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Culture, Tourism and the Centre for Education Statistics

Economic Contribution of the Culture Sector to Canada's Provinces



by Culture Statistics Program

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Culture Statistics Program

Statistics Canada

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Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Acronyms

ACOA	Atlantic Canada Opportunities Agency
CANSIM	Canadian Socio-economic Information Management System
CTCES	Culture, Tourism and Centre for Education Statistics
FAMEX	Family Expenditure Survey
GDP	Gross domestic product
ICT	Information and communications technologies
I-O	Input-output
LFS	Labour Force Survey
NAICS	North American Industry Classification System
NCLSP	National Core Library Statistics Program
OECD	Organisation for Economic Co-operation and Development
SHS	Survey of Household Spending
SIC	Standard Industrial Classification
SNA	System of National Accounts
SOC	Standard Occupational Classification

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Abstract

This report provides a descriptive analysis of the economic contribution of the culture sector to the Canadian economy. Culture sector output and employment levels are measured for each province, for the years 1996 to 2003.

The results of the study demonstrate that, on average, the culture sector accounted for 3.8% of national output and 4% of national employment, over the period under investigation. Ontario, Quebec and British Columbia were among the largest contributors to the culture sector in Canada, accounting for more than three-quarters of total output and employment.

Alberta experienced the largest growth in culture output, whereas Quebec recorded the largest increases in culture employment. Ontario dominated international trade in culture goods.

Government expenditure in culture amounted to \$7.4 billion in 2003. The federal share of government spending represented almost one-half of total expenditure, followed by provincial and municipal spending that were fairly evenly split during the same year.

Preface

The principal aim of this report is to provide a relative measure of the economic contribution of the culture sector to provincial economies¹ in Canada. Statistics Canada has produced a number of reports in recent years that examine this important issue. One major report, entitled “*Economic Contribution of Culture in Canada*,” covering the years 1996 to 2001 was published in December 2004.² The focus of that report was an analysis of the impact of culture on output and employment at the national level.

This report focuses on the relative contribution of the culture sector to provincial economies. The estimates are based on the concepts and definitions specified in the *Canadian Framework for Culture Statistics*. The methodology used in the report is well-documented and differs from methodologies used in earlier economic impact studies published by Statistics Canada, prior to December 2004. These earlier reports were published before the inception of the Framework, and are based on differing concepts and definitions.³ For example, previous Statistics Canada provincial or regional culture studies included estimates for the indirect impact of culture, an approach not used in this study⁴. As a result, data from previous studies are not directly comparable to the results found in the current report.

Indirect impacts, which include the re-spending of monies received as expenditures from culture establishments, or induced impacts, such as the spending elsewhere of earnings by workers in culture industries, or ancillary spending by culture attendees (e.g. spending at restaurants or hotels) are excluded explicitly. While indirect impacts can be substantial, their measurement is complex and is not included in the design of this study.

The most definitive way to approach this type of analysis would be through the creation of a ‘satellite account’. Some parts of the economy are difficult to measure within the traditional industry framework. For example, tourism, like culture, is not an explicitly recognized industry in the traditional list of North American Industry Classification System (NAICS) industries. Rather, it cuts across several industries, such as the transportation, restaurant, hotel, and recreation industries. More importantly, only a portion of the output of these industries serves tourism. Similar classification boundary issues exist for culture⁵, with the result that a simple economic impact study cannot provide the kind of substantive and comprehensive data that would be produced by a satellite account. The main benefit of this report, then, is in its comparative application, as the methodology used is consistent across all provinces.

Data gaps

There are establishments in Canada that define their products as 'new media' or 'digital interactive media' or 'crafts.' This activity has not been defined as a separate industry under NAICS, and hence cannot be measured as distinct categories in the culture framework. However, culture commodities produced by establishments involved in new media or crafts are integrated with other industries in the framework such as those that produce digital video, audio, images, and computer graphics, or industries that produce visual arts products.

Volunteer activity

The growing importance of the culture sector to provincial economies can be measured by examining employment data. Although a part of the economic activity in the culture sector is carried out by volunteers, they are not included in this report. Standard economic accounts do not include an estimate of the economic value of volunteer activity in the culture sector, as defined by the framework. However, as voluntary contributions of time are an important resource to the non-profit sector, Statistics Canada has created a Satellite Account of Non-profit Institutions and Volunteering to measure, among other things, the value of non-profit economic activity above what would be measured if only monetary transactions were taken into account.⁶ For instance, the accounts estimated that, in 2000, culture and recreation led the way with an estimated \$3.6 billion worth of volunteer effort – the highest value of economic contribution of the non-profit sector, as compared with other fields such as social services (\$3 billion), religion (\$2.5 billion) and education and research (\$1.8 billion).⁷

Data accuracy

Output

Throughout this report, the provincial output tables were derived using aggregated GDP level estimates. Provincial GDP by industry depends on the National GDP by industry and the Input-Output Tables to which it is anchored. In general, the higher the level of aggregation, the more reliable are the estimates. There is a trade-off between timeliness and accuracy. As more robust data becomes available, estimates are revised and become more accurate until the benchmark Input-Output Tables are published, two and a half years after the estimates were first published in the Provincial GDP by industry. Where possible, data from the most recent annual surveys are used when revising Provincial GDP.

In general, weaknesses in source data arise mainly from undercoverage and inappropriate concepts and definitions.

a) Undercoverage – This weakness is normally corrected by inflating reported data by a factor that allows the data to represent the universe concerned.

b) Concepts and definitions not suitable for the System of National Accounts (SNA) – For administrative records, the data are quite varied in coverage, details, definitions and concepts and often these factors do not coincide with those required for the Industry Accounts. They must be thoroughly examined and adjusted for consistency and coverage using carefully designed estimating procedures.

No direct measures of the margin of error in the estimates can be calculated.⁸ However, quality measures have been assigned as follows: the highest quality rating 'A' is assigned to a data set that originates from a survey or administrative source with the largest sample size and smallest undercoverage that requires no indirect estimation of missing detail; a reliable or 'B' rating is assigned to a data set estimated from source data with some but not all of the above attributes; finally, data sets with a 'C' rating involve significant application of indirect estimation techniques and rely on source data with small samples, undercoverage, or both.

The ranking of quality for GDP data for culture industries have been determined as follows:

NAICS Definition	L Aggregation – Industry Title	GDP
3231	Printing and related support activities	B
3271, 3272, 3274, 3279	Miscellaneous non-metallic mineral product manufacturing	A
3342-3346	Electronic product manufacturing	B
41	Wholesale trade	C
44-45	Retail trade	C
512	Motion picture and sound recording industries	A
5152, 517	Radio and television broadcasting	A
511, 516, 518, 519	Pay TV, specialty TV and program distribution and telecommunications	A
511, 516, 518, 519	Publishing industries, information services and data processing	B
532, 533	Rental and leasing services and lessors of non-financial intangible assets	B
5418	Advertising and related services	B
5411-5413	Architectural, engineering, legal and accounting services	B
5414-5417, 5419	Other professional, scientific and technical services	B
6111, 6112, 6114-6117	Educational services (except universities)	B
71	Arts, entertainment and recreation	B
8132-8134, 8139	Grant-making, civic, and professional and similar organizations	C
812, 814	Personal and laundry services and private households	B

Source: Statistics Canada catalogue 15-201, *The Input-Output Structure of the Canadian Economy*, 2006, pp320-321.

Employment

Employment data for this report was sourced mainly from the Labour Force Survey (LFS.) Since the LFS is a sample survey, all LFS estimates are subject to both non-sampling error and sampling errors.

Non-sampling errors can arise at any stage of the collection and processing of the survey data. These include coverage errors, non-response errors, interviewer errors, coding errors and other types of processing errors. The LFS closely monitors coverage and non-response errors through regular estimates of slippage rates and non-response rates. The LFS also includes quality control processes as an integral part of survey processes, so that all the results are closely monitored and changes can be made to the processes as needed. The performance of LFS interviewers is also monitored and training updates and reminders are distributed regularly.

Sampling errors associated with survey estimates are measured using standard errors of the estimates obtained from jackknife variance estimation procedures. These standard errors are calculated regularly for many LFS estimates. As well, approximate sampling variability tables are regularly produced that can be used to obtain approximate coefficients of variation for LFS estimates as a function of the size of the estimate and the geographic area.⁹

Generally speaking, the larger the sample size the smaller the standard error and associated CV, and the more reliable the estimate. Small sample sizes, such as that of the industries comprising the culture sector, tend to result in CVs beyond which the data can be considered as being reliable for some provinces. At the industry level, LFS data below the following values are considered to be not reliable and should not be used:

Canada	5,200
Newfoundland	1,300
Prince Edward Island	300
Nova Scotia	1,600
New Brunswick	1,100
Quebec	4,100
Ontario	3,500
Manitoba	1,900
Saskatchewan	1,400
Alberta	3,700
British Columbia	4,000

Disclosure control

Statistics Canada is prohibited by law from releasing any data that would divulge information obtained under the *Statistics Act* that relates to any identifiable person, business or organization without the prior knowledge or the consent in writing of that person, business or organization. Various confidentiality rules are applied to all data that are released or published to prevent the publication or disclosure of any information deemed confidential. If necessary, data are suppressed to prevent direct or residual disclosure of identifiable data.

In this report, employment estimates below the following levels are suppressed:

Canada	2,500
Newfoundland	600
Prince Edward Island	100
Nova Scotia	800
New Brunswick	500
Quebec	1,800
Ontario	1,500
Manitoba	900
Saskatchewan	600
Alberta	1,700
British Columbia	1,900

Endnotes

1. The economic contribution of the culture sector in the Northwest Territories, Yukon and Nunavut is not examined in this study due to data limitations.
2. Statistics Canada (2004), *Economic Contribution of Culture in Canada*, Statistics Canada Catalogue no. 81-595-MIE2004023, Ottawa.
3. For example, earlier studies included culture equipment (e.g. lighting and sound equipment, equipment maintenance, and the manufacturing and distribution of culture equipment and artist supplies) in the definition of culture. These activities are not included in the current version of the framework for culture statistics. Previous studies excluded ethnic and socio-cultural festivals because they are not consistent with the current definition of culture as defined by the framework.
4. The Nova Scotia study, *Profile of Culture Activities in Nova Scotia: Culture counts – Counting Culture*, were produced prior to the completion and publication of the *Canadian Framework for Culture Statistics*. As a result, the report was based on industry definitions and outputs that are not the same as those produced in the economic impact reports released after December 2004. For instance, culture equipment (e.g. lighting and sound equipment and equipment maintenance) were previously included in the Statistics Canada estimates for Nova Scotia, whereas they are now excluded from the *Canadian Framework for Culture Statistics*, and thus out of scope for these current estimates. The earlier report also had a narrow interpretation of festivals, so that only a performance or presentation of cultural intellectual property (such as music and film festivals), were included. Ethnic-oriented or socio-cultural festivals, attractions or events were excluded. In Heritage, only heritage institutions involved in the preservation of human and historical heritage were in scope. Nature and the environment including nature parks with interpretation programs, as well as zoos, botanical gardens, planetariums, archaeological sites, etc., were excluded. This current study treats these types of heritage activities as in scope. The result is a different final estimate of the size of some provincial culture outputs or employment. In addition, the above-noted study estimated direct and indirect effects of the culture sector, while the current study only estimates the direct effect.
5. National accountants have developed extensions (satellite accounts) to measure the importance of a variety of economic activities. Satellite accounts can be seen as a reorganization of, and sometimes an extension to, the existing statistics in the System of National Accounts. They focus on industries or sectors that are not identified in commonly used classifications or definitions. In Canada, there are satellite accounts for the tourism industries, the environment and for the nonprofit institutions and volunteering sector. Statistics Canada, in conjunction with Transport Canada, is also developing a Transportation Satellite Account that would include values for all transportation activity in Canada, as well as supporting services and capital infrastructure. It is hoped that enough interest exists in the culture sector that a satellite account could be justified for culture.
6. See Statistics Canada, “Satellite Account of Nonprofit Institutions and Volunteering, 1997 to 2003” Cat. No. 13-015-XIE, page 42 for its broader definition of culture and recreation. <<<http://www.statcan.ca/english/freepub/13-015-XIE/13-015-XIE2005000.pdf>>. The *Satellite Account of Nonprofit Institutions and Volunteering* contains new statistics on the economic contribution of the nonprofit sector in Canada.
7. *Ibid.* <http://www.statcan.ca/english/freepub/13-015-XIE/2005000/labour.htm#culture>
8. Data reliability ratings are a product of data integration and analysis inherent in the compilation of GDP by industry. They rely both on the quantitative attributes of the survey and administrative data sources that are used, such as sample size, response rate and coefficient of variation, and on the expert judgement of analysts who undertake data integration of various source data.
9. For more information see Catalogue No. 71-543 – GIE, *Guide to the Labour Force Survey*.

1. Executive summary

In 2003, culture industries contributed an estimated \$43.2 billion to the Canadian economy, accounting for approximately 3.8% of GDP.¹ All provinces reported growth in culture output from 1996 to 2003, with overall growth at the national level averaging 48.4%. Alberta reported the largest percentage increase, followed by Prince Edward Island and Quebec with increases of 73.6%, 55.1%, and 53.0%.

The culture sector contributed under 4% to the total GDP in all the provinces except Ontario and Quebec, where it accounted for 4.2% and 4.1%, respectively.

Ontario largest producer of culture output, Alberta has strongest growth

In 2003, Ontario accounted for the largest share of culture output (46%), followed by Quebec (23%) and British Columbia (12%). Ontario generated approximately \$20 billion in culture output, followed by Quebec with \$10 billion and British Columbia with \$5 billion. Together, these three provinces accounted for over 80% of the total culture output for all provinces.

The culture sector in these three provinces also showed healthy growth in output, ranging from 43.1% to 53.0%, on average, from 1996 to 2003. Alberta experienced the fastest growth in culture output (73.6%) over the period. Most provinces retained their shares of culture output between 1996 and 2003 with some exceptions. Quebec and Alberta increased their shares whereas all other provinces showed a slight decline.

Significantly, for Ontario and Quebec, the shares of the provinces' culture output were higher than the provinces' shares of total Canadian GDP. For instance, in 2003, Ontario accounted for 46% of total culture output for all provinces, compared to 42% of total Canadian GDP.

Alberta, Quebec and Prince Edward Island experienced above-average growth

Alberta, Prince Edward Island and Quebec were the only provinces to experience growth in culture output higher than the national average between 1996 and 2003.

In 2003, growth in culture output surpassed total provincial GDP growth in Quebec, Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia and Prince Edward Island. Noteworthy is culture output growth in Prince Edward Island, which was stronger than its overall provincial output. Culture output in Prince Edward Island increased by 8% compared to its overall GDP growth of 5.4%. All remaining provinces saw their culture output grow less than provincial GDP. The gap was greatest in Newfoundland and Labrador, where provincial GDP grew 10% compared to 7% in culture output during the period. This discrepancy is due,

in large part, to the strength of the oil production sector and its effect on provincial GDP.

Culture sector accounted for 3.8% of GDP

Culture accounted for 3.8% of total GDP in 2003. The culture sector contributed less than 4% to the total GDP of every province except Ontario and Quebec, where it accounted for 4.2% and 4.1%, respectively. Culture was least significant to the economy of New Brunswick, where it generated 2.1% of the province's GDP over the same period.

Ontario net importer, Quebec net exporter of culture goods

In terms of trade in culture goods, Ontario had the highest level of international trade activity.² In 2003, the province imported \$3 billion in culture goods (about three-quarters of all Canadian imports of culture goods). At the same time, its exports amounted to almost \$1.3 billion. Quebec was the second largest source and destination for culture trade in Canada, accounting for 10% of imports and 30% of exports. Ontario was a net importer whereas Quebec was a net exporter of culture goods. Quebec exported more culture goods (\$738 million) than it imported (\$398 million) in 2003.

