City of Kelowna

CREATIVE SECTOR
ECONOMIC IMPACT

KELOWNA CREATIVE SECTOR ECONOMIC IMPACT ASSESSMENT

JULY 2019

Prepared by:

VANN STRUTH CONSULTING GROUP INC.

For:

City of Kelowna

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EXECUTIVE SUMMARY

This report provides an updated estimate of the economic impact of the creative sector in Kelowna, BC, which was last studied in 2010. The "creative sector" is defined as "all self-employed individuals, profit, non-profit and public enterprises including incorporated and unincorporated businesses that produce, create, distribute and/or conserve cultural and artistic goods and services."

It includes 11 separate components that have each been analyzed with available statistical data, a confidential online survey, and various other public sources to generate estimates of employment, revenue, and income.

1. Arts Instruction & Education.
2. Art Galleries & Dealers.
3. Commercial Arts (including graphic design, commercial photography, architecture, interior design).
4. Cultural Facilities (including public galleries, heritage sites, theatre venues).
5. Events & Festivals.
6. Literary Arts.
7. Performing Arts.
8. Service & Material Providers.
9. Societies & Organizations.
10. Visual Arts.
11. Film and New Media.

As shown by the statistics on the next page, the sector has expanded significantly in the near decade since the last study. The analysis includes calculation of the "spinoff" economic impacts that are generated by the suppliers to the creative sector (called the indirect impact) and the household spending of affected workers (called the induced impact).

The study also provides insight into the very rate of self-employment among artists, the impressive level of volunteerism within the creative sector, and how it overlaps and supports the city's tourism sector.

Economic impact analysis is largely based on market-oriented metrics like revenue, income, and paid employment. This framework can be an awkward fit with the creative sector, which includes many participants who are not regularly paid and who participate in creative activities because of their passion for the arts and the intrinsic value it provides them personally, as well as their audience and the community at large. These values are not easily measurable in a standard economic impact assessment, even if they are among the most important ways in where the creative sector provides value to the community.

CREATIVE SECTOR STATS

Kelowna's creative sector more than doubled in size from 2009 to 2018.

43%
INCOME GROWTH

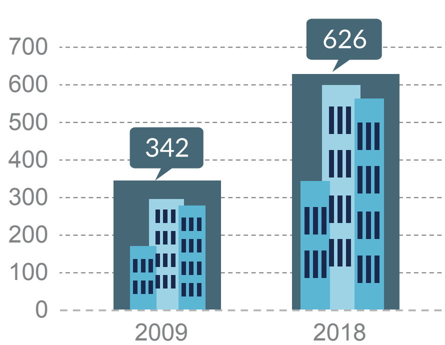
380,000
Volunteer hours in 2018

60%
SELF EMPLOYED

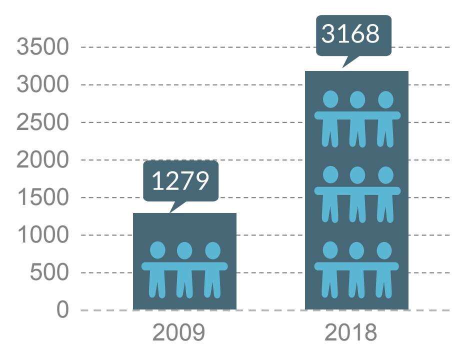
$339,000,000

DIRECT ECONOMIC OUTPUT IN 2018

ESTABLISHMENTS



JOBS(FTE)



1 INTRODUCTION

This report provides an updated estimate of the economic impact of the creative sector in Kelowna, BC, which was originally analyzed in a 2010 report.[1]

This report provides an update to the impact estimates contained in the original study and provides insight on several other aspects of the creative sector, including self-employment, volunteerism and tourism. This study has been prepared on behalf of the City of Kelowna Cultural Services Department in support of an updated Kelowna Cultural Plan.

1.1 Defining the Creative Sector

The definition of the "creative sector" was established in the 2010 economic impact study and has been extended and refined in this report. In general, the creative sector is defined as "all self-employed individuals, profit, non-profit and public enterprises including incorporated and unincorporated businesses that produce, create, distribute and/or conserve cultural and artistic goods and services."[2]

The 2010 report organized the creative sector into the following 10 sub-sectors, some of which are based on specific industry classifications according to the North American Industrial Classification System (NAICS), while others are more generally described as service providers and societies and associations that could not be identified using NAICS. Note that the description of the detailed activities under each category has been updated to accurately reflect what is measured in this study.

1. **Arts Instruction & Education.** Includes dance, acting and music schools; fine arts instruction; visual and performing arts instruction within post-secondary institutions; music and new media training.

2. **Art Galleries & Dealers.** Includes commercial art galleries, art dealers, art distributors and publishers.

3. **Commercial Arts.** Includes graphic design, commercial photography, book publishing, architecture, interior design.

4. **Cultural Facilities.** Includes public art galleries, heritage sites, museums, libraries, and theatre venues.

5. **Events & Festivals.** Event coordinators and administrators, part of performing arts (most of which is measured under #7).

6. **Literary Arts.** Creative writers.

[1] *The Creative Sector in Kelowna, British Columbia: an economic impact assessment,* prepared by Bernard Momer, The University of British Columbia Okanagan, March 2010.
[2] Ibid, page 5.

7. **Performing Arts.** Dancers, musicians, other independent performers, theatre companies, orchestras and other music groups, various other performing arts companies.

8. **Service & Material Providers.** Agents, craft retailers and suppliers, musical instrument retailers, picture framers.

9. **Societies & Organizations.** Cultural service organizations, recreational arts groups.

10. **Visual Arts.** Painters, sculptors, other independent artists.

