The Conference Board of Canada

Calgary's Creative Industries

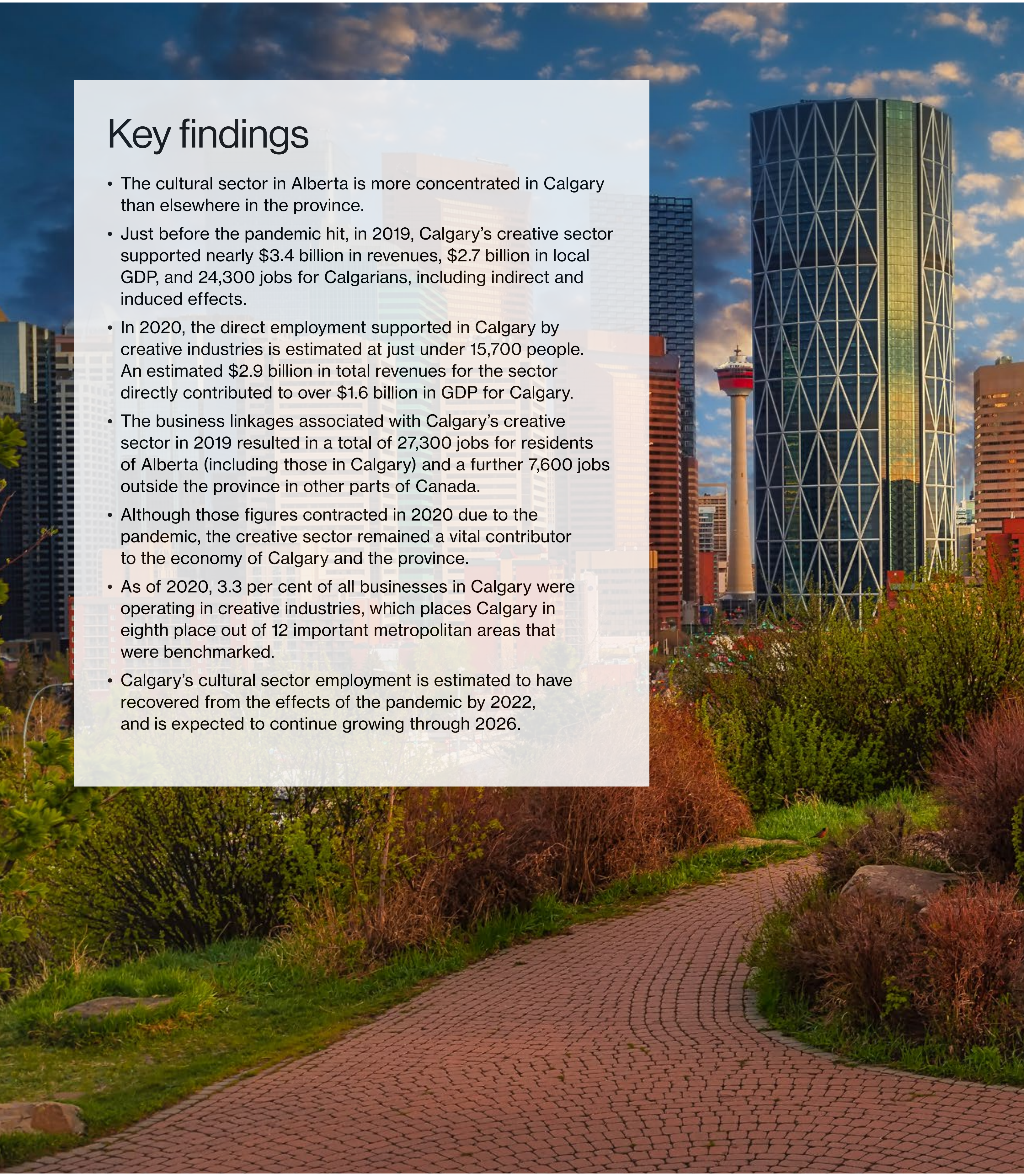
Update on the Economic Impact and Projections Going Forward

Impact paper | February 13, 2024

Contents

Key findings

- The cultural sector in Alberta is more concentrated in Calgary than elsewhere in the province.
- Just before the pandemic hit, in 2019, Calgary’s creative sector supported nearly $3.4 billion in revenues, $2.7 billion in local GDP, and 24,300 jobs for Calgarians, including indirect and induced effects.
- In 2020, the direct employment supported in Calgary by creative industries is estimated at just under 15,700 people. An estimated $2.9 billion in total revenues for the sector directly contributed to over $1.6 billion in GDP for Calgary.
- The business linkages associated with Calgary’s creative sector in 2019 resulted in a total of 27,300 jobs for residents of Alberta (including those in Calgary) and a further 7,600 jobs outside the province in other parts of Canada.
- Although those figures contracted in 2020 due to the pandemic, the creative sector remained a vital contributor to the economy of Calgary and the province.
- As of 2020, 3.3 per cent of all businesses in Calgary were operating in creative industries, which places Calgary in eighth place out of 12 important metropolitan areas that were benchmarked.
- Calgary’s cultural sector employment is estimated to have recovered from the effects of the pandemic by 2022, and is expected to continue growing through 2026.