All regions of Canada reported growth in exports and imports in culture goods trade between 1996 and 2003. The Atlantic provinces recorded the largest increase in the levels of culture imports, whereas the fastest growth in exports occurred in the Prairies (168%) over the same period.

In 2003, *Written media* (publishing) sub-sector accounted for 36% of exports of all culture goods and 70% of the total goods imports. *Film* followed with a 9% share of imports and a 2.8% share of exports.³

Federal per-capita spending lowest in west

In 2003, the three levels of government spent approximately \$7.4 billion on culture activities. The federal government contributed \$3.2 billion, followed by provincial governments at \$2.2 billion and municipalities at just over \$2 billion.

All three levels of government spent more on culture in 2003 than in the previous year, although the rate of federal spending slowed over the same period.⁴ Federal spending in the film and video industry, book publishing and the performing arts actually decreased.

Between 1996 and 2003, the largest increase in federal spending occurred in *Sound recording and music publishing*, more than doubling over this period. On the other hand, *Libraries* was the only sub-sector to experience a decline in federal spending (-2%). In comparison, between 1998 and 2003, overall provincial spending on *Film* recorded the largest increase (58%), while the smallest increase occurred in *Sound recording and music publishing* (2%).

Expenditures on culture were the largest in Ontario and Quebec, where the sector received 39% and 31%, respectively, of the combined spending from all three levels of government in 2003.

Quebec was the largest recipient of federal culture spending on a per-capita basis. In 2003, spending in Quebec amounted to \$153 per person, followed by Prince Edward Island at \$131 and Nova Scotia at \$125.

The largest percentage increases in per-capita federal culture spending occurred in Nova Scotia (36%), Prince Edward Island (31%) and Quebec (31%) over the period 1996 to 2003. Federal spending was relatively lower in the Western provinces and the Prairies compared to Central Canada and the Atlantic. Alberta was the only province in Canada to experience a decline in federal culture spending (-9%) on a per-capita basis between 1996 and 2003.

With the exception of British Columbia, provincial per-capita culture spending rose over the period 1996 to 2003. Per-capita provincial spending on culture activities in Quebec was the highest in Canada. In 2003, the Quebec provincial government spent \$97 per person, a 21% increase from \$80 in 1996. Manitoba followed with \$96 and Saskatchewan with \$88 in provincial per-capita culture spending in 2003. The provincial governments in Quebec, Manitoba, Saskatchewan, Prince Edward Island, Newfoundland and Labrador, and New Brunswick reported per-capita culture spending higher than the Canadian average. Ontario spent the least on culture activities on a per-capita basis in 2003 (\$51).

In this report, spending in British Columbia appears to be one of the lowest in Canada and below the Canadian average, with an expenditure of approximately \$243 million in 2003. The reason for these levels, however, is that British Columbia invests in the *Film industry* primarily through a tax credit system for film, animation, publishing and television, rather than through grants or donations. Unfortunately, data on tax credits are not included in the existing Statistics Canada *Survey of Government Expenditures on Culture*. Other provinces may rely on grants or contributions, which are measured by this Survey. Until the *Survey of Government Expenditures on Culture* can be revised to take into account the growth of tax credit systems, data will be underestimated for provinces such as British Columbia.

In British Columbia, municipalities spent \$75 on a per-capita basis, the highest in Canada in 2003. Saskatchewan and Ontario followed with per capita spending of approximately \$73 and \$72, respectively. British Columbia, however, was the only province in Canada where per-capita municipal spending fell between 1996 and 2003 (-2%).

Ontario employed more culture workers than any other province in Canada

Similar to culture output, Ontario had the greatest share (41%) of culture employment in Canada followed by Quebec (27%) and British Columbia (13%) over the period. Together, these three provinces averaged 81% of all culture employment in Canada in 2003.

Quebec was the only province to increase its share of total culture employment in Canada. It accounted for 27% of culture employment in 2003 compared to 24% in 1996. British Columbia, Alberta, Saskatchewan, Nova Scotia and New Brunswick all reported slight declines in employment shares over this period.

Culture's share of total employment was most significant in Quebec (4.6%), followed by Ontario (4.1%) and British Columbia (3.8%), and least significant in

Newfoundland and Labrador (2.9%), Saskatchewan (3.0%) and Prince Edward Island (2.9%)

The largest gains in culture employment between 1996 and 2003 occurred in Quebec (35%), followed by Ontario (16%) and Alberta (16%).

Majority of culture employees worked in the private sector

In 2003, a majority of culture workers in Canada were employed in the private sector – Newfoundland and Labrador had the highest proportion of private sector culture jobs (81%), while British Columbia had the lowest (61%). The province of Newfoundland and Labrador reported the largest increase in the share of private sector culture employment (from 74% in 1996 to 81% in 2003). Nova Scotia posted the greatest loss in its share of private sector culture jobs (from 77% in 1996 to 70% in 2003), which was somewhat offset by an increase in self-employment in that province's culture sector.

Largest public sector employment in the Atlantic provinces

The Atlantic provinces had a higher proportion of culture workers in the public sector than other provinces. Prince Edward Island was at the top, with 15% of its culture workers employed in the public sector in 2003. Prince Edward Island also reported the second largest per-capita federal culture spending in Canada. In general, most provinces recorded declines in their shares of public sector employment from 1996 to 2003, with the greatest drop occurring in Newfoundland and Labrador (from 15% to 7%). Nova Scotia and Saskatchewan were the only provinces without dwindling shares of public sector culture employment.

Self-employment in the culture sector increased in almost all provinces in Canada

With the exception of Saskatchewan, all provinces reported a rise in self-employment in the culture sector. Interestingly, the top four provinces in terms of culture employment reported the highest proportions of self-employment compared to other provinces. British Columbia led with 37% of its culture labour force consisting of self-employed workers. Most of the Atlantic provinces – Newfoundland and Labrador, Prince Edward Island and New Brunswick – reported relatively lower proportions of self-employment but higher proportions of public sector employment, as compared to other provinces.

Differing rates of full-time culture employment in the provinces compared to provincial averages

The majority of culture workers in all provinces were employed full-time. However, with the exception of Quebec, Alberta, British Columbia and Ontario, the remaining provinces had relatively lower rates of full-time employment in the culture sector. Full-time culture employment rates rose from 1996 to 2003 in just three of the provinces: Quebec, Newfoundland and Labrador and Alberta. Newfoundland and Labrador experienced the greatest increase in its rate of full-time culture employment, from 78% in 1996 to 83% in 2003, whereas Manitoba reported the largest decline from 81% to 76% during the same period.

Table 1.1
Culture output by province

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Newfoundland and Labrador	238	241	263	270	296	294	316	324
Prince Edward Island	69	65	72	75	83	86	92	107
Nova Scotia	575	570	580	597	648	665	704	730
New Brunswick	413	418	443	460	488	503	536	549
Quebec	6,402	6,913	7,523	7,869	8,457	8,649	9,161	9,798
Ontario	13,377	13,660	14,738	15,951	17,726	18,220	19,163	19,669
Manitoba	969	968	1,027	1,063	1,139	1,170	1,284	1,289
Saskatchewan	769	716	769	739	782	803	893	900
Alberta	2,665	3,260	3,173	3,434	3,857	4,223	4,449	4,627
British Columbia	3,630	3,829	3,997	4,036	4,450	4,659	4,950	5,194
All provinces	29,107	30,641	32,585	34,494	37,926	39,272	41,547	43,186

Source: Culture Statistics Program, Statistics Canada.

Table 1.2
Value of culture goods traded internationally, by province, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ thousands							
Imports								
Newfoundland and Labrador	523	788	641	399	598	445	259	172
Prince Edward Island	73	80	64	61	49	77	49	64
Nova Scotia	2,030	3,300	2,656	2,268	8,686	2,336	4,019	2,955
New Brunswick	10,620	11,308	12,485	14,858	18,038	17,691	18,405	15,518
Quebec	278,350	288,771	338,198	364,071	375,390	431,901	431,857	398,259
Ontario	2,244,151	2,493,979	2,618,806	2,627,202	2,656,911	2,745,815	2,889,079	2,954,564
Manitoba	225,238	244,342	265,647	269,557	265,959	282,101	308,439	283,457
Saskatchewan	6,364	9,114	8,227	8,396	9,390	9,015	11,749	35,555
Alberta	45,406	50,113	63,472	62,029	67,686	57,133	60,721	56,816
British Columbia	286,162	303,317	298,614	299,312	326,983	309,011	304,257	317,798
Territories	15	88	34	40	115	30	16	41
Canada	3,098,932	3,405,200	3,608,843	3,648,193	3,729,805	3,855,554	4,028,850	4,065,201
Exports								
Newfoundland and Labrador	488	234	429	1,507	1,047	932	453	369
Prince Edward Island	71	258	193	221	86	137	267	65
Nova Scotia	2,848	3,197	4,888	4,492	4,074	5,085	8,740	10,965
New Brunswick	7,266	6,861	4,124	4,366	6,068	6,088	7,662	8,024
Quebec	431,469	476,218	543,744	620,037	668,197	660,360	694,082	737,694
Ontario	645,613	689,573	856,513	986,395	1,091,469	1,239,012	1,319,616	1,291,412
Manitoba	28,888	39,293	59,171	62,496	70,041	80,122	98,033	97,737
Saskatchewan	2,458	3,006	3,541	4,206	4,487	5,216	7,027	7,704
Alberta	25,181	28,733	31,049	31,646	35,830	35,911	40,216	47,223
British Columbia	109,853	129,385	167,663	178,504	221,018	253,104	281,177	263,596
Territories	318	379	1,251	1,047	961	911	767	789
Canada	1,254,453	1,377,138	1,672,567	1,894,917	2,103,277	2,286,876	2,458,042	2,465,578

Note: Data used for culture goods trade tabulations are revised by the International Trade Division of Statistics Canada, on a monthly, quarterly, and annual basis. Due to these on-going quality improvements, data in this table may differ from data found in previous published versions. For data on culture trade in services, see Appendix I.

Source: Statistics Canada, Culture goods trade: Data tables, June 2006, catalogue no. 87-007-XIE.

Table 1.3
Spending on culture by level of government and type of expenditure, 2003^r

	Capital and operating expenditures		Grants, contributions and transfers		Total federal expenditures	Total provincial expenditures	Total municipal expenditures	Total gross expenditures
	Federal	Provincial	Federal	Provincial				
	\$ millions							
Newfoundland and Labrador	37	15	8	24	45	39	12	96
Prince Edward Island	13	7	5	5	18	12	3	33
Nova Scotia	92	20	25	37	117	57	35	209
New Brunswick	43	21	12	31	55	52	24	131
Quebec	923	265	222	462	1,145	727	420	2,292
Ontario	1,184	267	188	361	1,372	628	878	2,878
Manitoba	61	46	23	66	84	112	65	261
Saskatchewan	35	38	10	49	45	87	73	205
Alberta	117	60	32	139	149	199	186	534
British Columbia	136	41	67	202	203	243	310	756
All provinces	2,641	780	592	1,316	3,233	2,156	2,006	7,395

^r revised

Note: Data are revised as more robust data becomes available.

Total gross expenditures include inter-governmental transfers.

Sources: Statistics Canada: Survey of Federal Government Expenditures on Culture, Fiscal Year 2003/2004; Government expenditures on culture: data tables, October 2005, catalogue no. 87F0001XIE.

Table 1.4
Federal government spending on culture (per capita basis, \$)

	1996	1997	1998	1999	2000	2001	2002	2003
Newfoundland and Labrador	80	70	74	80	86	91	85	87
Prince Edward Island	100	111	124	121	120	163	153	131
Nova Scotia	92	95	100	96	96	107	119	125
New Brunswick	63	58	65	65	65	67	73	74
Quebec	116	114	128	125	135	150	154	153
Ontario	103	101	98	98	99	106	112	112
Manitoba	58	55	60	83	60	65	71	72
Saskatchewan	40	34	44	44	41	46	49	46
Alberta	52	45	45	40	49	50	51	47
British Columbia	38	33	38	36	39	39	44	49
All provinces	94	89	94	93	97	104	110	103

Notes: Per-capita basis refers to federal spending on culture activities divided by the population.

Data are revised as more robust data becomes available.

Source: Culture Statistics Program, Statistics Canada.

Table 1.5
Provincial government spending on culture (per-capita basis, \$)

	1996	1997	1998	1999	2000	2001	2002	2003
Newfoundland and Labrador	72	83	73	75	68	72	75	74
Prince Edward Island	75	78	74	80	84	81	73	86
Nova Scotia	59	63	72	73	65	64	66	61
New Brunswick	47	55	53	53	56	62	72	69
Quebec	80	78	84	83	93	92	95	97
Ontario	42	40	46	49	47	46	50	51
Manitoba	80	82	83	87	86	88	93	96
Saskatchewan	63	63	68	68	75	84	86	88
Alberta	48	44	45	48	65	57	56	63
British Columbia	71	67	72	74	76	75	62	58
All provinces	60	58	63	65	68	67	68	68

Notes: Per-capita basis refers to provincial spending on culture activities divided by the population.

Data are revised as more robust data becomes available.

Source: Culture Statistics Program, Statistics Canada.

Table 1.6
Municipal government spending on culture (per-capita basis, \$)

	1996	1997	1998	1999	2000	2001	2002	2003
Newfoundland and Labrador	23	20	20	21	21	22	21	23
Prince Edward Island	9	12	12	13	16	19	15	20
Nova Scotia	34	32	34	36	39	43	35	37
New Brunswick	25	26	25	26	28	29	30	32
Quebec	33	38	30	34	46	46	49	56
Ontario	62	60	55	59	60	69	70	72
Manitoba	43	52	46	46	47	36	46	56
Saskatchewan	51	57	61	56	57	58	64	73
Alberta	48	48	52	49	49	51	53	59
British Columbia	76	74	69	72	71	77	77	75
All provinces	52	52	48	51	54	59	60	63

Note: Per-capita basis refers to municipal spending on culture activities divided by the population.

Source: Culture Statistics Program, Statistics Canada.

Table 1.7
Culture employment by province

	1996	1997	1998	1999	2000	2001	2002	2003
Newfoundland and Labrador	5,200	4,700	5,400	5,800	5,700	5,900	5,800	6,300
Prince Edward Island	1,700	1,700	2,000	1,600	1,900	1,700	1,800	1,800
Nova Scotia	13,600	13,400	13,500	13,900	13,700	13,500	12,700	12,400
New Brunswick	10,200	9,900	9,500	10,600	10,500	9,600	10,000	9,200
Quebec	122,200	118,500	129,300	137,900	151,900	167,000	168,100	165,500
Ontario	216,700	219,500	221,100	235,100	270,100	258,600	248,200	252,300
Manitoba	17,200	18,500	18,800	19,300	19,000	21,200	20,300	18,400
Saskatchewan	13,900	14,000	14,300	15,000	14,500	14,300	13,800	14,200
Alberta	50,000	52,500	51,300	53,200	55,200	55,700	53,500	57,800
British Columbia	71,900	67,300	80,400	76,000	74,900	75,500	79,800	78,000

Notes: Employment estimates are rounded to the nearest hundred.

Data are revised as more robust data becomes available.

Source: Culture Statistics Program, Statistics Canada.

Table 1.8
Percentage of culture workers employed in the private sector

	1996	1997	1998	1999	2000	2001	2002	2003
Newfoundland and Labrador	74	75	73	81	78	76	76	81
Prince Edward Island	67	66	64	68	68	66	68	69
Nova Scotia	77	72	69	69	69	75	64	70
New Brunswick	71	72	74	82	69	74	72	73
Quebec	74	69	73	73	72	75	75	73
Ontario	71	69	68	70	71	69	71	71
Manitoba	69	70	71	73	70	73	74	72
Saskatchewan	71	69	71	75	69	71	68	72
Alberta	71	67	65	69	69	72	71	69
British Columbia	66	66	62	61	65	64	63	61

Source: Culture Statistics Program, Statistics Canada.