Based on direction from the City's Cultural Services staff, as well as a recognition of how the BC and Okanagan economies have evolved in the last decade, an eleventh sub-sector was added:

11. **Film and New Media.** Film and video production, music and sound recording, video game production and publishing.

As noted above, this definition of the creative sector does not neatly align with standard statistical classification systems for economic activity, which creates challenges in using reported data from Statistics Canada and for ensuring consistency in measurement over time.

For that reason, the distinction between the creative sub-sectors can be somewhat fluid, depending on the data source and the interpretation of survey respondents, industry stakeholders, and the consultant on where to place each type of creative activity within the overall sector. This means that the emphasis in this study is first, on the overall size of the creative sector and how it has expanded since 2009, and second, on the size and trends of the individual creative sub-sectors.

1.2 Economic Impact Analysis

Economic impact analysis is a well-established analytical technique for determining the contribution of a particular industry, project, or initiative to the economy of a given area. It can be expressed in terms of employment, economic output, labour income, and other variables.

The first step in the analysis is measuring the economic activity of the core industry participants. This is usually done in terms of employment and/or revenue and is referred to as the **"direct" impact** of the sector. It is typically measured for a specific area, such as the city of Kelowna.

The direct economic activity within the creative sector spreads throughout the local economy (and beyond) in two ways:

- The **"indirect effect"** is created by the suppliers to the direct activity, and the suppliers to those suppliers, and on down the supply chain. Naturally these supply chains stretch beyond city limits, which means the indirect effect can be estimated only at a provincial level (using multipliers produced by Statistics Canada).[3]

- The **"induced effect"** is created by the household income associated with both direct and indirect employment. These individuals use their income on the full range of household

[3] Statistics Canada, Industry Accounts Division, *Provincial Input-Output Multipliers, 2014,* catalogue no. 15F0046XDB.

expenditures, from food to beauty services to restaurants to transportation to entertainment and recreation. The induced effect also stretches beyond the local area and can be measured only at a provincial level.

The task in this study is to tally, as accurately as possible with available information sources, the direct creative sector activity within Kelowna, and then to rely on Statistics Canada input-output multipliers to estimate the indirect and induced effects. The combination of direct, indirect and induced impact is called the **total economic impact**.

The outputs of the economic impact analysis include:

- **Economic Output** is the total dollar value of expenditures in the economy, including the direct, indirect, and induced impacts. Note that it includes the purchase of intermediate inputs that are used to produce final goods and services.

- **GDP (Gross Domestic Product)** is the total "value-added" generated in the economy, meaning that the value of intermediate inputs is excluded.

- **Employment**, usually expressed as “full-time equivalent” positions.

- **Labour Income** is the total wages earned by workers at all levels of the provincial supply chain.

Data Sources and Assumptions

A detailed description of how each part of the creative sector was analyzed is found in Section 2. The data sources can vary for the different components of the creative sector, depending on availability and how easily that component can be measured using published data.

The data sources include Statistics Canada (including Census employment and income data, business location counts, and the monthly Labour Force Survey), directories provided by the City of Kelowna, operating data from non-profit organizations applying to the City of Kelowna for funding, an online survey, previous economic impact studies on relevant parts of the sector, and public information on companies or organizations, including websites.

All estimates in this study are prepared as of 2018. This requires converting all currency values to 2018, including Census income data (which is reported for 2015). The input-output multipliers are from 2014 (the latest year available), so currency values are first converted to 2014 to be consistent with the input-output model, and then converted to 2018 for reporting purposes.

How to Use These Results

Like any economic impact assessment, this study produces a lot of different numbers describing Kelowna’s creative sector. It is useful to consider which numbers are most useful for which purpose.

- The best numbers for describing the size of the local creative sector are the direct numbers, particularly employment and number of establishments. These are real jobs and companies located in Kelowna that anyone can count and are based on actual Kelowna residents filling out the Census and/or creative sector survey, as well as actual payroll and administrative records for Kelowna companies in the national Business Register. The direct results are more tangible than the total results, which include indirect and induced impacts that include jobs, employment and revenue located elsewhere in BC and rely on provincial multipliers that are more abstract in nature.

- For assigning a dollar figure to the size of the creative sector, the best metric is direct economic output. Note that economic output can also be called "total revenue" or "total spending." Direct economic output is preferred because it is a more tangible measure that is restricted to Kelowna, but it is also reasonable to say "the total economic impact of the Kelowna creative sector is $X dollars" that includes the indirect and induced output that is measured at a provincial level. Sometimes the total economic output is used because it is quite a bit larger than the direct figure, but needs to be understood as a provincial impact rather than an impact that is specific to Kelowna.

Compatibility of Economic Impact Framework with the Creative Sector

Economic impact analysis is largely based on market-oriented metrics like revenue, income, and paid employment. It is acknowledged that this framework can be an awkward fit with the creative sector, which includes many participants who are not regularly paid and who participate in creative activities because of their passion for the arts and the intrinsic value it provides them personally, as well as their audience and the community at large. These values are not easily measurable in a standard economic impact assessment, even if they are among the most important ways in where the creative sector provides value to the community.

2 METHODOLOGY

2.1 Overview

The creative sector is an amalgamation of the "creative parts" of a variety of separate industries (as described in section 1.1). Estimating the size of the overall creative sector requires estimating the size of each of the 11 creative sub-sectors that it contains.

Some of these sub-sectors align closely with standard industry or occupational classifications and can be analyzed using published statistical data. Others are more general in nature and can be analyzed only through primary research, such as published financial records and a survey of creative sector participants.