Quantifying Calgary's creative sector

Current perspective

The creative industries are essential for Calgary. They improve the quality of life, support the retention of workers, attract business investment, and contribute to the economic vitality of the city.

In 2019, the creative sector in Calgary employed more than 18,100 people and supported almost $3.4 billion in revenues for local businesses. (See Table 1.) It also generated $1.9 billion in direct GDP and $1.4 billion in wages. In terms of employment, the visual and applied arts was the most significant domain; however, based on other economic measures such as GDP, revenue, and wages, audio-visual and interactive media could be seen as the most significant domain. The creative sector in all of Alberta employed a total of 45,600 individuals and contributed $4.2 billion to GDP in 2019. This shows the important contribution of Calgary to the province's creative sector.

Table 1

Direct economic impact of cultural sector in Calgary and Alberta in 2019

(Employment is number of jobs, the rest is in $ millions)

	Employment		Revenue		GDP		Wages	
Domains	**Calgary**	**Alberta**	**Calgary**	**Alberta**	**Calgary**	**Alberta**	**Calgary**	**Alberta**
Heritage and libraries	1,536	2,641	125.8	202.6	66.8	106.5	57.2	90.7
Live performance	2,143	5,128	201.0	443.4	106.3	234.4	96.0	211.4
Visual and applied arts	4,640	8,730	847.1	1,449.1	451.7	764.3	357.1	605.8
Written and published works	2,092	5,292	400.8	884.2	205.5	448.9	137.3	290.6
Audio-visual and interactive media	4,340	8,919	1,376.7	2,422.0	784.6	1,353.1	520.5	874.5
Sound recording	300	520	22.8	35.9	11.5	18.2	12.1	18.8
Education and training	1,385	5,768	167.5	585.4	119.0	423.5	101.6	367.3
Governance, funding, and professional support	1,578	8,305	185.8	1,520.6	111.2	786.2	91.9	534.2
Multidomain	98	342	27.1	90.4	13.2	46.1	6.6	19.8
Total creative sector	**18,112**	**45,645**	**3,354.3**	**7,633.6**	**1,869.9**	**4,181.3**	**1,380.4**	**3,013.2**

Note: Multidomain includes cultural industries that affect more than one cultural domain and cannot easily be allocated to a single domain.
Sources: The Conference Board of Canada; Statistics Canada's Business Counts (June 2019) and Provincial and Territorial Culture Indicators (2019).

In 2020, both Calgary's and Alberta's cultural sector economic impact were adversely affected by the pandemic.[1] We estimate that Calgary's cultural businesses employed 15,700 employees in 2020, which is 2,400 fewer than in 2019. Meanwhile for Alberta, as governments imposed lockdowns in response to COVID-19, sector employment dipped to 39,300 employees, which is 6,300 less than in 2019. (See Table 2.) In line with the decrease in employment, other metrics declined accordingly. Calgary's cultural sector GDP was estimated to be $1.6 billion in 2020, more than $200 million lower than the previous year.

In percentage terms, employment in the cultural sector in Calgary decreased by 13.6 per cent in 2020, which is slightly lower than the overall decline in Alberta of 13.9 per cent. (See Table 3.) However, revenue, GDP, and wages were impacted relatively harder in Calgary, all falling about 14.0 per cent in 2020 compared to roughly 11.0 per cent for all of Alberta. In other words, compared to the rest of the province, Calgary's cultural sector experienced a smaller negative impact in terms of employment but the effects on GDP and wages were larger. This is due to the outsized presence of the cultural sector situated in Calgary compared to Alberta as a whole. For all economic metrics, the sharpest percentage drops were in heritage and libraries and live performance domains, which were more impacted by social distancing measures.

Table 2

Direct economic impact of cultural sector in Calgary and Alberta in 2020

(Employment is number of jobs, the rest is in $ millions)

	Employment		Revenue		GDP		Wages	
Domains	**Calgary**	**Alberta**	**Calgary**	**Alberta**	**Calgary**	**Alberta**	**Calgary**	**Alberta**
Heritage and libraries	1,063	1,916	86.7	147.7	46.0	77.0	39.4	65.1
Live performance	1,553	3,563	134.0	283.8	69.9	148.1	63.0	133.5
Visual and applied arts	4,207	7,736	774.0	1,305.0	409.9	684.7	327.8	547.9
Written and published works	1,994	4,433	376.6	742.6	190.0	367.2	123.5	232.7
Audio-visual and interactive media	3,798	8,286	1,124.0	2,177.8	643.4	1,223.9	429.1	805.4
Sound recording	247	467	20.9	35.7	10.4	17.8	11.0	18.5
Education and training	1,318	5,086	160.9	525.7	115.3	383.6	99.8	334.9
Governance, funding, and professional support	1,390	7,545	175.7	1,484.5	105.2	765.6	86.0	519.1
Multidomain	87	284	27.4	85.3	12.3	39.8	6.1	17.3
Total creative sector	**15,656**	**39,316**	**2,880.2**	**6,788.2**	**1,602.5**	**3,707.7**	**1,185.7**	**2,674.2**

Note: Multidomain includes cultural industries that affect more than one cultural domain and cannot easily be allocated to a single domain.
Sources: The Conference Board of Canada; Statistics Canada's Business Counts (June 2020) and Provincial and Territorial Culture Indicators (2020).

