by the forward linkage component at 11.0% of the total cluster impact and 7.0% by support activities.

<b>Table 2.5.1: Summary Economic Impact Nova Scotia Film and Television Cluster</b>		
<b>GDP</b>		
<b>Cluster</b>	<b>Direct GDP (millions\$)</b>	<b>Total GDP (millions \$)</b>
N.S. Film and Television Production	66.9	123.4
Forward Linkages	8.2	16.5
Support Linkages	6.0	10.6
<b>Total</b>	<b>81.1</b>	<b>150.5</b>

Table 2.5.2: Summary Economic Impact Nova Scotia Film and Television Cluster Household Income		
Cluster	Direct Income (millions\$)	Total Income (millions\$)
N.S. Film and Television Production	42.8	78.9
Forward Linkages	5.9	10.4
Support Linkages	4.7	7.8
Total	53.4	97.1

Table 2.5.3: Summary Economic Impact Nova Scotia Film and Television Cluster Employment		
Cluster	Direct Employment(FTEs)	Total Employment (FTEs)
N.S. Film and Television Production	986.8	2,284.7
Forward Linkages	145.9	321.7
Support Linkages	81.1	190.7
Total	1,213.8	2,797.1

## 2.6 Fiscal Impact

The Economic impact quantified in the previous section generates fiscal revenues. Table 2.6.1 sets out estimates of provincial revenue by major source. Overall, provincial revenues increase by \$13.6 million. The major contributor is household income tax at \$5.9 million followed by provincial HST revenue at \$4.1 million.

<b>Table 2.6.1: Provincial Fiscal Revenues 2006/07</b>	
<b>Provincial Tax Revenue</b>	<b>Millions</b>
Household Income Tax	\$5.9
HST Income	\$4.1
Other Indirect	\$3.0
Corporate Tax	\$0.6
<b>Total</b>	<b>\$13.6</b>

## Chapter 3 - Social Impacts

### *3.1 Introduction*

The Nova Scotia Film and Television Cluster's social impacts are as significant as its economic contribution. Though the two are connected in many ways, social impacts are very difficult to measure quantitatively. This chapter discusses the impact of the Nova Scotia Film and Television Cluster in this major area.

### *3.2 Place and regional vitality*

The academic, Richard Florida, who was recently attracted to Toronto from the USA, has, in two books, considered the idea that creative people are the new critical element in the development of cities and regions. In his 2002 book, The Rise of the Creative Class, (Florida, Richard. 2002) he outlined the basics of his approach. With the decline of manufacturing employment due to technology and the increasing deconstruction of corporations into geographically discrete functions, the vitality of cities and regions has become more dependent upon the creation and growth of companies based on new products and services. In his latest book, Who's Your City? (Florida, Richard. 2008) Florida explores the nature of 'place' in terms of emerging regions and cities. Much of what he is describing relates to the larger cities and regions on the planet, yet his ideas do hold some very useful lessons for Nova Scotia, Halifax and Atlantic Canada.

Florida notes three trends:

- 1) Place is actually more important in the globalized economy than before:
- 2) Places are becoming more diversified and specialized in terms of their economies and job markets and quality of life: and
- 3) We live in a highly mobile society and people are having more of a say over where they live.

To put it all together, it would seem that a good-sized creative class is critical to the continuing prosperity of a city or region, that this class leads to a kind of local specialization that has global reach and that this specialization builds on itself to attract more creative people and related companies. Yet, the increasing mobility factor implies that success can be temporary if the regional authorities do not constantly pay attention to the needs of this class. Regions and cities can take years to build a specialty that gives them a 'place in the sun', only to lose it through complacency. As well, the nature of the specialty of the cluster can erode in one place to the benefit of another place.

A 2004 report (Gertler, M.S. and Tara Vinodrai, 2004) prepared for the Greater Halifax Partnership provides some indicators on the strength of the creative class in Halifax. Table 3.1 shows how Halifax ranks on four key indicators defined as follows:

*Talent Index*

The proportion of the Census Metropolitan Area (CMA) population over 18 years of age with a bachelor's degree or higher.

*Bohemian Index*

The proportion of the CMA employed labour force that works in artistic and creative occupations.

*Mosaic Index*

The proportion of the CMA population that is foreign-born.

*Tech Pole Index*

Compares a region's share of national employment in high-technology industries to the region's overall share of national employment; this is then adjusted for city-size by multiplying by a region's share of national high-technology employment. It reflects both the region's degree of



specialization in technology-intensive activity, as well as its sheer scale of employment in these sectors. The index includes technology-intensive sectors in both manufacturing and services.

Index	1996	2001
Talent Index	2	4
Bohemian Index	7	7
Mosaic Index	19	19*
Tech Pole Index (1999)	10	10**
<p><i>*The Abbotsford and Kingston CMAs were not included in the original analysis since they were not CMAs in 1996. Halifax's 2001 rank on the Mosaic Index slips from 19<sup>th</sup> of 25 CMAs to 21<sup>st</sup> of 27 CMAs of Abbotsford and Kingston are included. Its 2001 ranks on the Talent and Bohemian Index are not affected by the inclusion of these two additional CMAs.</i></p> <p><i>**Tech Pole Index is calculated for 1999 only (excludes Abbotsford and Kingston CMAs)</i></p>		

Clearly, Halifax (given its small size) ranks significantly above average for the 27 cities ranked. In particular, it ranks 7 for its Bohemian Index - the index most clearly aligned to the film and television cluster.

This message relates to the film and television cluster in Nova Scotia in a very direct fashion. First, there are very few cities the size of Halifax in the world that have the relative size and vitality of a film and television cluster as it has. While this cluster acts in large part as a 'feeder' to the larger centres, it also does produce local works that have an influence in the globalized world. In a larger sense, tying together many of the local media industries with the broader entertainment/cultural part of the economy, shows clearly that Halifax and Nova Scotia have a distinctive spot in North American consciousness. One has only to note that a recent New York Times article on Oscar nominee, Ellen Page, could refer to her as a Halifax girl, without feeling the need to explain what or where Halifax is. The key, as Florida explains, is how to sustain and promote this unique cultural image.

### *3.3 Social and Economic Impacts on Regional Vitality*

The Nova Scotia Film and Television Production Cluster is an important strategic partner in advancing the provincial government's broader economic and social prosperity vision. The industry is as described above, important to the success of these endeavours. It is also a best practise example of what can be accomplished.