The estimates in this study are built "from the ground up", by identifying the best information source(s) for each detailed component of the sector and combining them into estimates for each of the 11 sub-sectors. A detailed description of how each information source is used in the analysis is provided in the rest of Section 2. Readers less interested in the technical details can skip to Section 3.

Relation to 2010 study

The methodology in this study differs somewhat from the approach used in the 2010 study of Kelowna's creative sector, including through greater reliance on published statistical data and by creating and adhering to a strict definition of each creative sub-sector. The creative sector in this study also includes an extra sub-sector (film and new media) that was previously dispersed among the other 10 sub-sectors (or not included).

While every effort was made to be consistent, **the estimates in this study for the 11 creative sub-sectors are not directly comparable to those in the 2010 study**. It is possible that creative activities that would have been classified as one sub-sector in the previous study (such as art dealers) are classified as a different sub-sector in this study (such as commercial arts).

2.2 Industrial and Occupational Classifications

Before discussing specific data sources, it is useful to explain how the creative sector fits into standard industrial and occupational classifications used by Statistics Canada and other agencies.

Industries are organized according to the North American Industrial Classification System (NAICS), which is a hierarchical system that divides the entire economy into 20 sectors (each with a 2-digit code). Those 20 sectors can be further divided into about 100 sub-sectors (each with a 3-digit code), and those divided into about 300 industry groups (each with a 4-digit code), and continuing until there are more than 900 detailed industries with a 6-digit code.

The creative sector definition in this study is applied at whatever level is most appropriate. In some cases, an entire 4-digit industry group (like 7111 Performing Arts Companies) is part of the creative sector. In other cases, a 6-digit code (like 453920 Art dealers) is part of the creative sector, but the rest of its 4-digit industry group (4539 Other Miscellaneous Store Retailers) is non-creative.

Occupations are organized according to the National Occupational Classification (NOC). It has a similar hierarchical structure to NAICS, although only a few parts of the creative sector are best identified by occupation (including creative writers and performing and visual artists).

2.3 Business Location Statistics

Custom business locations data was purchased for Kelowna at the most detailed industry classification possible (6-digit NAICS). Derived from Statistics Canada's Business Register, which uses payroll accounts and other administrative records, the data shows the number of business locations in Kelowna (as of June 2018) and the number of payroll employees, in ranges (no employees, 1-4 employees, 5-9 employees, etc.).

This data is used in two main ways:

- It helps to determine the number of establishments in each creative sub-sector.

- Employment can be estimated using the employment size ranges. This is not used for the actual employment estimates in the study (Statistics Canada advises against using Business Register data for estimating employment), but can be used to estimate the creative sector share of a given 4-digit industry group (which can then be applied to 4-digit employment estimates available elsewhere).

  For example, the 6-digit industry 541310 (Architectural Services) is part of the creative sector, but nothing else within the same 4-digit industry group 5413 (Architectural, Engineering and Related Services) is in the creative sector. Based on the business locations data, it can be estimated that architects comprise 5.1% of total employment in the larger industry group. The 5.1% figure can then be applied to Census employment data for 5413 to estimate the creative sector employment share.

2.4 Census

Statistics Canada's national Census, last conducted in 2016, is the only source of comprehensive and detailed employment-related data at a community level. The following types of Census data were used in the study:

- Employment by place of work in Kelowna. These are jobs that have a fixed place of work in Kelowna, regardless of where the worker lives.

- Employed Kelowna residents with no fixed place of work. These are jobs, such as musician, that do not have a fixed workplace (rather, they are regularly working in different locations).

- Both of the above types of employment are included for detailed industries and occupations that are identified as part of the creative sector. In most cases, the most detailed industry data available[4] is at the 4-digit NAICS level. In most cases only part of the 4-digit industry

[4] Employment data by Place of Work in this study is from a custom Census purchase by Vann Struth Consulting Group that was made available for this study.

group is in the creative sector, but the estimated employment shares from Business Register data is used to estimate the creative sector component.

- Industry and occupation data are two overlapping ways to look at employment. For example, the occupational code NOC 524 is Creative Designers and Craftspersons. This is clearly part of the creative sector, but some of these people are already counted in industries such as 5111 – Newspaper, Periodical, Book and Directory Publishers; 5413 – Architectural, Engineering and Related Services; and 5414 – Specialized Design Services (which includes fields like graphic design, interior design, landscape design, etc.). The custom Census data used in this study includes a complete cross-reference of industrial and occupational employment so these overlaps can be accurately removed from the estimates.

- Each of these calculations are performed for the 11 creative sub-sectors independently (and only added up to the total creative sector at the end). That means that in some cases, like NOC 513 Creative and Performing Artists, it is split into multiple creative sub-sectors. In this example, there are parts assigned to Creative Sub-Sector #10 – Visual Arts, #7 – Performing Arts, and #5 – Events & Festivals.

- The final type of Census data that is included is average employment income for each of the industries and occupations that are included.

  All employment data from the Census (which is reported as a single figure that combines full-time and part-time) is converted to an estimated full-time equivalent (FTE) figure based on the number of full-time and part-workers in each sector in the Kelowna metro area (this data is only available in a separate data table for the entire metro area).

  All income data is also converted to a 2018 dollar equivalent using the British Columbia Consumer Price Index (CPI).

While Census data is the best option in many cases, it does have limitations in its usefulness for the creative sector that need to be acknowledged. The most significant drawback is Census employment is based on a person's primary employment. Many participants in the creative sector are involved only on a part-time basis and have a primary source of income in another sector. For this reason, it is expected that the Census under-reports the total amount of employment and income from creative sector activities.

The most recent Census data on employment is from May 2016, while income data is reported for 2015. These figures are both updated to 2018 equivalents using additional methods described below.