1 Although a multi-year analysis can provide perspective about the evolution of the creative sector through the years, the results must be interpreted with caution. The Canadian Business Counts, one of our data sources for inputs, provide counts of active business locations on the basis of several variables, such as geography, business activity, and employment size, at maximum levels during the coverage period. Thus, the results are not perfectly comparable through time.

Table 3
Change in cultural sector from 2019 to 2020
(Percentage change from 2019 to 2020)

	Employment		Revenue		GDP		Wages	
Domains	**Calgary**	**Alberta**	**Calgary**	**Alberta**	**Calgary**	**Alberta**	**Calgary**	**Alberta**
Heritage and libraries	–30.8	–27.5	–31.0	–27.1	–31.1	–27.7	–31.2	–28.3
Live performance	–27.5	–30.5	–33.3	–36.0	–34.2	–36.8	–34.4	–36.8
Visual and applied arts	–9.3	–11.4	–8.6	–9.9	–9.3	–10.4	–8.2	–9.6
Written and published works	–4.7	–16.2	–6.0	–16.0	–7.6	–18.2	–10.0	–19.9
Audio-visual and interactive media	–12.5	–7.1	–18.4	–10.1	–18.0	–9.5	–17.6	–7.9
Sound recording	–17.8	–10.2	–7.9	–0.4	–9.7	–2.1	–8.7	–1.6
Education and training	–4.8	–11.8	–3.9	–10.2	–3.1	–9.4	–1.8	–8.8
Governance, funding, and professional support	–11.9	–9.2	–5.4	–2.4	–5.4	–2.6	–6.5	–2.8
Multidomain	–11.3	–17.0	1.0	–5.7	–6.9	–13.6	–7.7	–13.0
Total creative sector	**–13.6**	**–13.9**	**–14.1**	**–11.1**	**–14.3**	**–11.3**	**–14.1**	**–11.2**

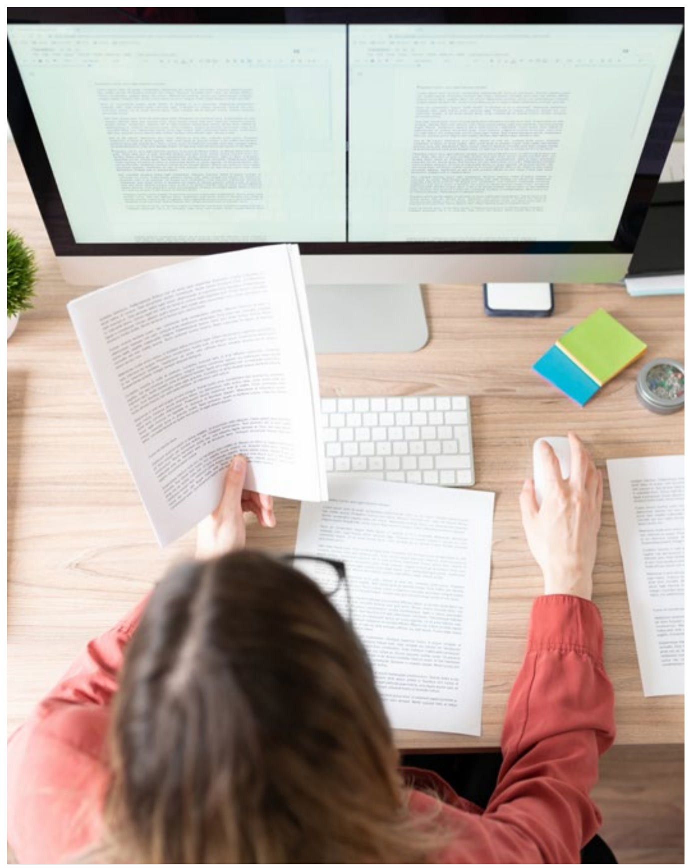
Note: Multidomain includes cultural industries that affect more than one cultural domain and cannot easily be allocated to a single domain.
Sources: The Conference Board of Canada.

Past employment lower than previously thought

As part of this project, we also updated older (2016) figures that were generated for Calgary's creative economy,[2] as Statistics Canada's Provincial and Territorial Culture Indicators had been revised.