Table 1.9
Percentage of culture workers employed in the public sector

	1996	1997	1998	1999	2000	2001	2002	2003
Newfoundland and Labrador	15	11	10	5	10	11	7	7
Prince Edward Island	19	18	15	10	15	19	11	15
Nova Scotia	7	6	7	8	9	6	9	7
New Brunswick	11	8	10	3	12	7	10	7
Quebec	5	6	5	4	3	2	3	3
Ontario	5	5	4	3	4	4	3	2
Manitoba	9	8	6	4	5	5	6	5
Saskatchewan	6	6	8	4	7	5	7	6
Alberta	3	3	4	3	2	1	2	2
British Columbia	3	2	2	2	2	2	1	2

Note: Public sector employees refer to those who work for a local, provincial or federal government, for a government service or agency, a crown corporation, or a government funded public establishment such as a school (including universities) or a hospital.

Source: Culture Statistics Program, Statistics Canada.

Table 1.10
Percentage of culture workers self-employed

	1996	1997	1998	1999	2000	2001	2002	2003
Newfoundland and Labrador	11	13	16	14	12	12	17	12
Prince Edward Island	14	16	21	22	17	15	21	16
Nova Scotia	17	22	24	23	22	19	28	23
New Brunswick	18	20	15	15	19	19	18	20
Quebec	21	24	22	23	25	23	22	24
Ontario	24	26	27	27	26	27	26	26
Manitoba	22	22	22	23	24	22	20	23
Saskatchewan	23	25	22	21	24	24	25	22
Alberta	26	30	31	29	29	27	27	29
British Columbia	31	31	36	37	34	35	36	37

Source: Culture Statistics Program, Statistics Canada.

Table 1.11
Full-time employment rates in the culture sector and in the province

	1996	1997	1998	1999	2000	2001	2002	2003
	%							
Newfoundland and Labrador								
Culture sector	78	84	81	78	83	89	77	83
Province	83	83	84	84	85	86	84	85
Prince Edward Island								
Culture sector	79	79	83	79	87	80	73	78
Province	82	82	83	83	84	84	84	83
Nova Scotia								
Culture sector	78	75	80	81	81	81	77	78
Province	80	79	80	81	81	82	81	81
New Brunswick								
Culture sector	83	85	84	77	83	81	79	82
Province	83	83	84	84	85	85	84	84
Quebec								
Culture sector	84	82	76	86	84	83	84	85
Province	82	82	82	83	83	83	82	82
Ontario								
Culture sector	83	81	83	86	85	85	83	82
Province	81	81	81	82	82	82	82	82
Manitoba								
Culture sector	81	83	80	83	81	80	80	76
Province	79	80	81	80	81	81	80	80
Saskatchewan								
Culture sector	73	76	80	78	79	79	80	78
Province	79	79	80	80	80	81	80	80
Alberta								
Culture sector	81	82	84	84	84	83	85	83
Province	81	81	81	81	82	82	82	82
British Columbia								
Culture sector	81	77	80	80	81	77	78	80
Province	80	79	79	78	79	79	77	78

Source: Culture Statistics Program, Statistics Canada.

Endnotes

1. The total contribution of culture to GDP shown in this report for the years 1996 to 2003 are revised from data published in the report "*Economic Contribution of Culture in Canada*," in 2004. These differences are based upon revisions in data from the Labour Force Survey and the Input-Output Accounts, which are revised on a regular basis.
2. Culture goods include original and mass produced goods, which contain culture content as defined by *Canadian Framework for Culture Statistics*, (Statistics Canada, 2004).
3. Statistics Canada, *The Daily*, 17 October 2005, International trade in culture goods, 1996 to 2004. <http://www.statcan.ca/english/freepub/87-007-XIE/87-007-XIE2005001.htm>
4. Statistics Canada, *The Daily*, 31 October 2005, Survey of Government Spending on Culture. <http://dissemination.statcan.ca/Daily/English/051031/d051031b.htm>

2. Introduction

Culture industries are an integral part of a nation's identity, providing social and economic benefits to its citizens. Traditionally, culture is seen to play an essential role in the development of social cohesion through its support of national and local identity, promotion of civic pride and enhancement of quality of life. Over the past few decades, governments have acknowledged the economic benefits that flow from culture industries. The rise of the information society and the availability of new technologies, for instance, have supported the demand for culture content, reinforced demand for skilled culture workers and encouraged international trade in culture goods and services.

This study measures the direct economic impact of the culture sector on Canada's provincial economies. More specifically, the report provides estimates of output and employment arising from the industries that comprise the culture sector, as defined by the *Canadian Framework for Culture Statistics*¹, for the period 1996 to 2003.

It is important to measure the relative economic importance of the culture sector because, like other industry sectors, economic activity in the culture sector affects other parts of the economy. Individuals employed in the creation, production, manufacturing, preservation or distribution of culture goods and services not only increase employment through their spending on goods and services but also receive income, as do other workers in the economy, further adding to the wealth of the economy. Likewise, individuals or establishments that produce culture goods or services purchase various goods and services that also add value to the economy.

Statistically speaking, it is very difficult to measure culture. Currently there is no international standard on what is meant by culture, although it is a generally accepted that any measure of culture should take into account the "creative chain" of economic activity by which culture goods and services are produced. Account must be taken of all the elements of the creative chain from the creative activity itself that produced the culture product or service, to its eventual trading in the market place.

The creative chain includes a number of distinct steps or activities, each of which occurs in establishments that can be assigned an industrial classification. To be consumed, a culture good or service must first be created, produced, manufactured, and distributed.

There is not always a clean differentiation, however, in the way industries are classified to the various activities in the creative chain. Typically, an industry may be defined in more than one economic activity in the same culture category, or alternatively an industry may be assigned to the same activity over several culture categories (see Appendix A). Hence, the creative chain, as specified in the frameworks is essentially an artificial grouping of industries and commodities that integrates data from a diverse set of industry and commodity classifications.

This poses a number of challenges for statisticians in the application of framework definitions to available data on culture. There are numerous instances in the report, for example, where output and employment data are not available at the required industry level of detail, or data was allocated to an activity of one category at the expense of another when the industry data is defined to the same economic activity in different culture categories. The methodology section of the report identifies instances where these data gaps exist, and provides detailed explanations of the treatment of the data, and the implications for the results in terms of data quality.

Endnote

1. Statistics Canada (2004), *Canadian Framework for Culture Statistics*, Research Paper Series, Catalogue no. 81-595-MIE2004021, Culture Tourism and the Centre for Education Statistics, Statistics Canada, Ottawa, Ontario. The culture industries defined by the *Canadian Framework for Culture Statistics* include those industries that encompass “creative artistic activity and the goods and services produced by it, and the preservation of human heritage”. They include writing and published works (writing; book, periodical, newspaper, internet and other publishing); film and video; broadcasting (radio, television and Internet); sound recording and music publishing; performing arts; visual arts; architecture; photography; design; advertising; festivals; heritage; and other information services (libraries and archives). See Appendix B for details.

3. Newfoundland and Labrador

Highlights:

- Newfoundland and Labrador reported the lowest per-capita culture output in Canada.
- Culture output grew less than provincial GDP, whereas culture employment grew more than provincial employment overall.
- *Sound recording and music publishing*, *Performing arts* and *Visual arts* sub-sectors experienced declines in output.
- Per-capita federal spending on culture activities was higher than provincial and municipal per-capita culture spending in the province.
- *Written media*, *Broadcasting* and the *Film industry* were the top three culture sub-sectors in terms of output.
- The majority of culture workers were employed full-time.
- The province recorded the largest increase in the rate of full-time culture employment in Canada.
- *Written media* accounted for the largest share of employment in the culture sector.
- The self-employment rate amongst culture workers in the province rose slightly.

In Newfoundland and Labrador culture output grew less than total provincial output. Provincial output increased 73% from 1996 to 2003, compared to a 36% rise in culture output over the same period (Table 3.1). It should be recognized, however, that the strong growth in provincial output was mainly due to expanded oil production.¹ Compared to other provinces, the increase in culture output in Newfoundland and Labrador was the fifth lowest in Canada. In 2003, the culture sector produced approximately \$324 million, accounting for 2% of provincial GDP. In per-capita terms, the province's culture output of \$557 per person was the lowest in Canada.

Between 1996 and 2003, the culture sub-sectors in Newfoundland and Labrador experienced uneven growth. For instance, *Sound recording and music publishing*, *Performing arts* and *Visual arts* output fell over this period (Table 3.1) whereas *Written media* and *Film* experienced increases over the same period. Sub-sectors experiencing negative growth also experienced lower federal spending on culture in recent years. For example, federal spending in Newfoundland and Labrador declined 91% in *Sound recording and music publishing*, 38% in *Performing arts* and 21% in *Visual arts* in 2003.²

Estimated annual spending on culture goods and services in Newfoundland and Labrador totalled \$301 million in 2003, a 38% increase from 1996 (Table 3.1). Culture spending accounted for approximately 3% of total average household expenditures in the province in 2003. The growth in annual household spending

was evident in all culture sub-sectors except *Visual arts* and the *Film industry*, where spending levels fell 28% and 4%, respectively, between 1996 and 2003 (Table D2, Appendix D).

Per-capita federal spending higher than provincial and municipal spending

In 2003, federal per-capita culture spending in Newfoundland and Labrador was the fifth largest in Canada. While below the national average it was higher than per-capita culture spending by provincial and municipal governments (Table 1.4). Federal culture spending in the province amounted to \$87 per person in 2003, an increase of 8% from 1996. The main recipient of federal spending was the *Heritage* sub-sector (46%), followed by *Broadcasting* (38%). In total, the federal government spent approximately \$45 million on culture-related activities in the province in 2003.

Per-capita provincial spending on culture activities in Newfoundland and Labrador was the fourth largest in Canada and above the national average in 2003 (Table 1.5). Provincial culture spending amounted to \$74 per person in 2003, an increase of 4% from 1996. The main recipients of provincial spending were *Libraries*, which accounted for half of all expenditures in 2003 and *Heritage* with 26% of provincial spending. In 2003, the provincial government spent approximately \$39 million on culture related activities.

Municipal spending on culture in Newfoundland and Labrador ranked amongst the lowest in Canada at \$23 in 2003 in per-capita terms. Most municipal culture spending was allocated to *Libraries*. In 2003, municipalities in Newfoundland and Labrador spent approximately \$12 million on culture related activities. Total spending on culture by all three levels of government amounted to \$185 per person in 2003.

Written media, Broadcasting and the Film industry produced the majority of culture output

Most of the province's culture output was generated by *Written media* and *Broadcasting*. These sectors each accounted for \$71 million or 22% of the provinces culture output in 2003 (Table 3.1). From 1996 to 2003, output from these sub-sectors increased 34% and 16%, respectively.

In third place was the *Film industry*, with 14% of total culture output in 2003. This sub-sector experienced a surge in output of 105% over the period and generated \$45 million in output in 2003.

The culture sector in Newfoundland and Labrador experienced a significant increase in employment

In 2003, 6,300 workers were employed in the culture sector, accounting for 3% of total provincial employment (Table 3.2), or 1% of total culture employment in Canada. Most culture employees worked full-time. The rate of full-time employment increased to 83% in 2003 from 78% in 1996. Compared to the other provinces, Newfoundland and Labrador reported the second largest gain in culture employment (19%) between 1996 and 2003. After a sharp decline in 1997, the province's culture employment rebounded in 1998. In addition, culture employment grew faster than provincial employment (13%) over the period.

The percentage of culture workers employed in the province's private sector was the highest in Canada and increased from 74% to 81% between 1996 and 2003 (Table 3.2). In contrast, the share of public sector workers declined from 15% to 7% over the same period. The self-employment rate in Newfoundland and Labrador's culture sector was the lowest in Canada (12%) in 2003.

Written media experienced a strong decline in employment

Written media, which generated the largest number of culture jobs in Newfoundland and Labrador, experienced an 18% loss in employment from 1996 to 2003 (Table 3.2). This sub-sector, which employed 1,400 workers, or 23% of all culture workers in the province, was the sole culture sub-sector to report job losses. The sub-sector was also subject to less spending by both federal and provincial governments in recent years. Federal government spending in this sub-sector fell 32% in 2003, while provincial spending dropped 17%.

Establishments engaged in production activities generated most of the culture output and employment

Almost half of the province's culture output and 60% of its culture employment were generated from production activities in 2003 (Table 3.3). Establishments engaged in distribution were the second largest generators of culture output (16%), whereas those involved in support activities were the second largest employers of culture workers (14%) in 2003. All of Newfoundland and Labrador's culture activities showed gains in output, and they all, except distribution, recorded gains in employment between 1996 and 2003 (Table 3.3). Distribution activities suffered job losses of 11%. Manufacturers reported the largest gains in culture output (113%), whereas those occupied with creation activities added the most workers (200%) over the period.

Endnotes

1. *The Daily, Provincial and territorial economic accounts 2000 to 2003*, available at: <http://www.statcan.ca/Daily/English/041109/d041109a.htm>, noted that Newfoundland and Labrador was a strong performer in 2002 and 2003, with growth in GDP fuelled by oil output.
2. Survey of Government Expenditure on Culture, Statistics Canada. Catalogue No. 87F0001XIE. <http://www.statcan.ca/english/freepub/87F0001XIE/2006001/data.htm>. Government spending in *Visual arts* also includes spending on crafts.

Table 3.1
Output by culture category, Newfoundland and Labrador, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Written media	53	52	55	56	61	66	69	71
Broadcasting	61	65	67	63	72	66	71	71
Film industry	22	22	26	32	33	34	42	45
Advertising	13	14	14	16	18	18	20	21
Heritage	12	10	13	15	17	20	20	21
Libraries	15	15	15	15	15	15	15	15
Architecture	5	4	6	6	7	7	7	9
Performing arts	8	8	9	8	7	7	8	7
Visual arts	8	6	7	7	6	6	5	7
Design	6	7	7	7	7	8	8	8
Photography	3	2	2	3	3	3	3	3
Sound recording and music publishing	4	5	5	3	3	3	3	3
Festivals	0	0	0	0	0	0	0	0
Support services	28	31	37	39	46	41	45	41
Culture output, all categories	238	241	263	270	296	294	316	324
Provincial GDP	9,105	9,407	9,802	10,621	11,742	12,048	14,288	15,712
Per-capita federal spending on culture (\$)	80	70	74	80	86	91	85	87
Per-capita provincial spending on culture (\$)	72	83	73	75	68	72	75	74
Per-capita municipal spending on culture (\$)	23	20	20	21	21	22	21	23
Culture output as percentage of provincial GDP (%)	2.6	2.6	2.7	2.5	2.5	2.4	2.2	2.1

0 true zero or a value rounded to zero

Notes: Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

As data on tax credits are not included in the expenditure data, estimates will be somewhat under-estimated.

Estimates on government expenditures are revised as more robust data becomes available.

Data may not add up due to rounding.

Source: Culture Statistics Program, Statistics Canada.