2.5 Labour Force Survey

Statistics Canada's Labour Force Survey (LFS) is conducted monthly among a sample of Canadian households and is the source of the monthly updates to the national unemployment rate, among other variables. Data is reported for the Kelowna Census Metropolitan Area (CMA), which has the same boundaries as the Regional District of Central Okanagan, but only for a broad amalgamation of industry sectors.

The LFS is the best source of the trend in regional employment since the 2016 Census and is used to adjust the 2016 Census employment figures to 2018. For example, employment in professional, scientific and technical services in the Kelowna metro area increased by 19% from 2016 to 2018. This 19% growth rate was applied to all of the detailed creative sector components that fall within the professional, scientific and technical services sector.

2.6 Operating Data from Prominent Creative Sector Organizations

Many of the largest creative sector organizations in Kelowna are public organizations that report financial and operating details either through public annual reports, or as part of grant funding submissions to the City of Kelowna.

Revenue is the most commonly-reported data from this source, although some employment information was also reported in certain cases.

This information source was most valuable in estimating the impacts of Creative Sub-Sector #9 – Societies & Organizations because they are indistinguishable from other types of societies and civic organizations in reported statistics. The data collected through public reports and grant applications, as well as some additional information from the online survey, was extrapolated to the City's full list of non-profit creative sector organizations.

Operating data from annual reports and grant applications was also useful for supplementing other information in the analysis of the performing arts and cultural facilities sub-sectors.

2.7 Online Survey

A confidential online survey was conducted in January and February of 2019.

The survey was emailed directly to more than 160 contacts provided by the City's Cultural Services Department (which were derived from both creative sector contacts as well as a sample of creative sector contacts from the City's business license directory). All contacts who were emailed the survey directly were "pre-sorted" into one of the 11 creative sub-sectors, such that their responses could be allocated to those categories.

An open link to the survey was also distributed by the City and by several other creative sector organizations. Several filtering questions were used to ensure the respondents were valid participants in the Kelowna creative sector[5] and several questions allowed the respondents to sort themselves into the appropriate creative sub-sector. They were also free to provide their name, organization and

[5] Only three respondents indicated they were not part of the creative sector. One was a local creative sector retail outlet that was sent the survey directly and may not have recognized themselves (as a retail store) as being part of the creative sector. Another operates a recreational arts group and also may not have recognized this recreation-focused activity as being part of the creative sector. The final one did not provide any identifying information, but provided comments that are consistent with membership in the Kelowna creative sector. All three responses were included in the reported survey results.

contact details in the event of any confusion in the responses – this information was used to contact one large employer after the survey to clarify their staffing details.

The survey yielded 84 valid results. Employment and revenue results for some of the larger creative sector organizations were blended with operating data (as described in section 2.6), with steps taken to avoid double-counting by checking to ensure that only a single set of responses are included from each organization. Income data from the survey was particularly useful – not only for the direct information it provides, but in using it in the analysis of Census data to help distinguish between typical creative and non-creative earnings within a particular industry.

The survey also covered a variety of other creative sector topics, including volunteerism, self-employment, and source of revenues, that are discussed in Section 3.

2.8 Post-Secondary Headcount Analysis

Direct measurement of the creative component of the formal education sector is challenging using published data. Specialized music schools and some new media training institutions can be identified, but most creative sector employment is combined with other post-secondary employment at the university and college level.

To get around this challenge, headcount enrollment data from UBC Okanagan and Okanagan College was reviewed to identify the number of students enrolled in visual and performing arts programs in the 2015-16 school year. The percentage of all students in these programs was applied to the Census data for total university and public college employment, thus providing an estimate of total creative sector employment in these institutions. This approach counts administrative and support staff as part of the creative sector, but this is reasonable since even a pure arts school will have administrative and support staff in addition to arts instructors.

Other post-secondary courses that might also be part of the creative sector, such as computer science courses on creative topics like animation, are unfortunately not measurable using this approach.

2.9 Previous Economic Impact Study

Accelerate Okanagan recently released a study called *Economic Impact of the Okanagan Tech Sector: 2017 Edition*. This study replicates the methodology used by BC Stats to assess the provincial technology sector and one part of the analysis – for gaming and animation – relates directly to Creative Sub-Sector #11 – Film and New Media.

The Accelerate Okanagan study provided results on an Okanagan-wide basis, but based on calculations of the Central Okanagan share of all Okanagan technology firms (about 58%), and Kelowna's share of Central Okanagan technology employment (estimated from the Census at about 80%), the study's estimates of gaming and animation employment and business locations can be directly used in the creative sector analysis.

2.10 Filling Data Gaps with the Input-Output Model

Economic impact calculations are discussed in greater detail in Section 3, but Statistics Canada's input-output model was also employed at this point of the analysis.

One of the things the input-output model shows for each industry is the average full-time equivalent (FTE) employment, and the amount of labour income, per million dollars of revenue. This means that, for example, if there is an employment figure from one data source, the input-output model can be used to estimate the corresponding revenue and labour income. Or if revenue data is available, the model can be used to estimate corresponding employment and labour income.

This approach is not perfect as there are the usual challenges of aligning the specific creative industry definitions with the industry definitions in the input-output model, plus the fact that the model is based on province-wide employment and income averages that may not be accurate for Kelowna. However, as a means to patch holes in the data when only partial information is available from other sources, it can be used quite effectively.

3 ECONOMIC IMPACTS

3.1 Direct Impacts

Based on the variety of information sources utilized in this study, estimated direct economic impacts of each creative sub-sector are outlined in TABLE 1.