Based on updated data, it is estimated that the production of creative products by the creative sector in Calgary during 2016 employed 20,700 individuals. (See Table 4.) That is revised down from just under 24,000 in the previous estimates. Using the new data, cultural sector employment in 2016 for the province as a whole now amounts to 45,600 employees, roughly 5,000 lower than previous estimates.

One of the main reasons for the decline is that the share of estimated employees decreased more in Calgary than in Alberta for particular domains: audio-visual and interactive media; written and published work and governance; and funding and professional support domains. Within audio-visual and interactive media, the decline was broad-based among all subdomains: film and video; broadcasting; and interactive media.



2 Conference Board of Canada, The, *Calgary's Creative Industries, Economic and Strategic Impact,* Calgary Economic Development, 2019, https://calgaryartsdevelopment.com/announcements/calgarys-creative-industries/.

Table 4

Direct economic impact of cultural sector in Calgary and Alberta in 2016 (revised)
(Employment is number of jobs, the rest is in $ millions)

	Employment		Revenue		GDP		Wages	
Domains	**Calgary**	**Alberta**	**Calgary**	**Alberta**	**Calgary**	**Alberta**	**Calgary**	**Alberta**
Heritage and libraries	1,391	2,346	106.9	168.2	59.3	92.1	50.4	77.8
Live performance	1,940	5,074	160.5	387.5	85.0	205.1	76.5	184.9
Visual and applied arts	4,680	8,615	792.7	1,341.3	431.7	724.3	345.2	577.5
Written and published works	3,128	6,528	571.3	1,119.7	288.9	567.5	191.2	360.5
Audio-visual and interactive media	5,496	8,789	1,803.6	2,438.7	992.3	1,322.7	663.7	866.0
Sound recording	355	556	29.2	41.7	16.2	23.1	17.2	24.0
Education and training	1,374	5,371	156.9	525.1	114.4	388.2	97.5	334.8
Governance, funding, and professional support	2,119	8,016	272.6	1,356.3	165.0	700.5	135.4	490.0
Multidomain	168	338	44.3	84.2	23.7	46.0	12.6	22.4
Total creative sector	**20,651**	**45,633**	**3,937.9**	**7,462.6**	**2,176.3**	**4,069.5**	**1,589.6**	**2,937.9**

Note: Multidomain includes cultural industries that affect more than one cultural domain and cannot easily be allocated to a single domain.
Sources: The Conference Board of Canada; Statistics Canada's Business Counts (December 2016) and Provincial and Territorial Culture Indicators (2016).

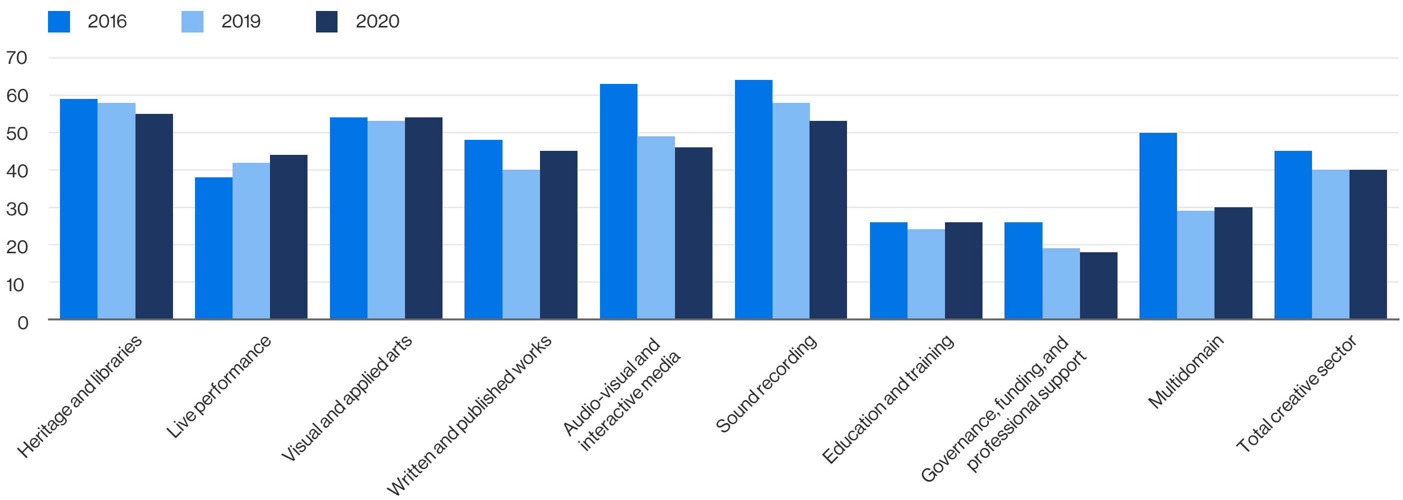
We estimate that the overall business revenues necessary to support the level of employment in the creative sector in 2016 were just under $4.0 billion in Calgary and that the direct GDP generated by the creative sector was $2.2 billion. Finally, wages are estimated to be just shy of the $1.6-billion mark. All those figures have been revised up compared to our previous analysis, in line with similar revisions to revenues and wages for Alberta from Statistics Canada. In all metrics, audio-visual and interactive media were followed by visual and applied arts, and written and published works as the most prominent domains in Calgary.