Table 3.2
Employment by culture category, Newfoundland and Labrador, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Written media	1,700	F	1,400	1,500	F	F	1,700	1,400
Heritage	F	F	F	F	F	F	F	F
Broadcasting	x	F	F	F	F	F	F	F
Film industry	x	x	x	x	x	x	x	x
Libraries	x	x	x	x	x	x	x	x
Advertising	x	x	x	x	x	x	x	x
Performing arts	x	x	x	x	x	x	x	x
Design	x	x	x	x	x	x	x	x
Sound recording and music publishing	x	x	x	x	x	x	x	x
Visual arts	x	x	x	x	x	x	x	x
Architecture	x	x	x	x	x	x	x	x
Photography	x	x	x	x	x	x	x	x
Festivals	0	0	0	0	0	0	0	0
Support services	F	F	F	F	F	F	F	F
Culture employment, all categories	5,200	4,700	5,400	5,800	5,700	5,900	5,700	6,300
Provincial employment	187,700	188,300	192,400	200,800	198,100	204,200	207,400	212,400
Culture employment as a percentage of provincial employment	2.8	2.5	2.8	2.8	2.8	2.9	2.8	2.9
Full time employment in culture sector (%)	78	84	81	78	83	89	77	83
Percentage of culture workers in the public sector	15	11	10	5	10	11	7	7
Percentage of culture workers in the private sector	74	75	73	81	78	76	76	81
Percentage of culture workers self-employed	11	13	16	14	12	12	17	12

x suppressed to meet the confidentiality requirements of the *Statistics Act*

F too unreliable to be published

0 true zero or a value rounded to zero

Notes: Employment estimates rounded to the nearest hundred.

Data may not add up due to rounding.

Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

Source: Culture Statistics Program, Statistics Canada.

Table 3.3
Culture output and employment by economic activity, Newfoundland and Labrador, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Culture output (\$ million)								
Creation	29	32	35	34	37	38	39	42
Production	128	126	135	138	148	149	155	158
Support	28	31	37	39	46	41	45	41
Manufacturing	14	13	14	19	18	19	26	29
Distribution	39	40	43	41	46	47	51	53
Total activity	238	241	263	271	296	294	316	324
Culture employment								
Creation	200	500	400	500	400	300	200	600
Production	3,100	2,600	3,200	3,500	3,400	3,300	3,700	3,800
Support	900	700	800	700	900	1,100	700	900
Manufacturing	100	100	200	200	200	200	200	200
Distribution	900	800	800	900	800	1,000	900	800
Total activity	5,200	4,700	5,400	5,800	5,700	5,900	5,700	6,300

Notes: Data may not add up due to rounding.

Employment estimates rounded to the nearest hundred.

Source: Culture Statistics Program, Statistics Canada.

4. Prince Edward Island

Highlights:

- Per-capita culture output was higher in Prince Edward Island than in the other Atlantic provinces.
- Culture output grew faster than total provincial output.
- *Libraries* was the only culture sub-sector in the province to report a slump in output.
- Per-capita federal spending on culture activities in Prince Edward Island was the second largest in Canada.
- *Written media, Broadcasting* and the *Film industry* were the top three culture sub-sectors in terms of output.
- The majority of culture workers in the province were employed full-time even though the rate of full-time employment dropped.
- *Written media, Film* and *Design* were the top three culture employers.

Culture sector experiences strong output growth

Compared to other provinces, Prince Edward Island reported the second largest increase (55%) in culture output in Canada and the largest increase in Atlantic Canada between 1996 and 2003. Prince Edward Island was the only Atlantic province where growth in culture output exceeded the national average.

Growth in culture output exceeded the provincial GDP growth in all years except 1997 and 1999 (Table 4.1). In total, the province generated \$107 million in culture output, or, 3% of total provincial GDP.

Most culture sub-sectors experienced increases in output, except for *Libraries* that declined 33% between 1996 and 2003 (Table 4.1).

Total annual spending in Prince Edward Island amounted to \$81.4 million on culture goods and services in 2003, a 54% increase from 1996. Approximately 3% of average household expenditures in the province came from culture products in 2003. All culture sub-sectors experienced growth in household spending, with *Broadcasting, Libraries* and *Visual arts* reporting more than twice the rate of growth over the period (Table D3, Appendix D).

Federal per-capita culture spending in Prince Edward Island was the second highest in Canada

On a per-capita basis, federal culture spending in Prince Edward Island not only ranked second highest in Canada, it was also greater than the combined culture spending of its provincial and municipal governments. In 2003, per-capita federal culture spending in the province amounted to \$131, a rise of 31% from 1996

(Table 4.1). The main recipients of federal spending in 2003 were *Heritage* (46%) and *Broadcasting* (24%). In total, the federal government spent approximately \$18 million on culture-related activities in the province that same year.

Meanwhile, provincial per-capita culture spending in Prince Edward Island was the fourth largest in Canada and higher than the average per-capita provincial spending on culture activities in Canada. Per capita spending amounted to \$86 per person in 2003, a 15% increase from 1996. The major recipients of provincial spending were the *Heritage* and *Libraries* sub-sectors. Together, they accounted for 84% of total provincial spending on culture in the province. In total, the provincial government spent approximately \$12 million on culture activities in 2003.

Municipal culture spending in Prince Edward Island on a per-capita basis was the lowest in Canada. It amounted to \$20 in 2003, most of which was allocated to *Libraries*. In 2003, municipalities spent approximately \$3 million on culture-related activities in Prince Edward Island. Total spending by all three levels of government amounted to \$237 per person.

Strong growth in *Written media*

Written media more than doubled its output from \$18 million in 1996 to \$37 million in 2003. *Film*, the second largest producer of culture output in the province, reported a 113% surge in output to \$17 million in 2003. These two culture sub-sectors each reported a higher rate of growth than the provincial culture sector output between 1996 and 2003.

Prince Edward Island increased its culture employment

Prince Edward Island's culture sector employed 1,800 workers in 2003, most of whom (78%) were employed full-time (Table 4.2). The culture sector accounted for 3% of total provincial employment.

In 2003, a majority of culture workers (69%) in Prince Edward Island were employed in the private sector (Table 4.2). At the same time, the share of culture workers employed in the public sector in 2003 (15%) was the highest in Canada. The proportion of self-employed culture workers rose from 14% to 16% between 1996 and 2003.

Employment falls in establishments engaged in production activities

All of the province's culture sector activities recorded output gains over the period (Table 4.3). In terms of culture employment, only creation and support activities experienced employment gains. Establishments engaged in production activities, which accounted for around 40% of Prince Edward Island's culture employment, suffered a 30% drop in employment from 1996 to 2003.

Manufacturing firms accounted for the greatest increases in culture output (236%), while firms involved in creation activities experienced the largest gains (300% or from 100 to 400 employees) in culture employment (Table 4.3).

Table 4.1
Output by culture category, Prince Edward Island, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Written media	18	20	21	23	26	28	29	37
Film industry	8	8	10	10	12	14	15	17
Broadcasting	13	14	15	15	16	16	16	17
Advertising	3	3	3	3	4	3	4	4
Performing arts	4	3	4	4	3	4	4	7
Visual arts	3	2	3	3	3	2	2	3
Architecture	1	1	1	1	1	1	1	2
Design	1	1	1	1	1	1	2	2
Heritage	1	1	1	1	1	1	2	2
Libraries	3	3	3	2	3	2	2	2
Photography	1	0	0	1	1	1	1	1
Sound recording and music publishing	1	1	2	1	1	1	1	1
Festivals	0	0	0	0	0	0	0	0
Support services	11	8	8	10	11	10	11	11
Culture output, all categories	69	65	72	75	83	86	92	107
Provincial GDP	2,495	2,521	2,626	2,776	2,954	2,974	3,174	3,345
Per-capita federal spending on culture (\$)	100	111	124	121	120	163	153	131
Per-capita provincial spending on culture (\$)	75	78	74	80	84	81	73	86
Per-capita municipal spending on culture (\$)	9	12	12	13	16	19	15	20
Culture output as percentage of provincial GDP (%)	2.7	2.6	2.7	2.7	2.8	2.8	2.9	3.2

0 true zero or a value rounded to zero

Notes: Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

As data on tax credits are not included in the expenditure data, estimates will be somewhat under-estimated.

Estimates on government expenditures are revised as more robust data becomes available.

Data may not add up due to rounding.

Source: Culture Statistics Program, Statistics Canada.

Table 4.2
Employment by culture category, Prince Edward Island, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Written media	F	F	F	F	F	F	F	F
Film industry	F	F	F	F	F	F	F	F
Design	x	x	F	x	F	F	F	F
Broadcasting	F	F	F	F	x	F	x	x
Performing arts	x	x	x	x	F	F	F	x
Visual arts	x	x	x	x	x	x	x	x
Photography	x	x	x	x	x	x	x	x
Heritage	F	F	F	F	F	F	F	F
Libraries	x	x	x	x	x	x	x	x
Sound recording and music publishing	x	x	x	x	x	F	x	x
Architecture	x	x	x	x	x	x	x	x
Advertising	x	x	x	x	x	x	x	x
Festivals	0	0	0	0	0	0	0	0
Support services	F	400	F	300	400	F	400	400
Culture employment, all categories	1,700	1,700	2,000	1,600	1,900	1,700	1,800	1,800
Provincial employment	58,700	58,600	59,500	60,200	62,800	63,700	64,600	66,100
Culture employment as a percentage of provincial employment	2.9	2.7	3.2	2.7	2.9	2.7	2.8	2.7
Full time employment in culture sector (%)	79	79	83	79	87	80	73	78
Percentage of culture workers in the public sector	19	18	15	10	15	19	11	15
Percentage of culture workers in the private sector	67	66	64	68	68	66	68	69
Percentage of culture workers self-employed	14	16	21	22	17	15	21	16

x suppressed to meet the confidentiality requirements of the *Statistics Act*

F too unreliable to be published

0 true zero or a value rounded to zero

Notes: Employment estimates rounded to the nearest hundred.

Data may not add up due to rounding.

Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

Source: Culture Statistics Program, Statistics Canada.

Table 4.3
Culture output and employment by economic activity, Prince Edward Island, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Culture output (\$ million)								
Creation	11	9	12	13	13	14	14	15
Production	31	31	34	34	36	37	39	43
Support	11	8	8	10	11	10	11	11
Manufacturing	6	6	6	8	10	9	11	19
Distribution	11	11	13	11	13	15	16	18
Total activity	69	65	72	75	83	86	92	107
Culture employment								
Creation	100	200	700	200	300	300	200	400
Production	1,000	700	700	800	900	900	900	700
Support	200	400	200	300	400	200	400	400
Manufacturing	100	100	100	100	100	100	100	100
Distribution	300	300	300	200	200	200	200	200
Total activity	1,700	1,700	2,000	1,600	1,900	1,700	1,800	1,800

Notes: Data may not add up due to rounding.

Employment estimates rounded to the nearest hundred.

Source: Culture Statistics Program, Statistics Canada.

5. Nova Scotia

Highlights:

- Nova Scotia was the largest producer of culture output and employed the most culture workers in Atlantic Canada.
- Culture sector output and employment grew less than provincial level GDP and employment.
- *Sound recording and music publishing, Performing arts, Libraries, Visual arts, Design and Photography* experienced declines in output.
- Per-capita federal spending on culture activities was higher than provincial and municipal per-capita spending.
- *Written media, Broadcasting* and the *Film industry* were the top three culture sub-sectors in terms of output.
- The majority of culture workers in the province were employed full-time.
- *Written media, Heritage and Broadcasting* were the top three culture employers.
- There was a substantial increase in the rate of self-employment among culture workers in the province.
- Establishments engaged in production activities accounted for the highest levels of output and employment.

Low growth in culture output

Nova Scotia was the seventh largest producer of culture output in Canada and the largest amongst the Atlantic provinces. In 2003, Nova Scotia produced approximately \$730 million (Table 5.1) or 2% of Canada's culture output. The culture sector accounted for 3% of total provincial GDP in 2003. However, culture output rose only 27% from 1996 to 2003, the second lowest rate of growth of all provinces, ahead of Saskatchewan. In per-capita terms, Nova Scotia experienced the smallest percentage increase (16%) in culture output in Canada from 1996 to 2003. Meanwhile, the province's per-capita culture output of \$702 was slightly ahead of the other Atlantic provinces.

Almost half of the province's culture sub-sectors experienced declines in output from 1996 to 2003 (Table 5.1). The largest drop occurred in *Performing arts* (-25%), followed by *Photography* (-14%), *Visual arts* (-14%), *Design* (-11%), *Libraries* (-11%) and *Sound recording and music publishing* (-9%).

Estimated annual spending on culture goods and services totalled \$623.5 million in 2003, a 52% increase from 1996. The growth in household spending was evident in all culture sub-sectors (Appendix D, Table D4).

Federal per-capita culture spending in Nova Scotia outpaced provincial and municipal spending

On a per-capita basis, federal culture spending in Nova Scotia was the third largest in Canada and above the national average. In 2003, per-capita federal culture spending in the province amounted to \$125 per person, an increase of 36% from 1996 (Table 5.1). In 2003, the activities that received the most federal spending were *Heritage* (43%) and *Broadcasting* (36%). In total, the federal government spent approximately \$117 million in culture related activities in 2003.

On a per-capita basis, culture spending by the province of Nova Scotia was among the lowest in Canada. At \$61, Nova Scotia was the only Atlantic Province to report per-capita provincial culture spending below the national average in 2003. This was an increase of only 3% from 1996. The biggest recipient of provincial expenditures was *Libraries*, which accounted for 42% of all provincial culture spending in 2003, followed by *Heritage* at 36%. In total, the provincial government spent approximately \$57 million on culture in 2003.

Per-capita municipal culture spending in Nova Scotia was also among the lowest in Canada and below the average per-capita municipal spending on culture in Canada. It amounted to \$37 in 2003, most of which was allocated to *Libraries*. In 2003, municipalities spent approximately \$35 million on culture-related activities in Nova Scotia.

Written media, Broadcasting and the Film industry were the top producers of culture output in the province

The written media sub-sector accounted for most of the culture output in Nova Scotia, posting almost \$193 million worth of output, or 26% of the province's culture output in 2003 (Table 5.1). Output from this sub-sector rose 18% from 1996 to 2003. It is interesting to note that output increased over the period even though both federal and provincial spending levels fell for this sub-sector (-7% and -20%, respectively in 2003).

Broadcasting and the *Film industry* were the second and third largest producers of culture output, accounting for 19% and 15% of total culture output in Nova Scotia, respectively. Output from *Broadcasting* rose 31% over this period and reached \$139 million in 2003.

Annual household spending on this sub-sector more than doubled over the period (Table D4, Appendix D).

Film experienced a strong increase in output, doubling over the period, most of which occurred in establishments engaged in creation and distribution activities. In recent years, Nova Scotia has emerged as an important location for both the domestic and foreign film industries. Output from film production in Nova Scotia amounted to \$106 million in 2003 compared to only \$53 million in 1996.¹ The province has developed a small but stable home-grown film production industry, which, in addition to attractive tax subsidies, has led to an increase in the number of foreign location productions in Nova Scotia.²

Culture employment declines

In 2003, the culture sector in Nova Scotia employed 12,400 workers, mostly on a full-time basis (78%) (Table 5.2). Employment from the culture sector accounted for approximately 3% of total employment in the province in 2003. Although culture output in Nova Scotia increased from 1996 to 2003, culture employment declined 10% over this period. This job loss was second only to that experienced in New Brunswick. Culture employment fell in all years except 1998 and 1999 and never exceeded the growth in provincial employment in any year. The losses in culture employment were spread across many sub-sectors (Table 5.2) such as *Written media and Broadcasting*. The full-time employment rate for culture workers was lower than that for all provincial workers for each year from 1996 to 2003.

A majority of culture workers in Nova Scotia were employed in the private sector, however, the proportion fell from 77% in 1996 to 70% in 2003 (Table 5.2). On the other hand, the share of self-employed increased from 17% to 23% over the same period.