#### **3.3.1 Economic Prosperity Strategy**

The Government of Nova Scotia set out its economic growth strategy in the document Opportunities for Sustainable Prosperity 2006. Within this document the vision for the province is:

*A thriving Nova Scotia that by 2010 is the best place in Canada to live, work, do business and raise families.*

Success is measured not only in terms of economic output but also in activity that is carried out in an environmentally and socially sustainable manner.

Cultural industries are in the forefront of ensuring Nova Scotia's continued prosperity. They drive economic growth and communities are successful when they have strong, vibrant cultural industries. The film sector is the 4th largest in the country and it has been for the last 10 years. It is industries like the film industry that will help us attract and retain a creative class in the competitive environment we live in. The Nova Scotia Film and Television Sector is a key contributor to Nova Scotia's quality of life and as an attraction magnet for attracting and retaining a creative class.

### **3.3.2 Immigration**

A second theme in the provincial prosperity paper is the need to attract immigrants to the province. The ageing workforce will result in a reduced labour force that will constrain economic growth. Furthermore, the developed economy continues to transform itself into a global economy, where success for Nova Scotia depends increasingly on the ability to compete globally. Increased migration helps to address both these issues by adding to labour force supply and increasing inter-connectedness with the global community.

The Nova Scotia Film and Television Cluster is a significant contributor to this provincial objective. First, there is the significant public relations value associated with Nova Scotia films and television displaying the province before the world. Secondly, as noted above the existence of the industry signals an open and welcoming message to immigrants. Finally, the industry is a direct employer of skilled immigrants. The high level of foreign film making along with domestic production results in employment of many new visitors to Nova Scotia.

### **3.3.3 Environmental**

The provincial economic prosperity strategy, as noted above, seeks to achieve economic growth in an environmentally sustainable manner. The Nova Scotia Film and Television Production Sector exemplifies the type of industry required to ensure this goal is achieved. Environmentally, creative industries such as the film industry tend to have less of an impact on the environment, leaving a smaller footprint as compared to other industries like manufacturing and resource based industries such as lumber and mining. Further, the industry is characterized by abundance - an abundance of ideas - that by definition does not deplete and in fact may expand.

### **3.3.4 Social Prosperity**

The province of Nova Scotia has recently released a social prosperity paper - *Weaving the Threads (2007)*. This paper sets out the social prosperity framework envisioned for the

province. It provides a useful framework for understanding the Nova Scotia Film and TV Production Sector's contribution to social prosperity in the province. The paper defines social prosperity as follows:

*"Maintaining our quality of life, while having the capacity to create, recognize, and seize opportunities that can improve the quality of life for ourselves and future generations."*

By creating a sustainable industry, we ensure a sustainable contribution to social prosperity and Nova Scotia's quality of life. The value of **recognition** of a community cannot be overestimated in terms of how it is treated by governments and businesses. With recognition comes a lowering of perceived risk in terms of a successful relationship between the institution and the region. This makes it easier to attract both private and public investment and to attract new population, either from domestic migration or foreign immigrants. In the cultural arena, much as in academic circles, this comes from awards, publicity and prizes. Recognition implies excellence and excellence attracts those others who aspire to it. The existence of the Atlantic Film Festival and the East Coast Music Awards, for instance, provide avenues for cultural recognition.

Second, the existence of a vital film and television sector helps to develop a **community** of what might be called cultural workers. This community is not restricted to people in film and related occupations, but extends to the wider group of artists and to those who support them. There are visual artists, crafts people, graphic designers, comic book artists and producers, digital media and game developers, various music-related occupations, performers and actors in the live theatre and a number of academics and financial and production executives. The community works in the film and television industry and between shoots is active in other creative sectors. The Halifax creative class is best characterized as an emerging cluster.

Reaching the goal of a sustainable cluster is intimately connected to the financing available for projects that employ the members of this community.

The film and television sector's contribution to society cannot be overstated. Films and TV can challenge us, change our behaviour and strongly influence our values, ideas and quality of life. We have identified some recent examples of Nova Scotia's contribution in this regard. As will be seen below, these examples provide a broad spectrum of social commentary from building a better world in 'Shake Hands with the Devil' to modern problems such as obesity. Our sample of recent Nova Scotia films reveal the depth and breadth of the industry's social contribution.

#### **SHAKE HANDS WITH THE DEVIL**

Feature Film

**Synopsis:** The feature film Shake Hands with the Devil, based on Lieutenant-General Roméo Dallaire's award-winning book, is directed by Roger Spottiswoode, and stars the highly-esteemed actor Roy Dupuis as Dallaire. A dramatization from Oscar®-winning Producer Michael Donovan and multi-award-winning Producer Laszlo Barna, Shake Hands with the Devil was filmed in Halifax and Rwanda using many of the actual locations described in the book.

Shake Hands with the Devil is produced by Halifax Film, Barna-Alper Productions and Seville Productions with the participation of Telefilm Canada, The Movie Network, Super Écran, Movie Central, Canadian Broadcasting Corporation, Radio-Canada, The Harold Greenberg Fund, Film Finances Canada Limited and Head Gear Films Limited.

**Screened** (festivals/markets and/or theatrical release date): 2007 International Toronto Film Festival / 27<sup>th</sup> Atlantic Film Festival / others to be determined Theatrical Release - September 28, 2007.

#### **POOR BOY'S GAME**

Feature Film

**Synopsis:** Donnie Rose went to prison for beating a young black man so brutally it left him handicapped for life. Nine years later, Donnie is a changed man but must go back home to the same violent place that created him.

George Carvery has waited nine years to avenge his son's fate. When he meets Donnie, however, Carvery surprisingly overcomes his need for vengeance. But the black community still wants justice. Their instrument is Ossie Paris – a devastatingly talented boxer who challenges Donnie to a grudge match.

As the racism boils to the surface, Carvery trains Donnie for the fight. Their partnership makes them outcasts from both tribes, knowing that their futures will be decided with the bell of the first round.

Screened (festivals/markets and/or theatrical release date): Had its world Premiere at the 2007 Berlin International Film Festival. Will have its North American Premiere at the 2007 Toronto International Film Festival, followed by a gala presentation at the Atlantic Film Festival.