Calgary accounts for an outsized share of Alberta's cultural sector

The Calgary share of cultural employment for the province of Alberta stands at 40.0 per cent in 2020, unchanged from 2019 but 5.0 per cent lower than in 2016. (See Chart 1.) However, it remains above Calgary's share of overall provincial employment of 27.0 per cent, which means that the cultural sector is more concentrated in Calgary than elsewhere in the province. Most domains have lost share since 2016; the exception is live performance and education and training, which have gained percentage points in 2020.

Heritage and libraries, visual and applied arts, and sound recording were the three domains with the highest share of the province's cultural employment, with rates above 50.0 per cent. All of this implies that Calgary has an outsized concentration of the province's cultural sector.

Chart 1
Calgary's share of cultural employment in Alberta
(Percentage)



Note: Multidomain includes cultural industries that affect more than one cultural domain and cannot easily be allocated to a single domain.
Source: The Conference Board of Canada.

Economic footprint of Calgary's cultural sector on Alberta and Canada

To appreciate the full economic footprint associated with Calgary's creative sector, we considered the business linkages of the creative sector to other industries through the supply chain. We also considered the benefits associated with the re-spending of wages supported either directly in the creative sector or indirectly by industries through the supply chain. An example of the supply chain would be commissioning contractors from the construction industry to build an outdoor stage or producing paint used by artists.

Aside from the physical products required by the creative sector, a variety of business services located within and outside the province are also needed through the supply chain, including finance, insurance, professional, and technical services.

Given that the economic footprint is associated only with creative goods and services produced by the creative sector, the overall analysis is conservative. The analysis does not include activities of the creative sector involving non-creative products—for example, food and beverage sales at a performing arts centre.

The creative sector is a key contributor to the local economy

Despite the specific activities that are contained in the economic impact analysis, the numbers suggest that the full economic footprint (including indirect and induced effects) of Calgary's creative sector is quite significant. In 2019, Calgary's creative sector is estimated to have supported a total of $3.0 billion in GDP and 27,300 jobs for the province. (See Table 5.) Within the local area, Calgary's creative sector supported nearly $2.7 billion in local GDP and about 24,300 jobs.

When we include the benefits to businesses outside the province, Calgary's creative sector supports benefits far beyond those reported solely within the province. In fact, the extensive business linkages point to a further 7,600 jobs being supported outside Alberta. If we include the 27,300 jobs in Alberta, the collective economic footprint of Calgary's creative sector supported 34,900 jobs for Canadians. These linkages also helped support a total of $3.7 billion in GDP for Canada in 2019.

Table 5

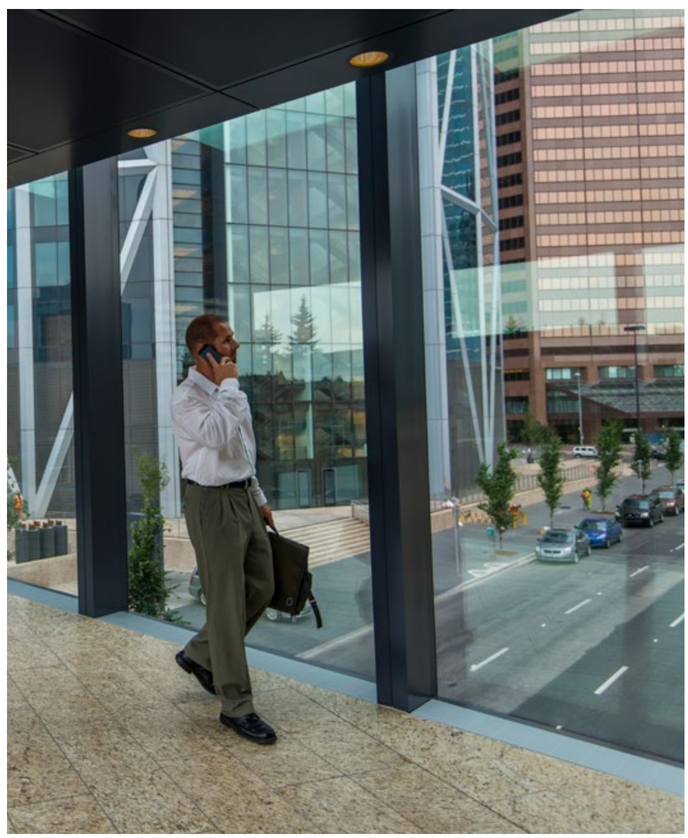
Total economic footprint of Calgary's creative sector