TABLE 1. KELOWNA CREATIVE SECTOR - DIRECT ECONOMIC IMPACTS, 2018

CREATIVE SUB-SECTOR	EMPLOYMENT (FTE)	ECONOMIC OUTPUT (REVENUE)	LABOUR INCOME	NUMBER OF ESTABLISHMENTS
1. Arts Instruction & Education	186	$16.7 million	$8.5 million	79
2. Art Galleries & Dealers	8	$800,000	$300,000	10
3. Commercial Arts	578	$60.5 million	$31.1 million	215
4. Cultural Facilities	270	$37.1 million	$15.8 million	12
5. Events & Festivals	74	$9.0 million	$3.2 million	25
6. Literary Arts	173	$18.0 million	$9.3 million	19
7. Performing Arts	416	$28.1 million	$17.2 million	68
8. Service & Material Providers	67	$8.5 million	$6.8 million	25
9. Societies & Organizations	24	$2.4 million	$1.3 million	25
10. Visual Arts	181	$11.1 million	$4.8 million	34
11. Film and New Media	1,192	$146.8 million	$88.9 million	114
Total	**3,168**	**$339 million**	**$187 million**	**626**

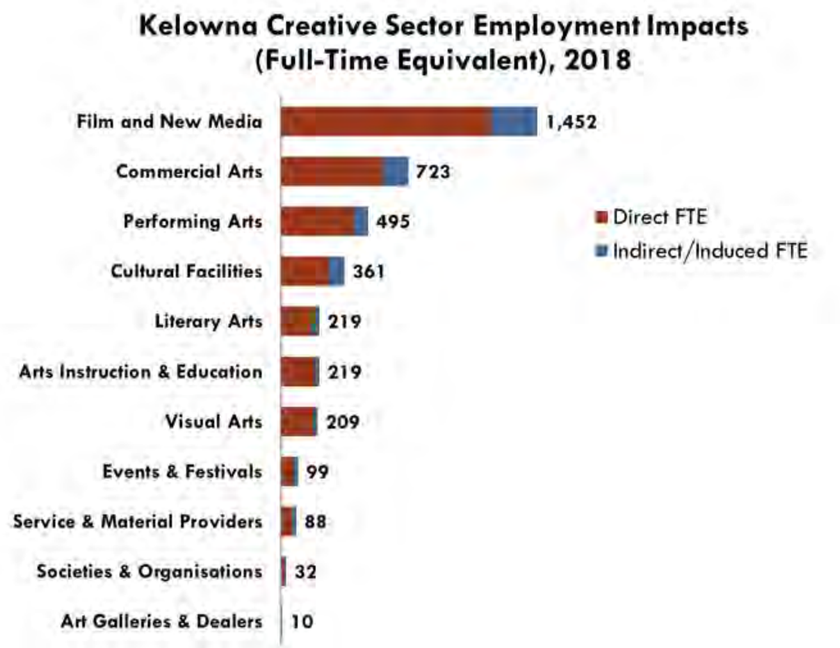
Employment is shown as 3,168 FTE (full-time equivalent). **The estimated number of jobs in Kelowna's creative sector, including part-time and other irregular or seasonal workers, is estimated at 3,792.**

3.2 Indirect and Induced Impacts

The total economic impact of the Kelowna creative sector includes both the direct impacts outlined above as well as the indirect and induced impacts. As explained in Section 1.2, indirect impacts are caused by the suppliers to the direct activity, while induced impacts are caused by both direct and indirect workers spending their income on the typical range of household expenditures.

Indirect and induced impacts, which are sometimes called “spinoff” impacts, are estimated using multipliers from Statistics Canada’s Input-Output Model. The “spinoff” impacts stretch beyond Kelowna’s borders because local creative organizations and individuals, as well as the personal households of both direct and indirect workers, purchase goods and services that are supplied from across BC and beyond.[6]

Applying these multipliers to the direct impacts tallied above suggests there is about 1 additional FTE from indirect and induced impacts for every 4 FTE in direct employment. The total for each creative sub-sector is shown in the chart to the right.



In total, the estimated 3,169 direct FTE in Kelowna supports a further 738 FTE in indirect and induced employment in British Columbia (perhaps one-third to one-half of which is also in Kelowna).

The indirect and induced impacts in terms of total economic output (revenue) and labour income is shown in TABLE 2. As noted earlier, the distinction between individual creative sub-sectors is somewhat fluid and emphasis should be placed on the creative sector total rather than the totals for any specific sub-sector.

[6] The creative sector, as defined in this study in Section 1.1, includes many different types of businesses, some of which are suppliers or service providers to other parts of the creative sector. For example, musical instrument retailers are included in Creative Sub-Sector #8 – Service & Material Providers and they undoubtedly sell some of their products to musicians, who are part of Creative Sub-Sector #7 – Performing Arts. This means that using multipliers to estimate the indirect impact of musicians will double-count the musical instrument stores that are already included as a direct part of the creative sector. Accurately untangling these inter-relationships is not possible with the data available. However, due to having only limited information sources for some parts of the creative sector, it is likely that the direct impacts outlined in section 3.1 are under-estimating the full scope of the sector. If that is true, then some modest amount of double-counting among the indirect impacts will not significantly affect the estimates of total economic impact.