### A STONE'S THROW

Feature Film

Synopsis: A Stone's Throw follows Jack Walker an American photojournalist whose work exposes the exploitation of nature by industry, as he returns unannounced to his hometown in rural Nova Scotia. It soon becomes clear that he is much more desperate than he chooses to reveal. Jack's eco-activist example inspires his young nephew, Thomas, to take action and pursue an investigation into the potential health risks caused by a local paint manufacturing plant. The emotional and physical stakes escalate for Thomas as his uncle's influence inadvertently sets the passionate youth on his own collision course with fate.

Awards (nominations and wins): Best Atlantic Film, Best Sound Design (Atlantic Film Festival).

Reviews (quotes and source):

*"Heat emanates off the screen... A Stone's Throw is a family drama underscored with hot button social issues. Adroitly crafted and well observed, the film shows a nascent talent behind the lens..."*

- Len Klady, Screen International

*"Veteran indie producer Camelia Frieberg's solid feature debut is an intimate Nova Scotia small-town story exploring conflicts arising from one's responsibility to self, family and society."*

- Jennie Punter, Globe and Mail

*"A Stone's Throw is reminiscent of a particular breed of family dramas, such as Sidney Lumet's Running on Empty or Ken Kesey's Sometimes A Great Notion, which stealthily employs the complexity of family dynamics with the intensity of an ecological suspense... shattering any illusions that isolation somehow excludes environmental responsibility."*

- Thom Ernst, Festival Daily

Screened (festivals/markets and/or theatrical release date): Toronto International Film Festival, Vancouver International Film Festival, Edmonton International Film Festival, Calgary International Film Festival, Victoria Independent Film and Video Festival, Sao Paulo International Film Festival, Palm Beach International Film Festival, Santa Cruz International Film Festival. Theatrical release in Toronto, Halifax, and Vancouver August 10, 2007.

### **THE LITTLE BLACK SCHOOL HOUSE**

Documentary

Synopsis: The Little Black School House tells the story of segregated schools in Canada, the teachers who taught there, and the students they taught. It is a story of the struggle of African Canadians to achieve dignity and equality through the pursuit of education. Generation after generation, these citizens filed petitions, launched court cases and pressured authorities to provide quality education for their children. Schools were segregated by custom and by law. Ontario's last school closed in 1964, Nova Scotia's, 1983. Former teachers --one who is over ninety years of age--and students, drawn from across generations, give first hand accounts of their experiences. At the core of the film is this question: how could a democratic society, that holds education as the mark of good citizenship, separate children on the basis of race?

### **FORGIVENESS: STORIES FOR OUR TIME**

Documentary

Synopsis: There are crimes so unspeakably horrendous they seem unforgivable. And yet, some people do manage to forgive. Forgiveness: Stories for Our Time focuses on four individuals who have lived through events so painful and horrific they are unimaginable to most of us. Lesley Parrott's young daughter was stalked, raped and strangled. Anne Marie Hagan's father was murdered by the next-door neighbour. Alan McBride's wife and eight others were killed in an IRA bombing in Belfast. Reverend Julie Nicholson's daughter was killed on the London underground in the terrorist bombing in 2004.

Through heartfelt interviews, archival footage and stunning cinematography, filmmaker Johanna Lunn tells the stories of these characters as they absorb, cope with and attempt to move beyond brutal events in their lives.

In a world wracked by increasing violence and horror, *Forgiveness: Stories for Our Time* brings hope that there are other possibilities beyond blind revenge – and that in forgiving others we can set ourselves free.

Awards (nominations and wins): Best Mid-length Documentary, Hot Docs International Film Festival.

Reviews (quotes and source):

*"Forgiveness is a study in grace and humanity: it finds light in the most unlikely places."*

- Alex Strachan, CanWest News Service

*"In a world where violence is so prevalent and often glorified by the media, we need films like this to spark the healing process by offering people a safe platform to question acts of carnage and to further embrace forgiveness."*

- Rachael Lovewell, Juicy Stuff

*"This is an important film."*

- Alexander Trudeau, Hot Docs International Film Festival Jury Member

*"...deeply moving..."*

- John Doyle, the Globe and Mail

*"Lunn's film is about far more than the need for forgiveness in our crisis-ridden world. Its a meditation..."*

- Paul Matthews, Toronto Life

*"a ground breaking documentary."*

- Etan Vlessing, Hollywood Reporter



*"...a tremendous body of work. You and your crew deserve to be commended. I hope it's entered for lots of awards. It deserves every piece of hardware it receives and then some."*

- Charles Adler, syndicated radio talk show host

*"A rare gem -- riveting and intimate. A film that takes us behind the headlines of murder and mass killing into the personal journey of the survivors as they move from horror and rage to inner questioning and forgiveness."*

- Richard Reoch, President of Shambhala International

Screened (festivals/markets and/or theatrical release date): Hot Docs International Film Festival April 2007

### **GENERATION XXL**

Documentary

Synopsis: Intimate, funny and character driven, GENERATION XXL follows four teen as they confront their pounds and themselves. The kids struggle against fast food, computers, video games, soda pop, parents and peer pressure, and we learn weight loss is more complex than getting off the couch. Exposed in their hopes, dreams, and clothing, these kids allow us to see the complexity of obesity and raise serious questions about societies' response to the extra large.

Awards (nominations and wins): Students Choice Award at Sprockets International Children's Festival of Toronto, Viewfinders Best Documentary.

Reviews (quotes and source):

"Compelling Documentary from Teresa MacInnes"

- Andrew Ryan, Globe and Mail

*"The kids in Generation XXL are phenomenal, so honest and brave. I watched the documentary last night and was moved so deeply."*

- Viewer Comment Source: CBC Web Forum

Aired on (network and date or planned dates): CBC March 8<sup>th</sup> 9pm

Screened (festivals/markets and/or theatrical release date): Sprockets International Children's Festival, NYC International Children's Festival, Viewfinders, Los Angeles International Children's Festival.

**BURIED AT SEA**

TV (Live action)

Synopsis: Weapons of mass destruction aren't new. Between the Second World War and the 1970's millions of tons of chemical weapons and munitions were dumped into the ocean and forgotten. Today, a new awareness of the ocean's importance inspires efforts to rediscover these lethal time capsules. We join the ocean search and weave the stories of people around the world whose lives have been impacted by chemical and conventional weapons Buried at Sea.