Calgary	**2016 (revised)**	**2019**	**2020**
Revenue ($ millions)	5,525.7	4,728.9	4,066.8
GDP ($ millions)	3,092.3	2,663.5	2,288.4
Wages ($ millions)	2,058.9	1,786.3	1,534.8
Employment (full-year jobs)	28,287	24,343	20,962
Taxes ($ millions)	52.3	42.1	36.7
Alberta	**2016 (revised)**	**2019**	**2020**
Revenue ($ millions)	6,292.3	5,391.1	4,637.0
GDP ($ millions)	3,506.6	3,021.8	2,597.8
Wages ($ millions)	2,277.4	1,975.0	1,696.8
Employment (full-year jobs)	31,927	27,312	23,486
Taxes ($ millions)	293.9	249.5	215.7
Canada	**2016 (revised)**	**2019**	**2020**
Revenue ($ millions)	7,878.5	6,723.8	5,756.3
GDP ($ millions)	4,319.8	3,706.4	3,173.9
Wages ($ millions)	2,753.4	2,376.5	2,035.1
Employment (full-year jobs)	41,469	34,895	29,829
Taxes ($ millions)	746.3	636.5	548.3

Source: The Conference Board of Canada.

Positive but dwindling contribution to tax receipts

In addition to adding to the GDP and employment numbers, Calgary's creative sector also contributes significantly to government revenues. It is estimated that tax contributions from Calgary's creative sector amounted to $637 million to the federal government, $250 million to the Province of Alberta, and a total of $42 million to municipal governments in 2019.



Creative sector severely strained during the lockdowns

In addition to a decline in direct economic impacts (presented in the first section), the total economic footprint of Calgary's creative sector has decreased since 2016. Our revised estimates show that Calgary's creative sector supported $3.5 billion in GDP and almost 32,000 jobs in Alberta in 2016.

The impact of government's lockdown in Calgary's creative sector total economic footprint was quite significant. For instance, the impact on Alberta GDP was more than $420 million in losses, or 14.0 per cent. (See Table 6.) The impact on revenue and employment was also a negative 14.0 per cent, or a loss of $754 million and almost 4,000 jobs.

Obviously, the impact on Canada of the struggles in Calgary's creative sector was even more severe. It cut $532 million from GDP and more than 5,000 jobs.

Table 6
Change in total economic footprint of Calgary's creative sector from 2019 to 2020
(Change from 2019 to 2020)

Calgary	**$ millions**	**Percentage**
Revenue ($ millions)	–662.1	–14.0
GDP ($ millions)	–375.1	–14.1
Wages ($ millions)	–251.5	–14.1
Employment (full-year jobs)	–3,381.0	–13.9
Taxes ($ millions)	–5.4	–12.8
Alberta	**$ millions**	**Percentage**
Revenue ($ millions)	–754.1	–14.0
GDP ($ millions)	–424.0	–14.0
Wages ($ millions)	–278.1	–14.1
Employment (full-year jobs)	–3,826.0	–14.0
Taxes ($ millions)	–33.8	–13.5
Canada	**$ millions**	**Percentage**
Revenue ($ millions)	–967.6	–14.4
GDP ($ millions)	–532.4	–14.4
Wages ($ millions)	–341.4	–14.4
Employment (full-year jobs)	–5,066.0	–14.5
Taxes ($ millions)	–88.2	–13.9

Source: The Conference Board of Canada.

The prominence of creative businesses in Calgary

To assess the prominence of creative businesses, we looked at the proportion of all businesses in an economic region that operate in creative industries. This gave us an indication of the relative weight and economic role that creative businesses have in a given area. A higher number means more opportunities to partake in creative activities, as a creator or as a consumer.

In Calgary, in 2020, the city's 6,500 creative businesses represented 3.3 per cent of all businesses, which places Calgary eighth out of 12 economic regions benchmarked—the same proportion as Ottawa and slightly behind the Canadian average of 3.5 per cent. (See Chart 2.) Montreal, Vancouver, and Toronto top the chart with 5.2 per cent, 4.7 per cent, and 4.5 per cent of their businesses operating in the creative industries, respectively. Those top positions are not too surprising and are the same as in 2016 and 2019. They are Canada's three biggest metropolitan areas, and they are generally viewed as both dynamic and vibrant places in which to live and work.