Written media experienced a large drop in employment

Written media employed 2,300 workers in 2003, a fall of 36% from 1996 (Table 5.2). Most of the job losses were in establishments engaged in creation and production activities. Because of this decline, *Written media's* share of provincial culture employment fell from 26% in 1996 to 19% in 2003. *Heritage* and *Broadcasting* each accounted for 15% of culture employment in the province in 2003. Employment in *Heritage* grew 19% from 1996 to 2003, mainly due to a large increase in jobs in nature reserves that were mainly part-time and seasonal.

Employment dropped in establishments engaged in production activities

All of Nova Scotia's culture sector activities reported gains in output, with manufacturing experiencing a healthy growth of 90% from 1996 to 2003 (Table 5.3). Establishments engaged in distribution activities were the second largest producers of culture output over the period. Manufacturers were responsible for the most job creation (29%), while firms involved in creation activities lost the most jobs (-25%) from 1996 to 2003. Although production output only rose 7%, this activity still constituted almost half of all output.

Establishments engaged in production activities were the largest employers of culture workers in Nova Scotia with 6,700 workers in 2003. However, employment in these establishments fell 12% from 1996 to 2003 (Table 5.3).

Endnotes

1. Nova Scotia Film Development Corporation, <http://www.film.ns.ca>
2. Department of Canadian Heritage (2005), Study of the decline of foreign location production in Canada, Ottawa.

Table 5.1
Output by culture category, Nova Scotia, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Written media	163	163	164	160	181	184	191	193
Broadcasting	106	114	119	115	120	127	137	139
Film industry	53	57	59	80	88	94	99	106
Advertising	36	34	31	34	35	36	38	41
Heritage	27	30	29	29	32	35	36	38
Libraries	37	34	34	32	34	33	33	33
Performing arts	26	23	24	24	19	20	22	20
Visual arts	22	19	18	20	18	16	15	19
Architecture	13	10	13	12	14	13	14	18
Design	18	17	16	15	14	15	16	16
Photography	7	5	4	6	6	5	6	6
Sound recording and music publishing	11	11	15	9	9	10	10	10
Festivals	1	1	1	1	1	1	1	1
Support services	55	53	54	62	77	77	85	90
Culture output, all categories	575	570	580	597	648	665	704	730
Provincial GDP	17,685	18,380	18,872	20,324	21,945	22,922	23,919	25,093
Per-capita federal spending on culture (\$)	92	95	100	96	96	107	119	125
Per-capita provincial spending on culture (\$)	59	63	72	73	65	64	66	61
Per-capita municipal spending on culture (\$)	34	32	34	36	39	43	35	37
Culture output as percentage of provincial GDP (%)	3.3	3.1	3.1	2.9	3.0	2.9	2.9	2.9

Notes: Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage. As data on tax credits are not included in the expenditure data, estimates will be somewhat under-estimated. Estimates on government expenditures are revised as more robust data becomes available. Data may not add up due to rounding.

Source: Culture Statistics Program, Statistics Canada.

Table 5.2
Employment by culture category, Nova Scotia, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Written media	3,600	4,000	3,700	3,300	3,600	3,800	3,300	2,300
Heritage	1,600	1,600	1,600	1,800	1,800	1,800	1,700	1,900
Broadcasting	2,000	F	1,800	1,800	1,900	1,900	F	1,900
Film industry	F	F	F	F	F	F	F	F
Libraries	F	F	F	F	F	F	F	F
Performing arts	F	x	x	x	x	x	x	x
Advertising	x	x	x	F	x	x	x	x
Architecture	x	x	x	x	x	x	x	x
Visual arts	x	x	x	x	x	x	x	x
Design	x	x	x	x	x	x	x	x
Sound recording and music publishing	x	x	x	x	x	x	x	x
Photography	x	x	x	x	x	x	x	x
Festivals	0	0	0	0	100	100	100	100
Support services	F	1,700	F	1,900	1,600	F	F	F
Culture employment, all categories	13,600	13,400	13,500	13,900	13,700	13,500	12,700	12,400
Provincial employment	375,700	381,000	393,800	403,200	411,100	415,400	422,400	431,300
Culture employment as a percentage of provincial employment	3.6	3.5	3.4	3.4	3.3	3.2	3.0	2.9
Full time employment in culture sector (%)	78	75	80	81	81	81	77	78
Percentage of culture workers in the public sector	7	6	7	8	9	6	9	7
Percentage of culture workers in the private sector	77	72	69	69	69	75	64	70
Percentage of culture workers self-employed	17	22	24	23	22	19	28	23

x suppressed to meet the confidentiality requirements of the *Statistics Act*

F too unreliable to be published

0 true zero or a value rounded to zero

Notes: Employment estimates rounded to the nearest hundred.

Data may not add up due to rounding.

Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

Source: Culture Statistics Program, Statistics Canada.

Table 5.3
Culture output and employment by economic activity, Nova Scotia, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Culture output (\$ million)								
Creation	90	86	86	87	90	92	94	99
Production	303	298	299	289	304	304	317	323
Support	55	53	54	62	77	77	85	90
Manufacturing	57	59	63	74	81	84	102	108
Distribution	70	75	78	85	96	108	106	111
Total activity	575	570	580	597	648	665	704	730
Culture employment								
Creation	2,000	1,500	1,700	1,500	1,900	1,800	1,800	1,500
Production	7,600	7,500	7,500	7,600	7,100	7,300	6,800	6,700
Support	1,300	1,700	1,500	1,900	1,600	1,200	1,200	1,300
Manufacturing	700	800	900	900	900	1,000	900	900
Distribution	2,000	1,900	1,900	2,000	2,200	2,200	2,000	2,000
Total activity	13,600	13,400	13,500	13,900	13,700	13,500	12,700	12,400

Notes: Data may not add up due to rounding.

Employment estimates rounded to the nearest hundred.

Source: Culture Statistics Program, Statistics Canada.

6. New Brunswick

Highlights:

- New Brunswick ranked eighth among the provinces as a producer of culture output and culture employment in Canada.
- The province had the ninth largest per-capita culture output in Canada.
- Culture output and employment grew less than did total output and employment in the province.
- Declines in output were experienced in *Sound recording and music publishing*, *Performing arts*, *Libraries* and *Visual arts*.
- On a per-capita basis, federal spending on culture activities was higher than provincial and municipal spending in New Brunswick.
- *Written media*, *Broadcasting* and the *Film industry* were the top three culture sub-sectors in terms of output.
- *Written media* and *Heritage* were the top culture sub-sectors in terms of employment.
- The sub-sectors *Broadcasting* and *Written media* experienced declines in employment.
- Establishments engaged in production activities were the largest producers of culture output and employment.

Growth in culture below provincial growth rate

New Brunswick was the eighth largest producer of culture output in Canada and second amongst the Atlantic provinces. In 2003, the province accounted for 1% of both culture output and culture employment in Canada.

Culture output grew less than provincial output. From 1996 to 2003, culture output rose 33%, compared to a 38% increase in provincial GDP (Table 6.1). The growth in culture output trailed the growth in provincial GDP in all periods except 1998, 2001 and 2002. Compared to other provinces, New Brunswick posted the third lowest growth in culture output in Canada from 1996 to 2003.

Most culture sub-sectors recorded increases in output. However, there were some sub-sectors where output declined from 1996 to 2003; these included *Sound recording and music publishing* (-38%), *Performing arts* (-24%), *Libraries* (-17%) and *Visual arts* (-5%).

Annual spending on culture goods and services in New Brunswick totalled \$4.3 billion in 2003, an increase of 38% from 1996. Culture spending accounted for approximately 3% of total household expenditure in the province in 2003. The growth in annual average spending was evident in all culture sub-sectors except *Visual arts*, where household spending fell 69% between 1996 and 2003 (Table D5, Appendix D).

Federal spending in New Brunswick was higher than provincial and municipal spending on culture in per-capita terms

Per-capita federal culture spending in New Brunswick ranked sixth among the provinces in 2003 and below the Canadian average. However, federal per-capita spending was still higher than the per-capita culture spending by provincial and municipal governments. In 2003, per-capita federal culture spending in the province amounted to \$74, a rise of 18% from 1996 (Table 6.1). In 2003, *Broadcasting* accounted for half of federal culture spending, followed by *Heritage* (26%). In total, the federal government spent approximately \$55 million in culture related activities in 2003.

Provincial per-capita culture spending in New Brunswick was the sixth highest in the country and exceeded average provincial spending on culture activities in Canada. It amounted to \$69 in 2003, a gain of 48% from 1996. The main recipients of provincial spending were *Libraries* (45%) and *Heritage* (34%). In total, the provincial government spent approximately \$52 million on culture activities in 2003.

Per-capita municipal culture spending in New Brunswick was the third lowest in Canada and below the average municipal culture spending in Canada. It amounted to \$32 in 2003, most of which went to *Libraries*. Municipalities spent approximately \$24 million on culture related activities in the province in 2003.

Large increase in output from *Written media*

Written media accounted for most of the culture output in New Brunswick. The sub-sector generated 28% of provincial culture output or \$154 million in 2003 (Table 6.1). Output increased 47% between 1996 and 2003. The sub-sector received substantial increases in provincial spending in recent years. In 2003, provincial spending almost tripled from the previous year's spending level.

Film output increased 111%, mainly due to growth in establishments engaged in production and creation activities. This sub-sector received strong support from federal spending in recent years. In 2003, federal spending on *Film* increased 91%.

New Brunswick recorded a large drop in culture employment relative to other provinces

In 2003, the province's culture sector employed 9,200 workers (Table 6.2). Most (82%) were employed full-time. Culture sector employment accounted for almost 3% of total employment in the province in 2003. Compared to other provinces, New Brunswick reported a large drop (-10%) in culture employment from 1996 to 2003. As a result, the provincial share of culture employment in Canada declined from 2% to 1% over this period.

Culture employment grew faster than total provincial employment in 1999 and 2002 only, and actually fell in all other years. *Broadcasting* and *Written media* experienced employment losses of 25% and 23%, respectively. Many sub-sectors suffered declines in federal and provincial spending during this period. In 2003, for example, federal and provincial spending in the *Broadcasting* sub-sector dropped 9% and 52%, respectively.

Employment levels declined in *Written media*

Written media employed 2,000 workers in 2003, a fall of 23% from 1996 (Table 6.2). Most of the job losses were in establishments engaged in production and distribution activities. *Heritage* was the second largest culture employer in New Brunswick, with 1,400 workers in 2003, most of whom were employed part-time (81%).

A majority of culture workers in New Brunswick were employed in the private sector (73%) in 2003 (Table 6.2). Meanwhile, the share of public sector workers fell from 11% to 7% between 1996 and 2003. The proportion of self-employed culture workers increased from 18% to 20% over the same period.

Establishments engaged in production, creation and distribution activities were important to the province's culture sector

All of New Brunswick's culture sector activities reported gains in output but most suffered losses in employment from 1996 to 2003 (Table 6.3). Firms engaged in support, creation and distribution activities experienced declines in employment over this period of 42%, 31% and 13%, respectively. Manufacturers reported the largest increases in both output (108%) and employment (20%) over this period.

Establishments engaged in production activities generated almost half of culture output and more than 60% of culture employment in 2003 (Table 6.3). Establishments engaged in distribution were the second largest contributors to both culture output and employment.

Table 6.1
Output by culture category, New Brunswick, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Written media	105	115	120	124	136	146	153	154
Broadcasting	84	91	95	89	96	97	114	117
Film industry	38	41	48	59	62	71	73	80
Advertising	21	23	22	29	28	26	28	29
Heritage	18	17	19	22	22	23	20	21
Visual arts	19	18	19	19	16	15	14	18
Performing arts	19	17	19	19	15	16	17	15
Libraries	18	16	15	13	15	15	15	15
Architecture	8	7	9	10	11	10	11	13
Design	10	11	11	12	11	11	12	11
Photography	4	3	3	6	4	4	5	5
Sound recording and music publishing	8	8	10	5	5	5	5	5
Festivals	1	1	1	1	1	1	1	1
Support services	60	51	53	52	65	62	68	64
Culture output, all categories	413	418	443	460	488	503	536	549
Provincial GDP	14,965	15,270	15,732	17,009	18,217	18,698	19,500	20,645
Per-capita federal spending on culture (\$)	63	58	65	65	65	67	73	74
Per-capita provincial spending on culture (\$)	47	55	53	53	56	62	72	69
Per-capita municipal spending on culture (\$)	25	26	25	26	28	29	30	32
Culture output as percentage of provincial GDP (%)	2.8	2.7	2.8	2.7	2.7	2.7	2.7	2.7

Notes: Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage. As data on tax credits are not included in the expenditure data, estimates will be somewhat under-estimated. Estimates on government expenditures are revised as more robust data becomes available. Data may not add up due to rounding.

Source: Culture Statistics Program, Statistics Canada.

Table 6.2
Employment by culture category, New Brunswick, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Written media	2,600	2,700	2,300	2,500	2,500	2,000	2,000	2,000
Heritage	1,400	1,300	1,400	1,500	1,400	1,400	1,400	1,400
Advertising	F	F	F	F	F	F	x	F
Broadcasting	1,600	1,600	1,400	1,500	1,800	1,700	2,000	1,200
Film industry	F	F	F	F	F	F	F	F
Libraries	x	x	x	x	x	x	x	x
Performing arts	x	x	x	x	x	x	x	x
Sound recording and music publishing	300	200	x	x	x	x	x	x
Design	x	F	x	x	x	F	F	x
Visual arts	x	x	x	x	x	x	x	x
Architecture	x	x	x	x	x	x	x	x
Photography	x	x	x	x	x	x	x	x
Festivals	0	0	0	0	100	100	100	100
Support services	1,200	F	1,200	1,500	1,200	F	1,200	F
Culture employment, all categories	10,200	9,900	9,500	10,600	10,500	9,600	10,000	9,200
Provincial employment	305,400	309,400	315,700	325,700	331,400	330,600	342,900	343,800
Culture employment as a percentage of provincial employment	3.3	3.2	3.0	3.3	3.1	2.9	2.9	2.6
Full time employment in culture sector (%)	83	85	84	77	83	81	79	82
Percentage of culture workers in the public sector	11	8	10	3	12	7	10	7
Percentage of culture workers in the private sector	71	72	74	82	69	74	72	73
Percentage of culture workers self-employed	18	20	15	15	19	19	18	20

x suppressed to meet the confidentiality requirements of the *Statistics Act*

F too unreliable to be published

0 true zero or a value rounded to zero

Notes: Employment estimates rounded to the nearest hundred.

Data may not add up due to rounding.

Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

Source: Culture Statistics Program, Statistics Canada.

Table 6.3
Culture output and employment by economic activity, New Brunswick, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Culture output (\$ million)								
Creation	61	61	66	70	67	67	68	71
Production	193	199	209	214	221	224	231	234
Support	60	51	53	52	65	62	68	64
Manufacturing	43	49	51	59	64	68	83	89
Distribution	56	59	65	64	71	82	86	90
Total activity	413	418	443	460	488	503	536	549
Culture employment								
Creation	1,300	1,200	700	800	1,100	1,100	1,400	900
Production	5,600	5,500	5,600	6,000	5,800	5,300	5,400	5,600
Support	1,200	1,000	1,200	1,500	1,200	900	1,200	700
Manufacturing	500	600	600	700	700	700	600	600
Distribution	1,600	1,600	1,400	1,600	1,700	1,600	1,400	1,400
Total activity	10,200	9,900	9,500	10,600	10,500	9,600	10,000	9,200

Notes: Data may not add up due to rounding.

Employment estimates rounded to the nearest hundred.

Source: Culture Statistics Program, Statistics Canada.