There are many other examples of the cluster's cultural contribution rather than just the film festival and ECMAs. Here are some key award winners and notable mentions:

- Michael Donovan winning an Academy Award (Oscar) as a producer for the documentary *Bowling for Columbine*.
- Halifax actress Ellen Page who has been receiving a lot of praise for her performance in the feature film *Juno*. Aside from winning Breakthrough Female Actress awards from Hollywood Film Festival, the USA National Board of Review and the Phoenix Film Critics Society and Best Actress awards at the Satellite Awards and the Chicago Film Critics Association Awards, the role has also earned her Best Actress nominations from the Golden Globes, Screen Actors Guild Awards, the Independent Spirit Awards, the Broadcast Film Critics Association Awards, the Gotham Awards and the Academy Awards (Oscars).
- *Trailer Park Boys: The Movie*, based on the Gemini Award winning TV series, which grossed \$1.3 million in its opening weekend making it the highest grossing opening weekend for an English language film in Canadian history. Telefilm Canada reports the movie earned \$3.7 million in box office receipts.
- Halifax Film's *This Hour Has 22 Minutes* has been consistently honoured with awards and nominations throughout its 15 seasons on the air.

### **3.4 Conclusion**

The question of the social impact of the Nova Scotia Film and Television Production Cluster can be summed up in both a positive and a negative way. It has a positive impact in that it contributes to the economy of the Province, to its reputation and recognition nationally and globally and to the social sensitivity internationally. The negative way results from the implication of Prof. Florida's research, that pursuing over the decades the status of a city-region that is a desirable place for new, creative businesses to start and expand can be quickly lost if support for cultural industries, such as film and TV production, were to falter. Hence, the cluster will require ongoing support to ensure its long term sustainability.

## Chapter 4 - Summary and Conclusions

### 4.1 Introduction

This chapter provides a summary of the previous results and some concluding observations with respect to the impact and potential programs.

### 4.2 Summary

The economic impact of the Nova Scotia Film and Television Cluster is substantial. Our analysis reveals the following major results:

1. The Nova Scotia Film and Television Cluster created direct GDP of \$81.1 million dollars and total GDP of \$150.5 million dollars in 2006/07.
2. The Nova Scotia Film and Television Cluster created \$53.4 million in direct household income and \$97.1 million in total household income.
3. The Nova Scotia Film and Television Cluster created 1,213.8 direct jobs (FTE) and 2,797.1 total jobs (FTE).
4. The sector creates \$13.6 million in provincial fiscal revenues.
5. The Nova Scotia Film and Television Sector is an emerging knowledge based cluster.

By way of comparison, a recent Canmac study (Canmac Economics 2002) documented that the Nova Scotia Boatbuilding Industry generated total household income of \$38.9 million and 1,359 person years of employment in 2001.

The social contribution of the cluster is no less significant than its economic impact. The cluster as a creative industry, is one of the primary drivers for continued economic prosperity in the Province. It is an integral component of the province's economic prosperity strategy. The cluster also makes a direct contribution to social prosperity. It directly impacts on the region's quality of life, providing residents with a creative environment and the opportunity for a cultural experience not available in many other jurisdictions.

### 4.3 Conclusions

The primary purpose of this report has been to document the existing economic and cultural impact of the Nova Scotia Film and Television Cluster. In this concluding section, our focus is on moving forward.

The development of a sustainable Nova Scotia Film and Television Production Cluster generates economic wealth directly by 'exporting' the sector's products and services either by hosting visitor production companies or domestic companies selling products and services outside Nova Scotia. As we have seen, this direct wealth generation also creates additional wealth via spinoff effects.

Some areas that could be further developed into the future are:

#### **1) Stronger Links to Visitor Tourism**

Showing films produced in Nova Scotia provides incredible public relations value and advertisement for the province's rich scenery - one of the key attractions for tourists. Major successful films have significant visitor attraction potential. Recent studies (Hudson, Simon, Ritchie J.R. Brent. 2006) have confirmed this.

*"Film tourism is a growing phenomenon worldwide, fuelled by both the growth of the entertainment industry and the increase in international travel. This article proposes a model of exploiting film tourism marketing opportunities. It identifies the optimum marketing factors that encourage film tourists to visit destinations that appear (or are depicted) in the movies. Factor analysis reveals four types of marketing activities in which destinations can engage to promote film tourism; proactive efforts to encourage producers and studios to film at the location, efforts to generate media publicity around the film and its location, marketing activities that promote the film location after production, and peripheral marketing activities that leverage film tourism potential. Results of a stepwise multiple regression analysis indicate a high correlation between film tourism success and one of the four factors: the proactive efforts of destinations that encourage producers and studios to film at their location."*

*Socio-Economic Impact Assessment, Nova Scotia Film and Television Cluster*

Some of the empirical evidence for film tourism are provided in Table 4.1.

**Table 4.1: FILM TOURISM IMPACTS**

Film or TV Series	Location	Impact on Visitor Numbers or Tourist Revenue
Braveheart	Wallace Monument, Scotland	300% increase in visitors year after release
Heartbeat	Goathland, North Yorkshire, England	Three times the number of normal visitors in 1991
Deliverance	Rayburn County, Georgia	20,000 film tourists a year Gross revenues \$2 to 3m
Dances with Wolves	Fort Hayes, Kansas	25% increase compared with 7% for previous 4 years
Close Encounters of the Third Kind	Devils Tower, Wyoming	75% increase in 1975 20% visit now because of the film
Thelma and Louise	Arches National Monument in Moab, Utah	19.1% increase in 1991
Field of Dreams	Iowa	35,000 visits in 1991 Steady increase every year
Dallas	Southfork Ranch, Dallas	500,000 visitors per year
The Lord of the Rings	New Zealand	10% increase every year 1998 to 2003 from UK
Steel Magnolias	Louisiana	48% increase year after release
Last of the Mohicans	Chimney Rock Park, North Carolina	25% increase year after release
The Fugitive	Dillsboro, North Carolina	11 % increase year after release
Little Women	Orchard House, Concord, Massachusetts	65% increase year after release
Bull Durham	Durham, North Carolina	25% increase in attendance year after release
Harry Potter	Various locations in U.K	All locations saw an increase of 50% or more
Mission: Impossible 2	National parks in Sydney	200% increase in 2000
Gorillas in the Mist	Rwanda	20% increase in 1998
Crocodile Dundee	Australia	20.5% increase in U.S. visitors 1981 to 1988
The Beach	Thailand	22% increase in youth market in 2000
All Creatures Great and Small	Yorkshire Dales	Generated £5m for Yorkshire Dales
To the Manor Born	Cricketer St Thomas, Leisure Park, England	37% increase between 1978 to 1980
Middlemarch	Stamford, Lincolnshire, England	27% increase in 1994
Four Weddings and a Funeral	The Crown Hotel, Amersham, England	Fully booked for at least 3 years
Mrs. Brown	Osborne House, Isle of Wight, U.K.	25% increase
Notting Hill	Kenwood House, England	10% increase in 1 month
Saving Private Ryan	Normandy, France	40% increase in American tourists
Sense and Sensibility	Saltram House, England	39% increase
Pride and Prejudice	Lyme Park in Cheshire, UK	150% increase in visitors
Cheers	Location in Boston	\$7m in unpaid promotional advertising each year
Miami Vice	Miami	150% increase in German visitors 1985 to 1988
Forrest Gump	Savannah, Georgia	7% increase in tourism
Troy	Canakkale, Turkey	73% increase in tourism
Captain Coralli's Mandolin	Cephalonia, Greece	50% increase over 3 years