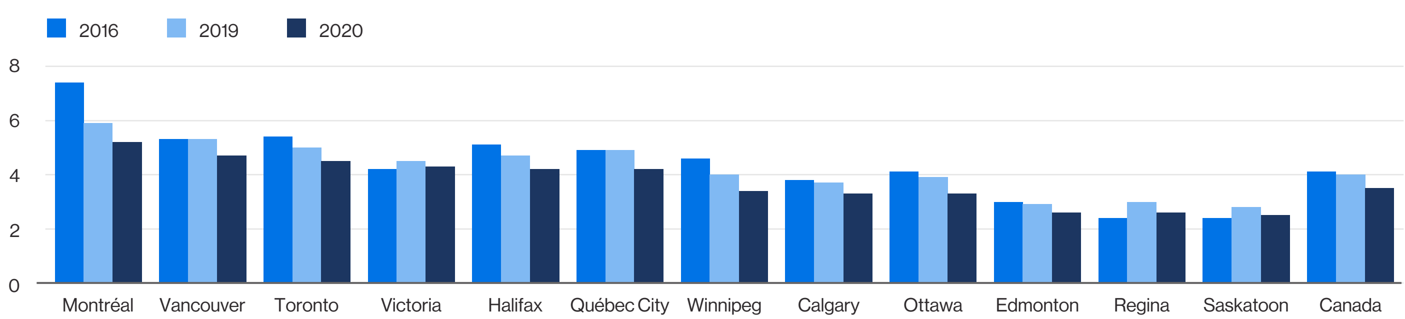
Victoria, Halifax, and Québec City are the other major cities with a share higher than the Canadian average, in the range of 4.2 per cent to 4.3 per cent. On the other hand, Edmonton, Regina, and Saskatoon are at the bottom of the rankings, with each having 2.6 per cent or less share of creative businesses.

Compared to 2019, all analyzed cities saw a decline in the share of creative businesses as the creative sector was more impacted by the social distancing measures implemented by governments. However, Calgary's cultural sector has been less impacted than the sector in other major cities. Its share decreased by a 0.3 percentage point, from 3.7 per cent in 2019. Because of that, Calgary moved up from ninth spot in 2019 to eighth spot in 2020 out of the 12 cities. Only the cities of Victoria and Edmonton have seen a smaller decrease in their creative sector share between 2019 and 2020 than Calgary.

Between 2016 and 2019, more than half of the cities saw their share of creative businesses decrease. Vancouver and Québec City remained unchanged while Victoria, Regina, and Saskatoon increased. The sharpest drop was in Montréal where the share of creative businesses was cut by 1.5 percentage points, decreasing from 7.4 per cent to 5.9 per cent. Calgary's share decreased by a 0.1 percentage point, from 3.8 per cent to 3.7 per cent during this period.

Chart 2

Creative industry as a share of total businesses
(Percentage)



Source: The Conference Board of Canada; Statistics Canada.

Projection of Calgary's cultural sector

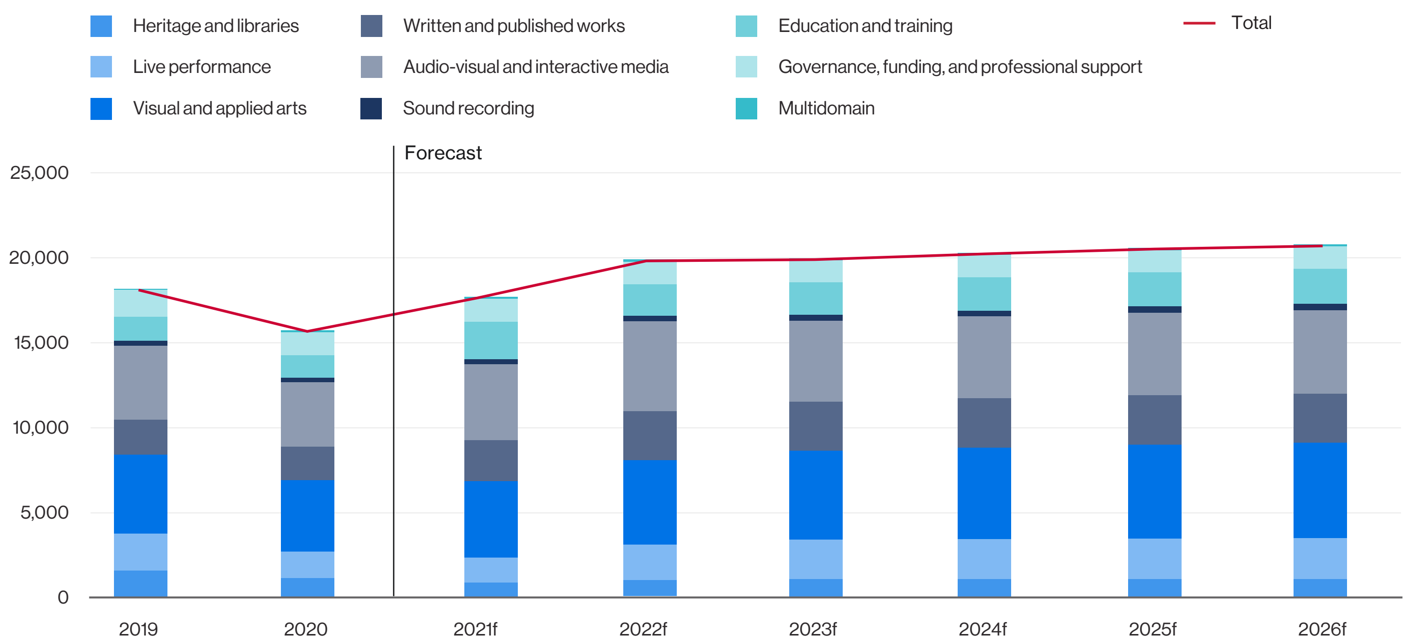
Calgary's cultural sector employment was estimated to rebound and surpass pre-COVID-19 employment levels in 2022.[3] (See Chart 3.)