TABLE 2. KELOWNA CREATIVE SECTOR – TOTAL ECONOMIC IMPACTS, 2018

CREATIVE SUB-SECTOR	EMPLOYMENT (FTE)			ECONOMIC OUTPUT ($ MILLIONS)			LABOUR INCOME ($ MILLIONS)		
	DIRECT	INDIRECT/ INDUCED	TOTAL	DIRECT	INDIRECT/ INDUCED	TOTAL	DIRECT	INDIRECT/ INDUCED	TOTAL
1. Arts Instruction & Education	186	33	**219**	$16.7	$8.6	**$25.3**	$8.5	$2.8	**$11.3**
2. Art Galleries & Dealers	8	2	**10**	$0.8	$0.6	**$1.3**	$0.3	$0.2	**$0.5**
3. Commercial Arts	578	145	**722**	$60.5	$40.4	**$101.0**	$31.1	$12.5	**$43.6**
4. Cultural Facilities	270	91	**361**	$37.1	$26.5	**$63.6**	$15.8	$7.7	**$23.4**
5. Events & Festivals	74	25	**98**	$9.0	$5.6	**$14.6**	$3.2	$1.8	**$5.0**
6. Literary Arts	173	46	**218**	$18.0	$12.6	**$30.6**	$9.3	$3.9	**$13.1**
7. Performing Arts	416	79	**495**	$28.1	$17.8	**$46.0**	$17.2	$5.7	**$22.9**
8. Service & Material Providers	67	21	**88**	$8.5	$5.9	**$14.4**	$6.8	$1.8	**$8.6**
9. Societies & Organizations	24	8	**32**	$2.4	$2.4	**$4.8**	$1.3	$0.6	**$1.9**
10. Visual Arts	181	28	**209**	$11.1	$7.8	**$18.9**	$4.8	$2.4	**$7.2**
11. Film and New Media	1,192	260	**1,452**	$146.8	$95.8	**$242.6**	$88.8	$30.0	**$118.8**
Total	**3,169**	**738**	**3,907**	**$339.1**	**$224.0**	**$563.1**	**$187.1**	**$69.1**	**$256.2**

Gross Domestic Product (GDP)

In addition to the impacts shown above, the **estimated contribution of the Kelowna creative sector to the provincial economy is $315 million of gross domestic product (GDP) in 2018** (including direct, indirect and induced impacts). This is a substantial increase on the estimated $73 million in GDP from the 2010 study.

GDP is the “value-added” portion of total industry revenue. For a given company, value-added is the difference between their total revenue and the cost of their inputs – it represents the additional value the company creates by combining their inputs in a particular way to create their product or service.

3.3 Tourism

The economic impact estimates outlined in this report are generated by the individuals and organizations that make up Kelowna's creative sector, along with their suppliers and workers. This is consistent with the approach of the 2010 economic impact study and allows for a comparison of changes over time.

Adding the impact of tourism provides an even broader picture of the creative sector's economic impact. A full assessment of the related tourism impacts is beyond the scope of this study, but using a recent regional study and some survey responses, the impacts can be approximated as follows:

1. According to the creative sector survey, the sub-sectors that have the most public attendees are cultural facilities, the performing arts, and events and festivals.

2. By extrapolating from survey responses to the entire creative sector, the percentage of public attendees who are tourists is in the range of 25 to 40%. To be conservative in this analysis, it is estimated that 30% of public attendees at creative sector facilities and events are tourists.

3. The total number of attendees can be estimated by extrapolating from survey respondents to the entire creative sector. The total appears to be in the range of 1.8 million to 2 million per year. This includes all cultural facilities and all public performances, including theatre, music and other performances in the city's largest cultural venues, as well as smaller venues like nightclubs and restaurants, as well as public art classes and much more.

   To be conservative, it is assumed that total attendance is 1.5 million, or just over 4,000 people per day, on average, attending some type of cultural facility or event.

4. The 30% tourism share estimated in point #2 is applied to the 1.5 million total attendance from point #3 to yield an estimated 450,000 tourist attendees to creative facilities and events.

5. The length of stay in Kelowna associated with these 450,000 attendees is not known, but to be conservative it is assumed that the average "cultural tourist" participates in two events each day. Tourists vising the city may also participate in a wide range of other activities, such as outdoor recreation, wine tastings and culinary events, visiting with friends and family, etc.. Only the portion of their trip that is dedicated to creative sector activities can be included in the creative sector's economic impact.

6. The result is an estimated 225,000 tourist-days in Kelowna associated with the creative sector. By way of comparison, total person-visits to Kelowna in 2016 were just under 2 million.[7] In other words, just over 10% of Kelowna visitor-days are generated by a creative sector facility or event.

7. Using per-day spending estimates and employment impacts from the recent economic impact study of the Kelowna tourism sector, this level of visitation suggests the **Kelowna creative sector supports $40 million of tourist spending and 650 FTE of direct tourism employment.**

[7] InterVISTAS (March 2017), *Economic Impact of Tourism in Kelowna, BC*.

Note that most of these jobs are in accommodation providers, restaurants, retail shops, and various entertainment and recreation facilities (including cultural ones). This emphasizes the role of the creative sector in supporting tourism in Kelowna and highlights the overlaps between the two sectors.

3.4 Volunteerism

The online survey asked respondents to identify whether their organization used volunteers and if so, how many and the average hours per year they volunteered.

- Overall, 52% of respondents who answered this question said their organization uses volunteers.

- Nearly all responding organizations in the events & festivals sub-sector and societies & organizations sub-sector use volunteers.

- Between 40% and 60% of organizations in arts & education, cultural facilities, performing arts, and service and material providers use volunteers.

- Volunteers are not used or rarely used among art galleries & dealers, commercial arts, literary arts, visual arts, and film & new media.

- Based on extrapolating the survey results to the entire sector, **an estimated 11,000 volunteers contributed 380,000 hours of volunteer effort to Kelowna's creative sector in 2018.**

- The average volunteer provided 36 hours of volunteer service in a year.

3.5 Self-Employment

The creative sector includes a mix of individuals who are "pure artists" as well as those who work in various administrative, support, and creative-related technical occupations. Looking strictly at those occupations that are the artistic core of the creative sector shows that self-employment is far more common (60% of the total) compared to the Kelowna labour force overall (16% of the total).