Sources: Riley and van Doren (1992); Tooke and Baker (1996); Grihault (2003); Croy and Walker (2003); Cousins and Anderak (1993); Busby, Brunt and Lund (2003); Riley, Baker, and van Doren (1998).

## **2) Merchandising**

Another area of future spinoff potential is merchandising. Several existing production companies sell merchandise associated with their film and television production. Local manufacturing companies may have potential to provide merchandise associated with film and television production.

## **3) Cost Effective Locations**

The encouragement of additional film and television production is sensitive to economics. A recent statistical study by InterVISTAS (2005) for British Columbia provided the following results:

- *"Econometric evidence generally supports the hypothesis that tax credits do have an impact on production spending decisions. The results from our analysis finds a weak but positive relationship between tax credits and production spending levels.*
- *Likewise, we find a significant relationship between production spending and effective labour costs (labour rates after adjusting for exchange rate and tax credits), such that, all else being equal, productions will move to jurisdictions with lower effective wages.*
- *The analysis also indicated that there was a high sensitivity to effective labour costs, such that a 1% increase in effective labour costs reduces overall production by 1.2% (equally, a 1% reduction in labour costs increases overall production by 1.2%). The analysis would appear to support the argument that film/TV production is mobile and will shift from one location to another on the basis of small differences in production costs.*

In addition we note the conclusion of a recent Canadian Institute for Research on Regional Development study on the culture sector in Atlantic Canada (2002). The study concludes:

*"Because of the lack of adequate cultural infrastructure in certain sectors of activity, many of Atlantic Canada's artists and suppliers of "exportable" cultural products have moved away from the region to record their work, pursue a stage career, or distribute their products. While this makes them important ambassadors for Atlantic Canada in foreign markets, it also raises concerns about the region's capacity to retain talent and creativity and to increase its international exports. There may not be a lack of talent or creativity in Atlantic Canada, but it does suffer from gaps in know-how and in mechanisms for production, promotion, diffusion, and distribution."*

Discussion with industry stakeholders reveal that a major cultural infrastructure deficiency is the lack of a state of the art sound stage in the HRM. Industry stakeholders noted the recent loss of a significant production to Toronto because we did not have adequate sound stage facilities. It was a feature film in the vicinity of \$50 million. Equally important is investment in education and R&D infrastructure and projects.

The Nova Scotia Film and Television Cluster is a major component of the overall creative industries cluster. Increasingly, governments around the world are seeing the potential of the creative industry cluster to play an ever increasing role in the future economic prosperity of advanced economies. Some examples will illustrate the point:

**United Kingdom**

*"Our creative industries have grown twice as fast as the rest of the economy in recent years, now accounting for over seven per cent of GDP. If they are to continue to grow in size and significance, we must work hard to maintain the most favourable conditions to stimulate British innovation and dynamism. And we must ensure there are people with the right skills to meet the needs to that expanded creative sector.*

*Today, the exciting worlds of music, television, fashion and film seem too closed off for many young people. Too often, a fledgling creative career depends on who you know, how far from home you are prepared to travel, or how littler you are prepared to work for.*



*So at the foundation of our strategy are two key proposals: more opportunity for young people to develop creative talents at school, and more structured pathways into creative careers."*

*Creative Britain,  
New Talents for the New Economy  
Development for Business Enterprise & Regulatory Reform*

### **New Zealand**

*"The creative industries sector is identified within the Growth and Innovation Framework as one of the keys to New Zealand's economic transformation. The sector was chosen both because of its potential for growth and its ability to enable innovation and improved productivity across other sectors within the economy. The creative industries sector currently contributes about \$2.86 billion (3.1% total GDP), but the sector is growing at a faster rate than the economy as a whole, at a rate of 9%.*

*Creative industries is a diverse sector, which includes screen production, television, music, design, fashion, textiles and digital content. New Zealand has already established competitive advantage in some niches within the sector, notably, screen production and post production, and has a growing reputation across a number of other areas including fashion and design.*

*In addition to our world class capability, the creative industries can leverage New Zealand's unique culture and as a knowledge based sector, it has the potential to generate wealth on a sustained basis and reposition New Zealand as a nation of new ideas and new thinking."*

*New Zealand Trade & Enterprise  
Developing Creative Industries in New Zealand*

### **Singapore**

*"Globalisation, technology and competition are changing the global environment rapidly. Singapore must now embark on a journey of reinvention to harness the multi-dimensional creativity of our people to develop a Creative Economy. This would require us to look at how we can fuse arts, business and technology to become Singapore's new competitive advantage.*

*The creative cluster is a key contributor to the Creative Economy and can be defined as “those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property”. The creative industries can be categorized into three broad groups: Arts and Culture, Design and Media.”*

*Creative Industries Development Strategy  
ERC Service Industries Subcommittee  
Workgroup on Creative Industries*

In conclusion, the Nova Scotia Film and Television Cluster has experienced successful growth to date. The further sustainable development of this cluster will increasingly become an anchor for Nova Scotia’s general economic and social prosperity and require continued government support to meet its future challenges and opportunities.