7. Quebec

Highlights:

- Quebec was the second largest producer of culture output and employment in Canada.
- The province reported the third largest per-capita culture output in the country.
- Culture output in Quebec increased every year from 1996 to 2003.
- Culture output and employment grew more than provincial GDP and employment.
- *Performing arts* and *Libraries* suffered declines in output.
- Quebec received the highest per-capita federal and provincial spending on culture in Canada.
- *Written media, Broadcasting* and *Film* were the top three sub-sectors for culture output.
- The majority of culture workers were employed full-time.
- Employment fell in the *Libraries* sub-sector.
- Establishments engaged in production activities were the largest producers of culture output and employment.

Strong growth in culture output

In 2003, Quebec produced approximately \$9.8 billion in culture output, making the province the second largest contributor to the culture sector in Canada (Table 7.1). Approximately 4% of total GDP in the province came from the culture sector in 2003. Quebec was the only province other than Ontario to have a higher share of Canadian culture output (23%) than its share of national GDP (21%) in 2003.

Quebec's share of culture output in Canada (Table 7.1) increased from 22% to 23% between 1996 and 2003. Compared to other provinces, Quebec reported the third largest gain in culture output (53%) in Canada, which was slightly higher than the rise in provincial GDP (43%) over the same period. Quebec reported an increase in culture output in every year over this period.

Libraries and *Performing arts* were the only culture sub-sectors in Quebec to report a decrease in output from 1996 to 2003, with declines of 10% and 4%, respectively (Table 7.1). Interestingly, both federal and provincial spending in *Performing arts* dropped in 2003 (28% and 3%, respectively). The output of the *Libraries* sub-sector fell in all years other than 2000. Meanwhile, federal spending on *Libraries* declined 1% in 2003.

Estimated annual spending on culture goods and services totalled \$4.3 billion in Quebec in 2003, an increase of 36% from 1996. In 2003, household expenditures on culture products accounted for approximately 3% of total average household expenditures in the province. The growth in annual spending was evident in all

culture sub-sectors except *Visual arts*, where spending fell 17% over the period (Table D6, Appendix D).

Federal and provincial per capita spending on culture was highest in Quebec

Federal per-capita spending on culture in Quebec was the largest in Canada in 2003 and was higher than that of the provincial and municipal governments combined. In 2003, federal per-capita spending on culture in the province amounted to \$153 per person, an increase of 34% (third largest increase in Canada) from 1996 (Table 7.1). The largest recipient of federal spending was *Broadcasting* (47%), followed by *Heritage* (23%). In total, the federal government spent approximately \$1.2 billion on culture related activities in Quebec in 2003.

Even though Quebec was the largest recipient of federal and provincial culture spending in Canada on a per-capita basis, Quebec's municipal culture spending lagged behind other provinces. In 2003, per-capita municipal spending in Quebec ranked fifth in Canada and below the national average. It amounted to \$56 per person, most of which went to *Libraries*. Municipalities spent approximately \$420 million on culture related activities in Quebec in 2003 (Table 1.3).

Written media dominated culture output

Most of the province's culture output in 2003 was in *written media*, which generated output of approximately \$3.9 billion. However, the growth in this sub-sector (42%) trailed the overall growth in the culture sector (53%) over this period.

Broadcasting and *Film* were a distant second and third in terms of culture output, with 15% and 11% of the provincial total in 2003 (Table 7.1). Output from *Broadcasting* rose 135% from 1996 to 2003 and amounted to approximately \$1.5 billion in 2003, mainly due to the strong performance of public broadcasting. Interestingly, output from private radio broadcasting (64%) grew more than output from private television broadcasting (40%) from 1996 to 2003. This was mainly due to sharp growth in the French-language market for radio broadcasting, which increased its airtime sales by 12% in 2003 alone and to the continuing growth and rationalization of FM radio.¹ Output from *Film* advanced 95% from 1996 to 2003, mostly due to large gains in output from establishments engaged in creation activities.

Quebec was the second largest centre of culture trade in Canada

Quebec was the second largest gateway for international trade in culture goods in Canada, accounting for 10% of imports and 30% of exports in 2003. Significantly, Quebec was the only province in Canada to export more culture goods than it imported in 2004, i.e., it was a net exporter. Quebec exported \$738 million and imported \$398 million in culture goods in 2003. Exports also grew more than imports over the period, from 1996 to 2003 (71% versus 43%).

Quebec reported the fastest growth in employment in Canada

Compared to other provinces, Quebec experienced the largest percentage gain (35%) in culture employment in Canada from 1996 to 2003, which also exceeded the increase in provincial employment (16%) over this period (Table 7.2). Culture employment grew more than provincial employment in most years of the period;

however, employment in the culture sector fell in 1997 and 2003. Approximately 165,500 workers were employed, most of them full-time, in Quebec's culture sector in 2003. The province accounted for 23% of all culture jobs in Canada in 1996 and increased its share to 27% by 2003. Over 4% of total provincial employment was generated by the culture sector in 2003.

A majority of culture workers in Quebec were employed in the private sector (73%) in 2003 (Table 7.2). The share of public sector workers fell from 5% to 3% between 1996 and 2003, while the proportion of self-employed culture workers increased from 21% to 24% over the same period.

Strong growth in culture employment in *Film*

The *Film* sub-sector experienced a huge increase in employment in Quebec (Table 7.2). In 2003, it became the largest culture employer (displacing *Written media*), with 38,000 workers. Most of the job growth in this sub-sector was in part-time jobs. The rise in employment in *Film* (112%) was more than three times the increase in provincial culture employment (35%) from 1996 to 2003. Most of the gains came from establishments engaged in production and creation activities.

There are a number of reasons for the strong growth in employment in Quebec's film sector. In recent years, Quebec has emerged as an important centre for film production in Canada. The industry also received significant support from federal and provincial governments in recent years. For instance, in 2003, 15% of total federal culture spending in Quebec was allocated to *Film*. Federal and provincial spending in this sub-sector also increased in recent years, 7% and 10%, respectively, in 2003. The province is also an important centre in Canada for film post-production,² earning 27% of total operating revenue in 2001.³

Even though *Film* enjoyed employment gains, *Architecture* was the fastest growing culture employer in Quebec (Table 7.2). Recent data show substantial growth in Quebec architecture firms, especially those specializing in landscape architecture.⁴ The only culture sub-sector in Quebec to experience a fall in both output and employment was *Libraries*, despite increases in municipal funding. Interestingly, annual spending on the Library sub-sector in Quebec increased the most over this period (117%) compared to other culture sub-sectors, but this was still just \$28 million in 2003, much lower than for other sectors (Table D6, Appendix D).

Establishments engaged in production activities were important to the culture sector

Establishments engaged in production activities were the largest producers of culture output and culture employment in Quebec (Table 7.3). They generated approximately half of the culture sector's employment and output in the province in 2003. Manufacturers were the second largest contributors to culture output, while firms occupied with creation activities were the second largest contributors to culture employment.

All of Quebec's culture sector activities showed gains in output and employment over the period 1996 to 2003 (Table 7.3). Establishments involved in distribution activities reported the greatest increases in output (78%), whereas those engaged in creation activities experienced the largest gains in employment (61%).

Endnotes

1. Statistics Canada (2004), Broadcasting and Telecommunications: Service Bulletin, Catalogue No. 56-001-XIE. <http://www.statcan.ca/cgi-bin/downpub/listpub.cgi?catno=56-001-XIE2004003>
2. Statistics Canada, The Daily, Film, Video and Audio-visual Post Production Survey 2001, <http://www.statcan.ca/Daily/English/030225/d030225e.htm>
3. Ibid.
4. Statistics Canada, CANSIM, Table 360-0002, Summary statistics for specialized design services (all establishments), by North American Industry Classification System (NAICS), annual.

Table 7.1
Output by culture category, Quebec, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Written media	2,742	3,010	3,222	3,242	3,501	3,622	3,863	3,890
Broadcasting	640	952	976	1,057	1,176	1,227	1,235	1,506
Film industry	535	560	705	792	785	894	969	1,043
Advertising	336	349	356	437	468	477	487	526
Performing arts	298	274	334	338	277	279	303	287
Visual arts	273	247	277	303	281	235	233	302
Heritage	165	165	171	176	193	211	247	262
Sound recording and music publishing	225	249	268	186	198	197	212	241
Architecture	124	105	143	149	189	175	185	227
Libraries	246	232	230	216	227	225	224	222
Design	167	171	176	185	189	199	209	206
Photography	64	45	46	71	71	67	75	78
Festivals	17	17	23	25	27	33	38	43
Support services	569	536	596	691	876	808	881	966
Culture output, all categories	6,402	6,913	7,523	7,869	8,457	8,649	9,161	9,798
Provincial GDP	167,842	175,118	179,111	194,063	211,729	217,039	227,133	239,884
Per-capita federal spending on culture (\$)	116	114	128	125	135	150	154	153
Per-capita provincial spending on culture (\$)	80	78	84	83	93	92	95	97
Per-capita municipal spending on culture (\$)	33	38	30	34	46	46	49	56
Culture output as percentage of provincial GDP (%)	3.8	3.9	4.2	4.1	4.0	4.0	4.0	4.1

0 true zero or a value rounded to zero

Notes: Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.
 As data on tax credits are not included in the expenditure data, estimates will be somewhat under-estimated.
 Estimates on government expenditures are revised as more robust data becomes available.
 Data may not add up due to rounding.

Source: Culture Statistics Program, Statistics Canada.

Table 7.2
Employment by culture category, Quebec, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Film industry	17,900	19,000	25,000	27,900	30,300	33,000	35,200	38,000
Written media	35,200	35,300	32,200	35,500	41,100	43,400	39,900	37,100
Broadcasting	12,000	11,900	13,200	11,900	12,000	16,500	13,500	15,100
Design	10,500	9,700	9,200	7,300	9,100	9,500	10,800	11,200
Advertising	8,300	5,100	9,000	12,400	11,000	11,200	15,200	10,700
Heritage	6,200	5,600	6,400	6,600	7,100	7,300	8,100	7,700
Performing arts	F	F	4,800	F	4,600	7,200	9,200	6,500
Architecture	F	F	F	F	4,800	F	4,100	6,200
Sound recording and music publishing	F	4,200	5,300	F	F	6,000	F	5,600
Libraries	4,700	4,600	4,600	4,400	4,500	4,500	4,500	4,500
Visual arts	F	F	x	F	4,800	x	x	x
Festivals	1,200	1,200	1,500	1,600	1,800	1,900	2,000	2,100
Photography	x	x	x	F	F	x	x	x
Support services	12,700	12,200	12,800	14,200	15,700	18,400	16,400	15,400
Culture employment, all categories	122,800	118,500	129,300	137,900	151,900	167,000	168,100	165,500
Provincial employment	3,116,800	3,162,400	3,242,900	3,320,100	3,402,200	3,440,200	3,568,000	3,625,100
Culture employment as a percentage of provincial employment	3.9	3.7	4.0	4.2	4.6	4.9	4.7	4.6
Full time employment in culture sector (%)	84	82	76	86	84	83	84	85
Percentage of culture workers in the public sector	5	6	5	4	3	2	3	3
Percentage of culture workers in the private sector	74	69	73	73	72	75	75	73
Percentage of culture workers self-employed	21	24	22	23	25	23	22	24

x suppressed to meet the confidentiality requirements of the *Statistics Act*

F too unreliable to be published

Notes: Employment estimates rounded to the nearest hundred.

Data may not add up due to rounding.

Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

Source: Culture Statistics Program, Statistics Canada.

Table 7.3
Culture output and employment by economic activity, Quebec, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Culture output (\$ million)								
Creation	950	961	1,119	1,173	1,260	1,262	1,279	1,381
Production	2,972	3,351	3,646	3,615	3,771	3,980	4,222	4,322
Support	569	536	596	691	876	808	881	966
Manufacturing	1,307	1,371	1,439	1,629	1,743	1,773	1,958	2,057
Distribution	604	694	723	761	807	827	821	1,072
Total activity	6,402	6,913	7,523	7,869	8,457	8,649	9,161	9,798
Culture employment								
Creation	17,700	19,300	17,200	20,100	23,000	22,700	28,100	28,500
Production	61,000	54,100	66,600	68,200	76,600	84,800	85,500	83,800
Support	12,700	12,200	12,800	14,200	15,700	18,400	16,400	15,400
Manufacturing	17,500	19,000	19,300	20,100	23,400	24,100	22,300	22,300
Distribution	13,900	13,900	13,400	15,300	13,200	17,000	15,800	15,500
Total activity	122,800	118,500	129,300	137,900	151,900	167,000	168,100	165,500

Notes: Data may not add up due to rounding.

Employment estimates rounded to the nearest hundred.

Source: Culture Statistics Program, Statistics Canada.

8. Ontario

Highlights:

- Ontario was the main contributor of culture output and employment in Canada.
- Culture output in Ontario increased every year between 1996 and 2003.
- Culture sector output and employment grew less than total provincial output and employment.
- *Performing arts* and *Libraries* experienced declines in both output and employment.
- Per-capita provincial spending on culture in Ontario was the lowest in Canada.
- *Written media* and *Broadcasting* were the top culture sub-sectors in terms of output.
- The province was the largest entry and exit point for culture goods trade in Canada.
- Ontario reported the largest increase in culture imports in Canada.
- Self-employment among culture workers increased.
- *Performing arts*, *Visual arts* and *Libraries* lost workers.
- Establishments involved in production activities were the largest contributors to culture output and employment.

Ontario largest producer of culture output

Between 1996 and 2003, Ontario was the largest contributor to culture output and employment. The province produced approximately \$19.7 billion, or 46% of national culture output (Table 1.1).¹ Overall, culture output grew 47% between 1996 and 2003.

In 2003, Ontario generated 46% of culture output, compared to 42% of total Canadian output. This underlies the strength of the culture sector in Ontario. Overall, it constituted over 4% of provincial GDP in every year in the period between 1996 and 2003.

All culture sub-sectors in Ontario reported gains in output from 1996 to 2003 with the exception of *Performing Arts* and *Libraries*. Output from these two sub-sectors experienced declines of 10% and 3%, respectively (Table 8.1).

Estimated annual spending on culture goods and services in Ontario amounted to \$8.4 billion in 2003, a 50% increase from 1996. Expenditures on culture products accounted for approximately 3% of total expenditures in 2003. The growth in annual spending was evident in all culture sub-sectors except *Visual arts*, where spending fell over the period (Table D7, Appendix D). Between 1996 and 2003, household spending increased in *Broadcasting* (114%), followed by *Written media* (47%) and *Performing Arts* (45%).

Provincial per capita spending on culture lowest in Ontario

In total, the provincial government spent approximately \$628 million on culture in Ontario in 2003². Provincial per-capita culture spending in Ontario was the lowest in Canada and amounted to only \$51 per person (Table 8.1). The chief recipient of provincial spending was *Libraries*, which accounted for 43% of all provincial culture spending in 2003, followed by *Heritage* at 29%.

The federal government spent approximately \$1.4 billion on culture related activities in Ontario in 2003 or 42% of total federal spending on culture in Canada. On a per-capita basis, federal culture spending in Ontario ranked fourth largest in the country, higher than the per-capita spending of provincial and municipal governments. Federal culture spending in Ontario was also above the Canadian average. In 2003, per-capita federal culture spending in the province amounted to \$112 per person (Table 8.1), with *Broadcasting* (51%) and *Heritage* (23%) as the principal recipients.

In 2003, per-capita municipal culture spending in Ontario was the third largest in Canada and was above the Canadian average. It amounted to \$72 per person, with the greatest portion allocated to the *Libraries* sub-sector. Municipalities spent approximately \$878 million on culture related activities in Ontario in 2003.

Increase in culture output fell short of the overall increase in provincial GDP

Between 1996 and 2003, provincial GDP increased 49%, compared to 47% for culture output. Culture output grew less than provincial GDP in all years except 1998, 2000 and 2002. Compared to other provinces, Ontario reported the fourth largest increase in culture output in Canada over the period (Table 1.1).