It must also be noted that like all Census labour force statistics, TABLE 3 shows only those people whose primary employment is in the creative sector. There are many, many more individuals who engage in creative sector activity as a secondary job or purely for the non-monetary reward who would also count as "self-employed."

TABLE 3. RATE OF SELF-EMPLOYMENT OF SELECTED CREATIVE SECTOR OCCUPATIONS, RD OF CENTRAL OKANAGAN, 2015

	TOTAL EMPLOYED	SELF-EMPLOYED	% SELF-EMPLOYED
Authors and writers	155	85	55%
Producers, directors, choreographers and related occupations	130	50	38%
Musicians and singers	155	100	65%
Dancers	55	20	36%
Actors and comedians	20	20	100%
Painters, sculptors and other visual artists	135	115	85%
Sub-Total of Creative Occupations Above	**650**	**390**	**60%**
All Occupations	**102,295**	**16,085**	**16%**

Source: Statistics Canada Census, 2016

3.6 Survey Feedback

Survey respondents were invited to provide additional comments, which have been lightly edited:

- Amateur performing arts are essential to the wellbeing of the Okanagan community and to the diverse development of its youth. Having access to venues, which are accessible, affordable, and suitable for festival events is so very important for the future of amateur performing arts in Kelowna. Thank you for connecting with us, and for working to enhance cultural arts in the community!

- The City of Kelowna needs to be able to offer more grant money to concert events as it's a balancing act to pay high expense costs but keep ticket prices fair for our patrons. Also, Waterfront Park needs upgrades to its Island Stage. A whole new redesigned stage/structure is needed ASAP to properly accommodate larger concerts.

- Basically, it is not worth the money. Why do we do it? Love I guess... is it worth the time? No, no appreciation, no value, except for the audience feeling happy.

- Income varies widely from year to year. Earned revenue is fairly consistent over the last 5 years. Calculation of per hour rates of pay is not a valid metric for performing arts - you should be looking at per service rates. To a considerable extent much of a performing artists work would have to be considered volunteer. Artists are the biggest subsidizers of the arts by far, in all sectors. Most subcontractors and advertising suppliers are paid at market value, but much of what takes place in the not-for-profit sector cannot be accounted for with market metrics.

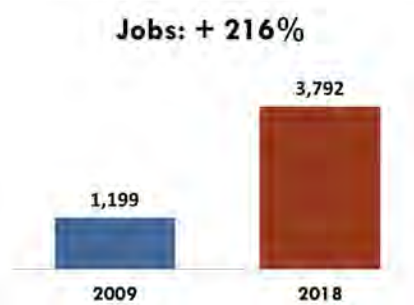
4 CREATIVE SECTOR GROWTH SINCE 2009

4.1 Total Creative Sector

No matter which metric is used, Kelowna's creative sector has grown substantially from 2009 to 2018.

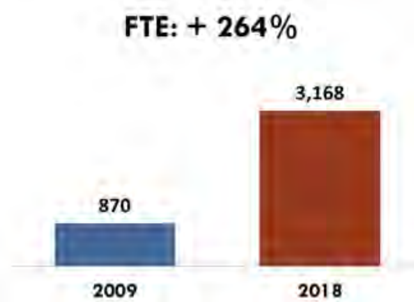
These comparisons focus on the direct economic impacts, which reflect the on-the-ground activities taking place in Kelowna (and exclude the indirect and induced impacts that spill outside Kelowna's borders).

Employment more than tripled from 2009 to 2018, regardless of whether it is measured by jobs (which includes part-time and irregular workers) or by FTE (full-time equivalent).



Film and new media is the largest part of the creative sub-sector. Anecdotal evidence suggests it has expanded significantly in the last decade, but was also not fully measured in the 2009 study.

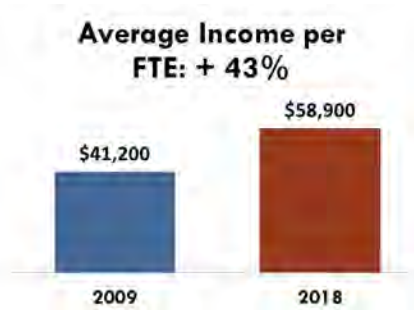
Film and new media is also one of the higher paying sub-sectors and its fast growth has helped to pull up overall incomes within the creative sector.

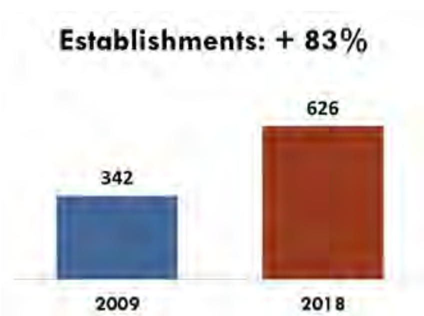


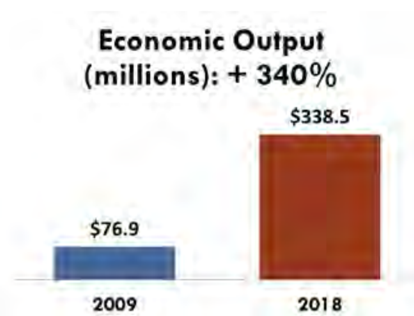
The substantial increase in sector revenue (also called economic output) is a combination of faster growth in high-earning sectors like film and new media, as well as inflation and overall economic growth within the Central Okanagan.

Changes Without Film and New Media

It should be noted that even without film and new media, all of the employment and revenue measurements for the other 10 sub-sectors have at least doubled since 2009. The count of establishments has increased 50% and average income per FTE has increased by 20%.