**APPENDIX A - Impact Simulation**  
*(This Appendix excludes visitor convention impacts)*

**IMPACT SUMMARY REPORT**

NSFDC Impact purchaser\$ all but Capital Invest. ECONOMIC IMPACT SORTED by IMPACT/IIND.	INPUT 000's \$	IMPACT 000's \$ (Sort Col.)	HHRG. 000's \$	EMPLOY #	GDPFC 000's \$
44 Households (includes direct employment)	\$48,246.21	\$82,434.04	\$48,246.21	1,027.1	\$0.0
35 Finance, Insurance & Real Estate Industries	\$5,595.00	\$24,976.88	\$6,308.46	102.4	\$15,776.3
33 Communications & Other Utilities Industries	\$9,166.07	\$15,253.24	\$4,878.81	123.6	\$10,429.2
32 Retail Trade Industries	\$5,699.50	\$12,348.14	\$6,314.08	381.2	\$7,473.4
31 Wholesale Trade Industries	\$5,023.88	\$8,025.86	\$3,389.23	97.6	\$4,635.9
DIRECT GDP@FC (primary input)	\$84,193.12	-----> Included in GDPFC total ----->			\$64,193.1
TOTAL	\$82,172.63	\$186,853.81	\$82,434.04	2,266.1	\$119,320.9

NSFDC Impact purchaser\$ all but Capital Invest. FEDERAL AND PROVINCIAL FISCAL IMPACT SORTED by IMPACT/IIND.	INPUT 000's \$	FEDERAL P.INCOME 000's \$	FEDERAL TOTAL 000's \$	PROV. P.INCOME 000's \$	PROV. TOTAL 000's \$ (Sort Col.)
43 Households	\$48,246.2	\$4,503.8	\$7,140.1	\$3,054.0	\$6,785.4
23 Finance, Insurance & Real Estate Industries	\$5,595.0	\$588.9	\$1,452.7	\$399.3	\$1,094.4
22 Retail Trade Industries	\$5,699.5	\$589.4	\$978.3	\$399.7	\$905.5
33 Communications & Other Utilities Industries	\$9,166.1	\$436.0	\$940.3	\$296.2	\$757.0
31 Wholesale Trade Industries	\$5,023.9	\$317.3	\$550.7	\$215.2	\$501.1
DIRECT FEDERAL REVENUE (primary input)	\$0.0	----->	\$0.0		
DIRECT PROVINCIAL REVENUE (primary input)	\$5,045.6	-----> Included in Totals ----->			\$5,045.6
TOTAL	\$82,172.6	\$7,695.2	\$13,192.8	\$5,218.1	\$17,035.6

PRIMARY INPUTS	INPUT 000's \$	IMPACT 000's \$	EMPLOY #	GDPFC 000's \$
DIRECT EMPLOYMENT (included in households)	1,027.1			
DIRECT GDP@FC	\$64,193.1			
DIRECT FEDERAL REVENUE	\$0.0			
DIRECT PROVINCIAL REVENUE	\$5,045.6			

Impact Results

Nova Scotia 1996 Input-Output Model 2

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**IMPACT SUMMARY REPORT**

NSFDC Impact purchaser\$ all but Capital Invest.	INPUT	IMPACT	HHREC.	EMPLOY	GDPFC
ECONOMIC IMPACT SORTED by IMPACT/IND.	000's \$	000's \$	000's \$	#	000's \$
IMPORTS	\$0.0				

Version 1.0

Nova Scotia Department of Finance

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**KEY INDUSTRIES IMPACT REPORT**

NSFDC Impact purchaser\$ all but Capital Invest. KEY INDUSTRY SECTORS IMPACT	INPUT 000's \$	IMPACT 000's \$	HHREC. 000's \$	EMPLOY #	GDPFC 000's \$
1 RESOURCES	\$35.5	\$3,276.7	\$1,060.7	37.9	\$1,850.6
2 MANUFACTURING	\$0.0	\$9,479.8	\$1,947.5	49.9	\$2,645.7
3 CONSTRUCTION	\$0.0	\$1,443.1	\$529.3	13.5	\$571.3
4 TRANSPORTATION & COMMUNICATIONS	\$11,338.0	\$20,705.7	\$6,762.8	192.4	\$13,299.7
5 WHOLESALE & RETAIL TRADE	\$10,723.4	\$20,374.0	\$9,713.3	478.9	\$12,109.3
6 FINANCE, INSURANCE & REAL ESTATE	\$5,595.0	\$24,976.9	\$6,308.5	102.4	\$15,776.3
7 SERVICES	\$6,234.6	\$24,163.5	\$7,865.8	363.9	\$9,074.9
8 HOUSEHOLDS (includes direct employment)	\$48,248.2	\$82,434.0	\$48,246.2	1,027.1	\$0.0
9 DIRECT GDP@FC (primary input)	\$64,193.1				\$64,193.1
					Included in GDPFC total --->
TOTAL	\$82,172.6	\$186,853.8	\$82,434.0	2,266.1	\$118,320.8

NSFDC Impact purchaser\$ all but Capital Invest. FEDERAL AND PROVINCIAL KEY INDUSTRY SECTORS FISCAL IMPACT	INPUT 000's \$	FEDERAL P.INCOME 000's \$	FEDERAL TOTAL 000's \$	PROV. P.INCOME 000's \$	PROV. TOTAL 000's \$
1 RESOURCES	\$35.5	\$99.0	\$186.6	\$67.1	\$161.0
2 MANUFACTURING	\$0.0	\$181.8	\$318.8	\$123.3	\$286.1
3 CONSTRUCTION	\$0.0	\$49.4	\$81.9	\$33.5	\$75.9
4 TRANSPORTATION & COMMUNICATIONS	\$11,338.0	\$631.3	\$1,279.0	\$428.1	\$1,062.1
5 WHOLESALE & RETAIL TRADE	\$10,723.4	\$806.7	\$1,539.0	\$614.9	\$1,406.6
6 FINANCE, INSURANCE & REAL ESTATE	\$5,595.0	\$588.9	\$1,452.7	\$399.3	\$1,094.4
7 SERVICES	\$6,234.6	\$734.3	\$1,194.8	\$497.0	\$1,118.5
8 HOUSEHOLDS	\$48,248.2	\$4,503.8	\$7,140.1	\$3,054.0	\$6,785.4
9 DIRECT FEDERAL REVENUE (primary input)	\$0.0		\$0.0		\$0.0
10 DIRECT PROVINCIAL REVENUE (primary input)	\$5,045.6				\$5,045.6
					Included in Totals ----->

Impact Results

Nova Scotia 1996 Input-Output Model 2

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**KEY INDUSTRIES IMPACT REPORT**