Written media dominated culture output

Most of Ontario's culture output came from *Written media* (Table 8.1). This sub-sector produced approximately \$8.6 billion in output, almost half of Ontario's total culture sector output in 2003. The growth in this sub-sector's output (52%) was higher than the growth in provincial culture output (47%) from 1996 to 2003, mainly due to strong book sales.³ This led to an increase in this sub-sector's share of culture output, from 43% in 1996 to 44% in 2003. The sub-sector also experienced increases in both federal and provincial spending (71% and 9%) respectively over the period. *Broadcasting* and *Film* were a distant second and third with 12% and 9% of culture output in Ontario.

Broadcasting generated approximately \$2.4 billion output in 2003 (Table 8.1). Private broadcasting contributed to the majority of output from this sub-sector (70%). The increase in output in *Broadcasting* (72%) was higher than provincial culture output growth (47%) from 1996 to 2003. The third largest contributor to output was *Film* which generated \$1.8 billion in 2003 (Table 8.1). Establishments engaged in creation and production activities contributed 30% and 27% respectively.

Most culture goods imports originated in Ontario

In 2003, Ontario was the largest centre in Canada for culture goods imports and exports, representing almost three-quarters of imports and a little more than half of exports. Almost \$3 billion in culture goods were imported into the province, while culture exports amounted to \$1.3 billion in 2003. Culture goods imports rose 31% between 1996 and 2003, while culture goods exports almost doubled over the same period.

Ontario was the largest employer of culture workers

In 2003, the culture sector employed 252,300 workers in Ontario, an increase of 17% from 1996 (Table 8.2). In 2003, most of these workers were employed full-time (82%). The rate of full-time employment in Ontario's culture sector was also higher than the provincial rate.

The culture sector accounted for 41% of employment in Ontario compared to a 40% share of total employment in Canada. In 2003, approximately 4% of total employment in the province originated in the culture sector. After Quebec, employment from the culture sector was most significant in Ontario.

Relative to other provinces, Ontario ranked third in growth in culture employment from 1996 to 2003. However, culture employment fell short of the provincial employment increase of 20% over this period (Table 8.2). Culture employment grew less than overall provincial employment in all years except 1999 and 2000. The province experienced a jump in employment in 2000 because of employment gains in *Written media*, *Broadcasting*, *Advertising*, *Architecture* and *Film*.

Most culture sub-sectors in Ontario reported employment gains from 1996 to 2003 with the exception of *Performing arts*, *Visual arts* and *Libraries*. *Performing arts* and *Libraries* experienced declines in both employment and output over the period. These sub-sectors also experienced decreases in federal culture spending in recent years. In 2003, federal spending fell 0.3% in *Performing arts* and 12% in *Libraries*.

A majority of culture workers in Ontario were employed in the private sector (71%) in 2003 (Table 8.2). The share of workers in the public sector fell from 5% to 2% between 1996 and 2003, while the proportion of self-employed culture workers increased from 24% to 26%. Comparable percentages of culture workers worked full-time from 1996 to 2003.

Written media, Film and Advertising generated most of the culture employment

Written media, *Film* and *Advertising* were the top three culture sub-sectors in Ontario in 2003, generating more than half of the province's culture jobs (Table 8.2). *Written media* employed 70,400 workers in 2003, an increase of only 1% from 1996. The somewhat sluggish growth in this sub-sector led to a loss in share of total culture employment from 32% in 1996 to 28% in 2003.

The *Film* sub-sector employed 35,300 workers in 2003, more than double its level in 1996 (Table 8.2). Compared to other sub-sectors, *Film* enjoyed the fastest growth in culture employment over the period. Most of the jobs created in this sub-sector were part-time and freelance. Employment in this sub-sector grew in all years except 2002, when it shrank 8%.

The largest increase in employment in *Film* came from establishments engaged in production activities. There are many reasons for the growth in the *Film* in Ontario. Until a few years ago, Toronto was attracting film productions from Hollywood due to the declining value of the Canadian dollar and lower operating costs. In addition, a number of large Canadian production companies were established in the province.⁴ Ontario has also been a major centre in Canada for film post-production. According to the *Film, Video and Audio-visual Post-Production Survey*, Ontario firms dominated the post-production industry in Canada, earning two-thirds of total operating revenue in 2001.⁵

Advertising was the third largest culture sub-sector, employing 24,600 workers in 2003, an increase of 41% from 1996 (Table 8.2). Ontario was the primary centre of advertising firms in Canada, accounting for 55% of all advertising revenues in Canada in 2003.⁶

Establishments engaged in production activities were important to Ontario's culture sector

All of Ontario's culture sector activities posted gains in output between 1996 and 2003, and all except manufacturers increased employment (Table 8.3). Establishments involved in production activities were the largest contributors to output and employment in the sector, with about half of culture output and culture employment in the province in 2003. They accounted for the largest percentage increase in culture employment (24%), while support activities had the greatest percentage gain in output (53%) over the period.

Manufacturers were the second largest contributors to culture output while establishments involved in creation activities were the second largest contributors to employment in the culture sector (Table 8.3). Establishments in the manufacturing sector reported employment losses of 2% from 1996 to 2003, the only culture activity to experience a decline over the period.

Endnotes

1. Statistics Canada released a report, *Economic Contribution of the Culture Sector in Ontario*, covering the years 1996 to 2001, in December 2004. Estimates in that report are slightly different from the Ontario estimates in this report due to revisions in data for the basic output (from the Input-Output accounts) and employment (from the Labour Force Survey) data that are used to produce the economic impact reports. For example, input-output (I-O) accounts, from the System of National Accounts, are based on data mainly extracted from surveys and administrative records. The integration of this massive amount of information results in the production of balanced tables, which are multidimensional and contain time series. These time series are revised as required, based upon the revision of data that make up these accounts. The Labour Force Survey is also revised regularly, due to seasonal adjustment according to the latest data and information for seasonal models and factors. The seasonally adjusted series are usually revised back three years. Adjustments are also made to LFS data every five years after new population estimates are available following the most recent census. So, at the beginning of 2005, all Labour Force Survey estimates were adjusted to reflect 2001 Census population counts; and LFS estimates were revised back to January 1976. For this reason, there will always be some discrepancies between data sets produced at different times.
2. Ontario has tax credit programs for a number of culture industries such as, film, television broadcasting, sound recording and book publishing. As data on tax credits are not included in the current Survey of Government Expenditures on Culture, data will be somewhat underestimated for provinces such as Ontario.
3. Statistics Canada, *The Daily*, Survey of Book Publishing and Exclusive Agents <http://www.statcan.ca/Daily/English/000726/d000726b.htm> and <http://www.statcan.ca/Daily/English/060630/d060630a.htm>
4. Statistics Canada, *The Daily*, July 22, 2002, Film, video and audio-visual production 2000/2001. <http://www.statcan.ca/Daily/English/020722/d020722b.htm>
5. Statistics Canada, *The Daily*, February 25, 2003, Film, video and audio-visual post-production, 2001. <http://www.statcan.ca/Daily/English/030225/d030225e.htm>
6. Statistics Canada, Annual Survey of Advertising and Related Services.

Table 8.1
Output by culture category, Ontario, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Written media	5,687	5,933	6,271	6,792	7,680	8,295	8,534	8,618
Broadcasting	1,399	1,567	1,710	1,786	1,942	2,085	2,245	2,405
Film industry	1,121	1,070	1,328	1,444	1,500	1,570	1,752	1,802
Advertising	775	845	853	1,075	1,286	1,226	1,247	1,319
Visual arts	581	510	537	577	546	465	466	588
Performing arts	587	528	563	606	501	527	627	527
Architecture	285	254	342	368	520	451	473	569
Design	384	413	422	455	518	511	535	517
Libraries	511	519	515	523	507	504	500	497
Sound recording and music publishing	467	531	569	431	483	482	505	491
Heritage	269	263	281	297	303	318	338	358
Photography	144	105	106	170	187	165	187	190
Festivals	5	5	7	8	8	10	11	13
Support services	1,159	1,118	1,236	1,418	1,747	1,611	1,742	1,776
Culture output, all categories	13,377	13,660	14,738	15,951	17,726	18,220	19,163	19,669
Provincial GDP	313,729	331,339	343,518	376,601	417,139	428,966	445,157	468,822
Per-capita federal spending on culture (\$)	103	101	98	98	99	106	112	112
Per-capita provincial spending on culture (\$)	42	40	46	49	47	46	50	51
Per-capita municipal spending on culture (\$)	62	60	55	59	60	69	70	72
Culture output as percentage of provincial GDP (%)	4.3	4.1	4.3	4.2	4.2	4.2	4.3	4.2

Notes: Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage. As data on tax credits are not included in the expenditure data, estimates will be somewhat under-estimated. Estimates on government expenditures are revised as more robust data becomes available.

Source: Culture Statistics Program, Statistics Canada.

Table 8.2
Employment by culture category, Ontario, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Written media	70,000	74,100	67,000	68,200	77,300	73,600	67,800	70,400
Film industry	15,400	17,500	22,700	26,800	33,500	34,200	31,100	35,300
Advertising	17,400	22,200	20,600	18,700	26,000	24,300	22,600	24,600
Design	20,100	20,300	19,700	22,200	23,200	21,300	21,500	20,600
Broadcasting	18,100	16,600	18,000	21,500	26,100	27,100	28,300	24,500
Libraries	11,100	11,100	11,100	11,000	11,100	11,100	11,100	11,000
Heritage	9,100	9,400	9,600	9,800	9,800	9,800	9,800	9,900
Performing arts	10,800	9,000	7,300	7,600	8,300	7,700	10,000	8,600
Architecture	4,400	3,700	4,600	7,400	9,900	7,900	7,300	7,300
Visual arts	6,200	5,100	7,700	6,600	5,600	5,000	6,000	5,600
Sound recording and music publishing	5,300	6,500	7,700	6,500	6,400	6,300	5,200	5,400
Photography	5,200	F	F	4,800	4,400	5,100	4,100	4,200
Festivals	400	400	500	500	500	600	600	600
Support services	23,200	20,600	22,900	23,200	28,000	24,800	22,700	24,200
Culture employment, all categories	216,700	219,500	221,100	235,100	270,100	258,600	248,200	252,300
Provincial employment	5,158,100	5,283,300	5,450,900	5,632,800	5,814,000	5,925,600	6,035,200	6,208,300
Culture employment as a percentage of provincial employment	4.2	4.2	4.1	4.2	4.6	4.4	4.1	4.1
Full time employment in culture sector (%)	83	81	83	86	85	85	83	82
Percentage of culture workers in the public sector	5	5	4	3	4	4	3	2
Percentage of culture workers in the private sector	71	69	68	70	71	69	71	71
Percentage of culture workers self-employed	24	26	27	27	26	27	26	26

F too unreliable to be published

Notes: Employment estimates rounded to the nearest hundred.

Data may not add up due to rounding.

Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

Source: Culture Statistics Program, Statistics Canada.

Table 8.3
Culture output and employment by economic activity, Ontario, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Culture output (\$ million)								
Creation	1,989	2,008	2,142	2,370	2,694	2,679	2,722	2,875
Production	6,453	6,693	7,259	7,867	8,520	8,860	9,407	9,674
Support	1,159	1,118	1,236	1,418	1,747	1,611	1,742	1,776
Manufacturing	2,575	2,570	2,762	2,923	3,332	3,542	3,594	3,601
Distribution	1,201	1,271	1,340	1,373	1,434	1,528	1,698	1,743
Total activity	13,377	13,660	14,738	15,951	17,726	18,220	19,163	19,669
Culture employment								
Creation	41,800	39,400	40,400	50,200	56,700	51,300	50,300	50,800
Production	97,100	104,700	100,900	102,300	123,000	115,700	115,000	120,600
Support	23,200	20,600	22,900	23,200	28,000	24,800	22,700	24,200
Manufacturing	32,600	33,000	35,600	34,500	33,300	36,300	35,100	32,100
Distribution	22,000	21,800	21,300	24,900	29,100	30,500	25,100	24,600
Total activity	216,700	219,500	221,100	235,100	270,100	258,600	248,200	252,300

Notes: Data may not add up due to rounding.

Employment estimates rounded to the nearest hundred.

Source: Culture Statistics Program, Statistics Canada.

9. Manitoba

Highlights:

- Manitoba ranked fifth in both culture output and culture employment in Canada.
- Culture output grew less than overall provincial GDP.
- *Sound recording and music publishing, Performing arts, and Libraries and Design* experienced declining output.
- Manitoba reported the second largest per-capita spending on culture by a provincial government (after Quebec).
- *Written media, Broadcasting and Film* were the top three culture sub-sectors in terms of output.
- The majority of culture workers were employed full-time, however, the rate of full-time employment declined.
- *Written media* was the top employer compared to other culture subsectors.
- *Advertising, Written media and Heritage* lost workers.

Increase in culture output

Compared to other provinces, Manitoba ranked fifth as a producer of culture output in Canada. In 2003, the province produced \$1.3 billion in culture output. Meanwhile, the culture sector accounted for 4% of total provincial GDP in 2003. Between 1996 and 2003, culture sector output grew less than overall provincial output (33% versus 35%) (Table 9.1). Culture output grew more than provincial output in 1998, 1999, 2001 and 2002.

Most of Manitoba's culture sub-sectors experienced increases in output from 1996 to 2003, except for *Sound recording and music publishing, Performing arts, Libraries and Design*, as shown in Table 9.1. *Sound recording and music publishing* experienced the greatest drop in output as federal spending slumped in this sub-sector in recent years. In 2003, federal spending declined 73%.

In 2003, annual spending on culture goods and services totalled \$74 billion in Manitoba, an increase of 35% from 1996. Household expenditures on culture products accounted for approximately 3% of total average household expenditures in the province. The growth in annual spending was evident in all culture sub-sectors except *Library and Visual arts*. (Table D8, Appendix D).

High provincial per-capita culture spending offset low per-capita federal spending

The federal government spent approximately \$84 million on culture-related activities in Manitoba in 2003, or 2% of total federal spending on culture in Canada (Table 1.3). In 2003, federal spending on culture activities in Manitoba was one of the lowest in Canada on a per-capita basis and was lower than the per-capita spending on culture

by the provincial government (Tables 1.4 and 9.1). The level of federal per-capita spending in Manitoba at \$73 per person in 2003 was also below the national average (\$111). The major recipients of federal spending on culture were *Heritage* (40%) and *Broadcasting* (33%).

Per-capita provincial culture spending increased 20% over the period, from \$80 in 1996 to \$96 in 2003, making Manitoba the province with the second largest provincial per-capita spending on culture activities in Canada (Tables 1.5 and 9.1). The chief recipient of provincial spending was *Libraries*, which accounted for 43% of all provincial culture spending in 2003, followed by *Heritage* with 36%. In total, the provincial government spent approximately \$112 million on culture in 2003.

Per-capita municipal culture spending in Manitoba was the sixth largest in Canada and below the Canadian average in 2003 (Table 1.3). It was also smaller than the federal and provincial per-capita spending on culture in the same year. Municipal spending on culture activities amounted to \$56 per resident, most of which went to *Libraries* (Tables 1.6 and 9.1). Overall, municipalities spent approximately \$65 million on culture related activities in Manitoba in 2003.

Written media, Broadcasting and Film were the top three sub-sectors in terms of culture output

Most of the output in the culture sector in Manitoba originated from *Written media*, which generated \$522 million in output in 2003 (Table 9.1). This sub-sector's output increased 43% from 1996 to 2003 and its share of provincial culture output rose from 38% to 41% over the period. *Broadcasting* (17%) and *Film* (6%) reported the second and third largest shares of provincial culture output in 2003. Between 1996 and 2003, these three sub-sectors also enjoyed higher output growth than did the overall provincial culture sector.