4.2 Individual Creative Sub-Sectors

The 11 sub-sectors that comprise the total creative sector were defined in Section 2.

Every effort was made in this study to use the same definitions that were used in 2009, but differences in methodology and available data sources mean that the definitions are not identical and **2018 results are not directly comparable to the 2009 results**.

Some of the individual sub-sectors are showing very significant changes between 2009 and 2018, both positive and negative. Unfortunately, it is not possible to know exactly how much of this is due to an actual change and how much is due to changes in methodology.

TABLE 4. KELOWNA CREATIVE SECTOR – DIRECT EMPLOYMENT, 2009 & 2018

CREATIVE SUB-SECTOR	EMPLOYMENT (FTE)		
	2009	2018	GROWTH
1. Arts Instruction & Education	197	186	-6%
2. Art Galleries & Dealers	48	8	-84%
3. Commercial Arts	162	578	257%
4. Cultural Facilities	88	270	207%
5. Events & Festivals	22	74	232%
6. Literary Arts	12	173	1351%
7. Performing Arts	82	416	405%
8. Service & Material Providers	175	67	-62%
9. Societies & Organizations	38	24	-36%
10. Visual Arts	48	181	276%
11. Film and New Media	n/a	1,192	n/a
Total	**872**	**3,168**	**263%**

APPENDIX: CREATIVE SECTOR TECHNICAL DEFINITION

The table below shows the detailed definition of the creative sector used in this report.

The numeric codes are industry codes from NAICS (North American Industrial Classification System), unless denoted as NOC codes (National Occupational Classification).

Both NAICS and NOC are hierarchical systems. This means that a 3-digit NAICS code like "711 – Performing arts, spectator sports and related industries" includes multiple 4-digit codes, such as "7111 – Performing arts companies" and "7115 – Independent artists, writers and performers." Each of those 4-digit codes includes one or more 5-digit codes (e.g., 71111 – Theatre companies and dinner theatres), which include one or more 6-digit codes (e.g., 711112 – Musical theatre and opera companies).

The notes in the table often show a 6-digit code expressed as a percentage, which refers to the percentage of its 4-digit parent code. For example, on the first row, 11.7% of 611610 means 11.7% of the employment from NAICS 6116.

TABLE 5. KELOWNA CREATIVE SECTOR – DETAILED DEFINITIONS

CREATIVE SUB-SECTOR	DETAILED COMPONENT	DEFINITION
1. Arts Instruction & Education	GENERAL Fine Arts Schools	11.7% of 611610
	GENERAL Music & New Media Training…..allocating the estimated employment from Centre for Arts and Technology, Soulsikk School of Breaking and others …. Estimating 2/3 of the "Other Schools and Instruction" industry	1/2 of 31.8% of 611610
	Music schools (combined with dance, acting & art above)	Using survey results directly
	Visual and performing arts - OK Coll	Share of headcount enrollment for 2015 (growth rate is 2017 headcount vs. 2015)
	Visual and performing arts - UBCO	Share of headcount enrollment for 2015-16 (growth rate is 2017-18 headcount vs. 2015-16)
2. Art Galleries & Dealers	Commercial art galleries	included in art dealers below
	Art dealers	453920 is 2.5%

	Art distributors and publishers	511190 is 0.4% and "art prints, publishing" is one of 5 bullet points (so 1/5 of 0.4%)
3. Commercial Arts	GENERAL Commercial Arts	541490 is 13.1%
	Commercial artists	OCC 524 less overlap with 5111, 5413, 5414
	Graphic designers	541430 is 28.1%
	Photographers	541920 is 11.5%
	Book publishers	511130 is 1.6%
	Architects	541310 is 5.1%
	Interior designers	541410 is 51.9%
4. Cultural Facilities	Public art galleries	712111 is 27.6%
	Heritage sites	712120 is 5.5%
	Museums	712115 + 712119 are 64.3%
	Libraries	519121 is 45.7%
	Theatre venues	512130 is 60.1%
5. Events & Festivals	Event coordinators & administrators	11.7% of 7113 /// Plus actual survey results (which are added on top)
	Featured performers	2% of NOC 513 (based on half of theatre companies)
6. Literary Arts	Creative writers	NOC 5121; 21.3% of 7115 less overlap with other performing arts below
7. Performing Arts	GENERAL Performing Arts	7111 Performing Arts Companies; 30.2% of 7115 less overlap with writers above
	Dancers	10.9% of NOC 513
	Orchestras	30.7% of NOC 513
	Theatre companies	2% of NOC 513 (half shared with featured performers above)
8. Service & Material Providers	Agents	Assumed half of 7114
	Craft retailers and suppliers	451130 is 3.0% of 4511
	Musical instrument retailers	451140 is 3.3% of 4511

	Picture framers	442292 is 8.8% of 4422
9. Societies & Organisations	Societies & Organisations	Based on survey responses and (mostly) City grant application data, extrapolated to rest of non-profit list from City
10. Visual Arts	GENERAL Visual Arts	48.5% of 7115; Part of NOC 513; less overlap
11. Film and New Media	Film and video production	512110 is 39.0%; 512190 is 0.8% / plus assume 2017 figures from Accelerate Okanagan report are holding steady - this combines gaming and animation and is based on RDCO having 399 of 693 tech businesses in the Okanagan and Kelowna having roughly 80% of tech employment in RDCO)
	Music and sound recording	All of 5122
	Video game production and publishing	511212 is 11.3%; 17.4% of 5415

VANNSTRUTH
CONSULTING GROUP

585 - 1111 West Hastings Street
Vancouver, BC
V6E 2J3

(604) 762-6901

www.vannstruth.com