NSFDC Impact purchasers: all but Capital Invest.	INPUT	IMPACT	HHREC.	EMPLOY	GDPFC
KEY INDUSTRY SECTORS IMPACT	000's \$	000's \$	000's \$	#	000's \$
TOTAL	\$82,172.6	\$7,695.2	\$13,192.8	\$5,218.1	\$17,035.6
PRIMARY INPUTS					
DIRECT EMPLOYMENT (included in households)	1,027.1				
DIRECT GDP@FC	\$64,193.1				
DIRECT FEDERAL REVENUE	\$0.0				
DIRECT PROVINCIAL REVENUE	\$5,045.6				
IMPORTS	\$0.0				

Impact Results

Nova Scotia 1996 Input-Output Model 2

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**STANDARD IMPACT REPORT**

Primary Input / Model Results (1)

NSFDC Impact purchaser\$ all but Capital Invest.  
**MODEL VALUES DIRECT, SPINOFF & TOTAL**

	DIRECT	SPINOFF	TOTAL
EMPLOYMENT (number)	1,027.1	1,239.0	2,266.1
HOUSEHOLD INCOME (000's \$)	\$48,246.2	\$34,187.8	\$82,434.0
PROVINCIAL REVENUE (000's \$)	\$5,045.6	\$11,990.0	\$17,035.6
PROVINCIAL INCOME TAX REVENUE (000's \$)	\$2,732.4	\$2,485.7	\$5,218.1
PROVINCIAL HST TAX REVENUE (000's \$)	\$2,313.2	\$1,289.2	\$3,602.4
PROVINCIAL OTHER INDIRECT TAX REV (000's \$)	\$0.0	\$2,665.9	\$2,665.9
PROVINCIAL CORPORATE TAX REV. (000's \$)	\$0.0	\$503.7	\$503.7
GROSS DOMESTIC PRODUCT @ FC (000's \$)	\$64,193.1	\$55,127.8	\$119,320.9

(1) DIRECT EMP., GDP & PROV. TOTAL REVENUE FROM PRIMARY INPUTS, HOUSEHOLD INCOME, ETC. FROM NSIO MODEL. ALL DIRECT VALUES CAN BE OVERWRITTEN BY USER, TOTALS MAINTAINED.



## APPENDIX B - Survey Instrument

**Film Nova Scotia  
Impact Survey- Extended Cluster**

Company Name: \_\_\_\_\_  
Date Established: \_\_\_\_\_  
Address: \_\_\_\_\_  
Interviewee: \_\_\_\_\_

Canmac Economics is conducting an economic impact assessment of the Nova Scotia Film Development Corporation's activities. May I ask a few questions concerning your operation and your relationship to the Nova Scotia Film Development Corporation? The survey is quite short and shouldn't take more than ten minutes. All information will be held in the strictest of confidence by Canmac Economics Limited.

1. Please describe the products/services you provide.

\_\_\_\_\_  
\_\_\_\_\_

2. For the most recent fiscal year - 2006/07, what percent of your business revenue was derived from Nova Scotia film/TV activity associated with the Nova Scotia Film Development Corporation? \_\_\_\_\_%

3. For the most recent fiscal year - 2006/07, what percent of your business revenue was derived from Nova Scotia film/TV activity associated with other Nova Scotia film production? \_\_\_\_\_%

4. In your opinion, how important is the Nova Scotia Film Development Corporation to the success of your operation? On a scale of 1 to 5 with 1 being not important to 5 being very important, where would you rank the Nova Scotia Film Development Corporation?

\_\_\_\_\_

5. For 2006/07, what are your total sales? \$ \_\_\_\_\_

6. What percent of your total sales was sold outside Nova Scotia? \_\_\_\_\_%

7. For 2006/07, what percent do wages and salaries represent of total sales?  
\_\_\_\_\_%

8. What is the income of Business Owners (N.S.) in 2006/07 as a percent of total sales?  
\_\_\_\_\_ % (Note: Check that it is not part of wage and salaries) Y / N
9. Number of employees (2006/07) - Full time equivalents (approx. 2000 hr/yr).  
\_\_\_\_\_
10. Do you have any suggestions as to how the Nova Scotia Film Development Corporation could improve its mandate?

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## APPENDIX C - Data Collection

### Appendix C - Data Collection

An essential part of the analysis is the collection of data. Data was collected from both primary sources and secondary sources. In what follows, we discuss the data sources and quality by major category.

#### *Nova Scotia Film and Television Sector*

Data to estimate total production for this sector came from both direct and secondary sources. Film Nova Scotia provided the majority of the data from detailed tax submissions by clients. Secondary data sources were used to estimate the television production data. Finally, the Film Nova Scotia data was supplemented with direct interviews to measure a corporate margin - the amount of corporate expenditures incurred over and above the direct costs of the specific project associated with Film Nova Scotia.

In addition to Film Nova Scotia sponsored activity, the Nova Scotia Film and Television sector includes in-house television production. In-house television production in Canada can be separated into three key segments: (1) Canadian Broadcasting Corporation (CBC), (2) privately owned conventional (over-the-air) television broadcasters, and (3) privately-owned pay and specialty television networks. We collected data for each segment and made estimates of the levels of production in Nova Scotia.

To assess the added impact of the CBC as well as other broadcasters and speciality channels we used public data sources to obtain the necessary data. Data was obtained for fiscal year 2005/06, one year short of the 2006/07 Film Nova Scotia impact year, but was assumed to be representative of the 2006/07 period. Data was obtained for total (CBC plus private broadcasters) in-house production in Nova Scotia and Atlantic Canada from the CFTPA's annual industry profile, "*Profile 2007: An Economic Report on the Canadian Film and Television Production Industry*" [CFTPA 2007]. From this amount we deducted the total in-house

production spending by private conventional broadcasters. This data was available from "Television Statistical and Financial Summaries" [Canadian Radio-Television and Telecommunications Commission 2002-2006 (1)], CRTC's annual financial summaries for the Canadian Television Broadcasting Industry. This data was only available for Atlantic Canada. The residual amount is the estimate for CBC in-house production expenditure in Atlantic Canada.