In fact, in 2022, cultural employment was estimated to be higher than in 2019 in all domains except heritage and libraries, live performance and governance, funding and professional support.

Live performance employment is expected to surpass 2019 levels in 2023, while employment in the heritage and libraries domain as well as in governance, funding, and professional support will remain below the 2019 level until the end of our projection horizon in 2026.

Chart 3

Calgary cultural sector employment forecast out to 2026
(Number of employees)



Source: The Conference Board of Canada; Statistics Canada.

3 Our forecast is based on the Conference Board's internal forecast for similar cultural businesses in Alberta.

Appendix A

Methodology

Quantifying the direct and full economic footprint of the cultural sector

To quantify Calgary's creative sector, we started by collecting data (where possible) on Alberta's cultural sector, to ensure that the gathering of information on the creative sector in the Calgary census metropolitan area (CMA) was consistent with the approach used by Statistics Canada to define the cultural sector. This process ensured that any measures reported for Calgary would align with those produced for the province of Alberta through Statistics Canada's Provincial and Territorial Culture Indicators report.

The first step in establishing the footprint of the creative sector in the Calgary CMA involved determining the employment levels in the industries that correspond with the "core" and "transversal" creative domains (and subdomains). This step involved using various data sources, including Statistics Canada's Canadian Business Counts, the 2016 Census, and Provincial and Territorial Culture Indicators. The process was also informed by figures provided by Calgary Economic Development, Calgary Arts Development, and the City of Calgary.

Deriving employment estimates for Calgary involved using Statistics Canada's Business Register data to reproduce estimates of creative sector employment for Alberta. By leveraging the actual employment data reported from Statistics Canada's Provincial and Territorial Culture Indicators, we compiled a series of ratios on an industry-by-industry basis so that the estimates (after applying the ratios) would match the reported data. The final step involved using these ratios on employment estimates derived from Statistics Canada's Business Register for the Calgary CMA.

Using the employment estimates for the cultural sector as a guide, it was possible to determine the level of revenues, GDP, and wages that would be required to support that level of employment. Direct input–output multipliers for the province of Alberta were used for this task. As opposed to traditional input–output model simulations where the level of spending (or industry output) is used to initiate the analysis, in this instance, one key component of the economic footprint (employment) was already known.

To calculate the full economic footprint of the sector, the Conference Board of Canada's Economic Impact Assessment (EIA) model was used to simulate the Alberta economy along with customized local area coefficients that reflect the economic makeup of the Calgary CMA.

Calculating Calgary's share of creative businesses

Our metric used Statistics Canada's Canadian Business Counts to compare the number of active businesses in creative industries across economic regions. To do this, we cross-tabulated North American Industrial Classification System (NAICS) categories with business counts. We then used Statistics Canada's Classification Guide for the Canadian Framework for Culture Statistics to guide our selection of which NAICS codes are considered creative industries. This list includes businesses whose main type of economic activity is linked to creative industries (for example, arts, heritage, performances, visual arts, written and published work). We counted both businesses with employees and businesses without employees (sole proprietorship businesses). These indicators were scaled by the total number of businesses.

Building the number of creative businesses using Statistics Canada's business count data required some approximation, because even though an industry can be classified as creative according to NAICS, not all employment in that industry will be classified as creative according to the Statistic Canada's Culture Satellite Account. For example, marketing, legal, and security jobs in a museum are not considered creative occupations, even though the museum is a creative establishment. As a result, we restricted the number of creative industries based on the proportion of employees in each industry who are considered to occupy creative jobs, according to the Culture Satellite Account. If less than 10.0 per cent of an industry's employees were in creative occupations, we excluded all businesses in that industry from our estimations. This means we included all industries where 10.0 per cent or more of its employees were in creative occupations. This implies that of the 103 NAICS we used in quantifying the economic footprint of cultural sector, we used 62 with this approach across all cities.

Acknowledgements

This issue briefing was prepared with financial support provided by Calgary Arts Development.

The following members of The Conference Board of Canada's team contributed to this work: Michael Burt, Vice-President, and Shahrokh Shahabi-Azad, Associate Director, Economic Research.

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Gregory Hermus, Principal Economist, and Jonathan Lachaine, Senior Economist

Calgary's Creative Industries: Update on the Economic Impact and Projections Going Forward
The Conference Board of Canada

To cite this research: Conference Board of Canada, The. *Calgary's Creative Industries: Update on the Economic Impact and Projections Going Forward* Ottawa: The Conference Board of Canada, 2023.

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Price: Complimentary

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