<b>Table C1: Estimate of CBC In-House Television Production Spending</b>	
<b>Fiscal Year Ending</b>	<b>2007</b>
Total in-house production spending – Atlantic Canada (\$) (Source: CFTPA, Profile)	\$33,000,000
Deduct: In-House production spending by private conventional broadcasters – Atlantic Canada (\$) (Source: CRTC Financial Summaries)	\$14,796,281
Estimate for CBC in-house production spending in Atlantic Canada (\$)	\$18,203,719
Assumption: Share of CBC Atlantic Canada spending in Nova Scotia	57.14%
Estimated amount of CBC Nova Scotia in-house production spending	\$10,401,605
<i>Estimate for 2006/07 based on 2005/06 data.</i>	
<i>Source: Calculations based on data from CFTPA, Profile 2007; CRTC Financial Summaries 2002-2006.</i>	

The estimate of CBC in-house production expenditure for Nova Scotia was derived using CFTPA 2007 profile data, Exhibit 94: Broadcaster in-house production by province, which includes CBC and private broadcasters. Over the last five years Nova Scotia in-house production averaged 57.14% of Atlantic Canadian in-house production, as CBC represents the majority of this production that figure was used to estimate CBC's Nova Scotia in-house production expenditure.

To estimate the expenditures of private conventional television broadcasters in Nova Scotia we used CRTC publicized data for broadcast licensees. Data was only available for Atlantic Canada as a region but was proportioned to each province based on population share. Again, CRTC data was only available up to 2005/06 and we assumed 2006/07 was equal to 2005/06 as expenditures over the last five years was relatively consistent. Table C2 presents the estimate of Nova Scotia conventional broadcast in-house production expenditure.

<b>Table C2: Estimate of Private Nova Scotia Conventional Broadcast In-House Production</b>	
<b>Program Categories (excluding news and sports)</b>	<b>2005/06<sup>(1)</sup></b>
Other information	\$1,498,547
Drama	\$0
Music	\$4,788
Game shows	\$0
Human Interest	\$391,625
Other information	\$0
<b>Total</b>	<b>\$1,894,960</b>
Nova Scotia share of Atlantic Canada population	39.98%
<b>Estimated Total Expenditures</b>	<b>\$757,611</b>
<sup>(1)</sup> Data for 2005/06 assumed to represent 2006/07 Source: Calculations based on data from CRTC.	

As with the CBC estimate, expenditures were distributed using detailed expenditure data from Film Nova Scotia supported productions with approximately 54% labour and 46% goods and services.

One pay and speciality television network, The Independent Film Channel (IFC) is based in Nova Scotia. The data for pay and speciality in-house production was obtained from the CRTC financial summaries [*Canadian Radio-Television and Telecommunications Commission 2002-2006 (2)*] for IFC. In 2006 (2005/06) IFC had in-house expenditures of \$963,430 on filler programming and program production. Allocation of spending as with the CBC and private

broadcasters was proportioned according to detailed expenditure data for production provided by Film Nova Scotia, 54% labour and 46% goods and services.

***Forward Linkages***

Data to estimate the size of forward linkages came primarily from direct surveys and key informant interviews plus secondary sources such as annual reports. The weakest data is on Film Festival visitor expenditures. This data, in the future, should be collected during the festival event.

***Support Linkages***

Support linkage data sources were similar to forward linkages, i.e. direct survey and key informant discussion and annual reports.



## APPENDIX D - List of Survey Respondents

### **Appendix D - Survey Respondents**

#### **Survey Respondents**

- 45 North Broadcast Group, Mr. Tim Reed
- ACTRA, Mr. Gary Vermeir
- Ad Despatch, Mr. Nathan Kroll
- Arcadia Entertainment Inc., Mr. John Wesley Chisholm
- DGC, Mr. Tim Storey
- DHX Media Ltd.
- Egg Films, Mr. Richard Huggard
- Film Nova Scotia - Ms. Carolyn Horton
- IATSE667, Ms. Nadine Dunsmore
- IATSE849, Ms. Charlotte Shurko
- NSCAD University, Ken Gardner Honey Church, Senior Vice-President
- NSCC, Mr. Bruce Tawse
- National Film Board, Mr. Kent Martin
- Ocean Entertainment Limited, Ms. Johanna Eliot
- PHI (formally Cenex), Mr. Scott Westerlaken
- RPM Productions Inc., Mr. John Rosborough
- Telefilm Canada, Mr. Gorden Whittaker

## **APPENDIX E - Sensitivity of Results**

The economic impact analysis presented in the main body of the report provides a base case. This base case is sensitive to the data and the I-O model employed. We have conducted a sensitivity analysis of the data and model to evaluate how sensitive the results are to these inputs:

**1) Nova Scotia Expenditure Data**

The base case results took the total Nova Scotia domestic expenditures and based on the client's knowledge subtracted out those purchase expenditures for which no industries existed in Nova Scotia. An alternative to this assumption is to keep the original total expenditures and use the implicit average import leakages in the Nova Scotia I-O model. We conducted a simulation with this alternative assumption and found that:

- Total household income would increase by 6.3%.
- Total Employment would increase by 7.6%.
- Total GDP would increase by 12.8%.

**2) Alternative Models**

The economic impact analysis presented in the main body of the report was simulated using the publicly available Nova Scotia Input-Output model based on 1996 data. Since that time the provincial I-O model has been updated to 1997, 2000 and very recently 2003. These updates were performed at the detailed worksheet level of industry and commodity and as such are strictly confidential for provincial in-house use only.

To test the sensitivity of the 1996 model utilized we had the Nova Scotia Department of Finance simulate the results using the two latest versions of the detailed input-output model, the 2000 and 2003 confidential versions. Input-output models are a snapshot in time of a given economy, the model simulates the industry and commodity flows (use and make) and the final end use of production (demand). Given that a large and complex economy such as Nova Scotia is somewhat static, any significant change in the economic structure usually happens at a relatively slow pace over a number of years.

When we simulate Film Nova Scotia's impact using different year versions on the input-output model we achieve very similar total impact results. Comparing the report model (1996 I-O) with the latest version (2003 I-O) we found that:

- Total household income would increase by 3% mainly as a result of increases in average wage.
- Total employment would decrease by 2.6% mainly as a result of increased productivity.
- Total GDP for 2003 is not comparable to 1996 as the definition has changed from basic price to market price, however, comparison is possible between the 1996 and 2000 models. Under this comparison, total GDP would increase by 0.4%.
- Total provincial revenue would decrease by 0.5%, mainly as a result of tax changes.

In conclusion, the impact results presented in the text are robust to alternative assumptions and provide a reasonable estimate of the impact results.

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