Broadcasting generated an output of \$224 million in 2003, an increase of 47% from \$152 million in 1996. The growth in output from private broadcasting (47%) was greater than that of public broadcasting (33%) over this period, mainly due to declining output from private radio broadcasting (4% drop). The 2003 profit margin from private radio broadcasting in Manitoba area stood at 7%, the lowest in Canada.¹

Rise in culture employment

Manitoba reported a 6% rise in culture employment compared to an increase of 11% in provincial employment. Employment in the culture sector fell in 2000, 2002 and 2003, only exceeding provincial employment growth in 2001. The sharp increase in culture employment in 2001 can be attributed to strong employment growth in *Advertising*, *Performing arts* and *Broadcasting*.

There were 6% more workers employed in the culture sector in 1996 than in 2003, accounting for approximately 3% of provincial employment in 2003. Most of the workers in Manitoba's culture sector were employed full-time; however, the proportion of full-time workers declined from 81% to 76% between 1996 and 2003.

Written media reported a decline in employment

Written Media employed 5,900 workers in 2003 compared to 6,800 in 1996, a drop of 13% or 900 jobs (Table 9.2). Most of the job losses occurred in establishments involved in distribution and production. Distributors reported declines of 33% over the period, mainly due to lower employment in retail activities. Federal and provincial spending in this sub-sector also declined in recent years. In 2003, for example, federal spending fell 26%, while provincial spending dropped 14%. Not only were a majority of culture workers in Manitoba employed in the private sector, the private sector's share of employment increased from 69% in 1996 to 72% in 2003 (Table 9.2). On the other hand, the public sector's share of employment fell from 9% in 1996 to only 5% in 1995. Self-employment in the culture sector increased slightly from 22% to 23% over the same period.

Production activities accounted for largest share of employment and output

Establishments engaged in production activities were the major contributors to culture output and employment in the province (Table 9.3). These establishments generated approximately 36% of culture output and 43% of culture employment in 2003. Manufacturers were the second largest contributors to output in the culture sector. They also reported the largest increase in culture output (59%) from 1996 to 2003. Establishments involved in distribution activities reported the fastest increase (33%) in culture employment over the period.

Endnote

1. Statistics Canada (2004), *Broadcasting and Telecommunications: Service Bulletin*, Catalogue No. 56-001-XIE, *Private Radio Broadcasting*, 2003, p. 2. <http://www.statcan.ca/english/freepub/56-001-XIE/0030456-001-XIE.pdf>

Table 9.1
Output by culture category, Manitoba, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Written media	364	386	389	404	449	478	523	522
Broadcasting	152	160	163	163	178	195	236	224
Film industry	49	49	59	69	63	69	72	73
Advertising	40	40	39	49	46	45	45	49
Performing arts	45	40	51	58	45	43	45	41
Visual arts	36	30	37	46	40	31	29	38
Libraries	37	36	35	34	35	35	34	34
Heritage	25	25	25	25	27	29	28	30
Architecture	15	12	16	17	19	16	17	21
Design	20	20	19	21	19	19	19	19
Sound recording and music publishing	18	20	25	14	15	15	15	15
Photography	8	5	5	8	7	7	7	8
Festivals	2	2	3	3	3	4	5	5
Support services	159	145	145	154	154	193	209	210
Culture output, all categories	969	968	1,027	1,063	1,139	1,170	1,284	1,289
Provincial GDP	26,101	27,479	28,374	29,293	31,950	32,657	33,671	35,331
Per-capita federal spending on culture (\$)	58	55	60	83	60	65	71	72
Per-capita provincial spending on culture (\$)	80	82	83	87	86	88	93	96
Per-capita municipal spending on culture (\$)	43	52	46	46	47	36	46	56
Culture output as percentage of provincial GDP (%)	3.7	3.5	3.6	3.6	3.4	3.6	3.8	3.6

Notes: Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage. As data on tax credits are not included in the expenditure data, estimates will be somewhat under-estimated. Estimates on government expenditures are revised as more robust data becomes available. Data may not add up due to rounding.

Source: Culture Statistics Program, Statistics Canada.

Table 9.2
Employment by culture category, Manitoba, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Written media	6,800	6,900	6,700	6,200	6,600	5,600	6,200	5,900
Broadcasting	F	F	F	2,700	2,700	3,300	2,800	2,500
Design	F	F	F	F	F	F	F	F
Heritage	F	F	F	F	F	F	F	F
Film industry	x	x	F	F	F	F	F	F
Performing arts	x	F	F	F	x	F	F	x
Advertising	F	F	F	x	x	2,100	1,300	x
Sound recording and music publishing	x	x	x	x	x	x	x	x
Libraries	x	x	x	x	x	x	x	x
Architecture	x	x	x	x	x	x	x	x
Photography	x	x	x	x	x	x	x	x
Festivals	100	100	200	200	200	200	200	300
Visual arts	x	x	x	x	x	x	x	x
Support services	2,100	2,100	2,200	2,700	F	2,500	2,800	2,500
Culture employment, all categories	17,200	18,500	18,800	19,400	19,000	21,200	20,300	18,400
Provincial employment	515,900	523,700	532,800	540,000	551,700	554,300	567,400	570,600
Culture employment as a percentage of provincial employment	3.3	3.5	3.5	3.6	3.5	3.8	3.6	3.2
Full time employment in culture sector (%)	81	83	80	83	81	80	80	76
Percentage of culture workers in the public sector	9	8	6	4	5	5	6	5
Percentage of culture workers in the private sector	69	70	71	73	70	73	74	72
Percentage of culture workers self-employed	22	22	22	23	24	22	20	23

x suppressed to meet the confidentiality requirements of the *Statistics Act*

F too unreliable to be published

Notes: Employment estimates rounded to the nearest hundred.

Data may not add up due to rounding.

Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

Source: Culture Statistics Program, Statistics Canada.

Table 9.3
Culture output and employment by economic activity, Manitoba, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Culture output (\$ million)								
Creation	132	130	155	178	178	169	163	172
Production	382	379	397	387	405	419	456	458
Support	159	145	161	154	193	186	209	210
Manufacturing	192	206	201	231	252	279	310	305
Distribution	104	109	113	114	111	118	146	145
Total activity	969	968	1,027	1,063	1,139	1,170	1,284	1,289
Culture employment								
Creation	1,900	2,000	2,000	2,600	2,200	2,500	2,200	2,000
Production	8,000	8,900	9,000	7,400	8,200	10,000	9,100	8,000
Support	2,100	2,100	2,200	2,700	1,800	2,500	2,800	2,500
Manufacturing	3,100	3,400	3,600	3,700	3,600	3,000	3,400	3,100
Distribution	2,100	2,100	2,000	3,000	3,200	3,200	2,800	2,800
Total activity	17,200	18,500	18,800	19,400	19,000	21,200	20,300	18,400

Notes: Data may not add up due to rounding.

Employment estimates rounded to the nearest hundred.

Source: Culture Statistics Program, Statistics Canada.

10. Saskatchewan

Highlights:

- Saskatchewan ranked sixth in both culture output and employment.
- The culture sector grew less than provincial growth, both in terms of output and employment.
- *Written media, Broadcasting and Film* were the top three culture sub-sectors in terms of output.
- Per-capita federal spending on culture in Saskatchewan was the second lowest in Canada.
- The majority of culture workers in the province were employed full-time and the rate of full-time employment increased.
- *Written media, Broadcasting and Heritage* were the top three employers in culture sub-sectors.
- Establishments engaged in production activities accounted for most of the employment and output in the culture sector.

Steady increase in culture output

Saskatchewan produced \$900 million in culture output in 2003, accounting for approximately 3% of total culture output in Canada, or \$859 per person. Compared to other provinces, Saskatchewan reported the lowest increase in culture output between 1996 and 2003. Output in the culture sector increased 17%, falling short of the 28% increase in provincial output over this period. The provincial share of culture output in Canada declined slightly from 3% in 1996 to 2% in 2003.

The majority of culture sub-sectors in Saskatchewan reported gains in output, although some suffered large drops over the period (Table 10.1). Declines in output were seen in *Design* (-22%), *Sound recording and music publishing* (-15%), *Performing arts* (-12%), *Photography* (-14%) and *Libraries* (-5%). Some sub-sectors, such as *Heritage, Broadcasting* and the *Film*, reported more growth in output than did the overall provincial culture sector.

Annual spending on culture goods and services in Saskatchewan amounted to approximately \$636 million in 2003, an increase of 40% from 1996. Annual spending increased in all years except 2000, where spending on culture goods and services fell 3%. Culture expenditures accounted for approximately 3% of total household expenditures in the province in 2003. Growth in household spending was evident in most culture sub-sectors. However, *Visual arts, Libraries* and *Film* saw declines of 33%, 26% and 7% respectively, between 1996 and 2003 (Table D9, Appendix D).

Relatively low levels of per-capita federal spending

The federal government spent approximately \$45 million (or 1% of total federal culture spending) on culture related activities in Saskatchewan in 2003. Federal culture spending in the province amounted to \$46 per-capita, the lowest in Canada (Table 10.1). Federal spending was also lower than provincial and municipal spending, on a per capita basis. The main recipients of federal spending were *Broadcasting* (46%) and *Heritage* (34%).

The low level of federal per-capita spending in the culture sector was mitigated by the relatively higher amounts of provincial spending. Saskatchewan reported the third largest provincial per-capita culture spending in Canada in 2003, with an increase of 40%, from \$63 to \$88 between 1996 and 2003 (Table 10.1). The main recipient of provincial culture spending was *Heritage* (39%), followed by *Libraries* (26%). In total, the provincial government spent approximately \$87 million on culture activities in 2003¹.

Per-capita municipal culture spending in Saskatchewan was above the national average and the second largest in Canada, after British Columbia. In 2003, municipal spending amounted to \$73 per resident, most of which went to *Libraries* (Table 10.1). Municipalities spent approximately \$73 million on culture related activities in Saskatchewan in 2003.

Large increase in output in *Broadcasting*

Written media, *Broadcasting* and *Film* were the top three culture sub-sectors in terms of output in Saskatchewan, accounting for 26%, 26% and 7% of total provincial culture output in 2003, respectively (Table 10.1). *Written media*, which generated \$233 million in output in 2003, experienced a slight decline in its share of provincial output from 28% to 26% between 1996 and 2003. On the other hand, the *Broadcasting* sub-sector demonstrated strong growth (52%) during the period, mainly due to an increase in output from private broadcasting. Private broadcasting, composed of television and radio broadcasting, reported a 53% rise in output, whereas radio broadcasting experienced a decline in output. Annual spending on the *Broadcasting* sub-sector was the largest compared to other sub-sectors and grew the fastest between 1996 and 2003. Annual household spending totalled \$2.3 billion in this sub-sector in 2003, an increase of 152% from 1996 (Table D9, Appendix D).

Slow growth in culture employment

Employment growth in the culture sector in Saskatchewan was among the lowest in Canada between 1996 and 2003. During the period, culture employment increased only 3% compared with a 4% increase in provincial employment (Table 10.2). Employment growth in the culture sector failed to match the growth of overall provincial employment for most of the period. Jobs were lost in the province's culture sector in 2000, 2001 and 2002.

In total, the culture sector in Saskatchewan employed 14,200 workers in 2003, or 2% of total culture employment in Canada (Table 10.2). The culture sector accounted for 3% of total employment in the province in 2003. The proportion of workers employed full-time in the culture sector increased from 73% to 78% between 1996 and 2003. However, the full-time employment rate in the culture sector was

lower than the average rate of full-time employment in the province for most years.

Written media, Broadcasting and Heritage were the top three culture employers

Written media, Broadcasting and Heritage created more than half of all jobs in the province's culture sector in 2003 (Table 10.2). *Written media* employed 4,000 workers in 2003, an increase of 21% from 1996, which led to an increase in this sub-sector's share of provincial culture employment from 24% in 1996 to 28% in 2003.

Broadcasting followed *Written media* with 2,700 jobs (Table 10.2). This sub-sector reported an increase of 42% in employment from 1996 to 2003 and increased its share of provincial culture employment from 14% to 19%. Most of the increase in this sub-sector came from private broadcasting, whereas public broadcasting saw a decline in employment over the period. Private broadcasting, which accounted for a majority of the jobs in this sub-sector, grew more than 24% since 1996. *Heritage* ranked third in terms of employment and mainly employed part-time workers.² The sub-sector employed 1,600 workers in 2003, an increase of 14% from 1996. Growth was mainly concentrated in establishments involved in the preservation of other heritage institutions, where much of the employment is seasonal.

A majority of culture workers in Saskatchewan were employed in the private sector – the proportion increased slightly from 71% to 72% between 1996 and 2003 (Table 10.2). On the other hand, there was a slight decline in self-employment in the province's culture sector, from 23% to 22%, during the same period.

Production activities important part of Saskatchewan's culture sector

Establishments engaged in the production activities accounted for much of the culture employment and output in the province – 45% of the output and 57% of the employment in 2003 (Table 10.3). Support activities were the second largest generator of culture output, whereas distribution was the second largest culture employer in the province.

Endnotes

1. Saskatchewan also has a tax credit program for film production, that was introduced in the 1998-1999 provincial budget. As data on tax credits are not included in the current Survey of Government Expenditures on Culture, data will be somewhat underestimated for provinces such as Saskatchewan.
2. Part-time workers accounted for approximately 64% of total employment in Heritage in 2003.

Table 10.1
Output by culture category, Saskatchewan, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Written media	213	183	186	188	216	228	230	233
Broadcasting	152	154	190	170	144	164	247	231
Film industry	50	45	64	51	65	73	62	59
Heritage	25	25	29	33	33	36	35	37
Advertising	36	35	33	35	34	32	34	36
Libraries	38	37	37	36	37	36	36	36
Performing arts	30	30	31	31	29	29	30	27
Visual arts	23	21	21	24	25	20	19	23
Architecture	13	10	13	12	14	12	13	15
Design	18	17	16	15	14	14	14	14
Sound recording and music publishing	12	16	17	10	11	10	10	11
Photography	7	5	4	6	5	5	6	6
Festivals	1	1	1	1	1	1	1	1
Support services	150	138	126	129	155	143	157	170
Culture output, all categories	769	716	769	739	782	803	893	900
Provincial GDP	25,201	26,907	27,661	28,445	30,393	30,051	29,968	32,286
Per-capita federal spending on culture (\$)	40	34	44	44	41	46	49	46
Per-capita provincial spending on culture (\$)	63	63	68	68	75	84	86	88
Per-capita municipal spending on culture (\$)	51	57	61	56	57	58	64	73
Culture output as percentage of provincial GDP (%)	3.1	2.7	2.8	2.6	2.6	2.7	3.0	2.8

Notes: Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage. As data on tax credits are not included in the expenditure data, estimates will be somewhat under-estimated. Estimates on government expenditures are revised as more robust data becomes available. Data may not add up due to rounding.

Source: Culture Statistics Program, Statistics Canada.

Table 10.2
Employment by culture category, Saskatchewan, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Written media	3,300	3,500	3,700	4,200	3,600	3,400	3,300	4,000
Broadcasting	1,900	2,200	2,400	2,600	2,600	2,800	2,600	2,700
Heritage	1,400	1,400	1,500	1,600	1,600	1,600	1,600	1,600
Film industry	F	F	F	F	F	F	F	F
Libraries	F	F	F	F	F	F	F	F
Advertising	F	x	x	F	x	F	x	F
Performing arts	x	x	x	x	x	x	x	x
Design	x	x	F	x	x	x	x	x
Sound recording and music publishing	x	x	x	x	x	x	x	x
Photography	x	x	x	x	x	x	x	x
Visual arts	x	x	x	x	x	x	x	x
Architecture	x	x	x	x	x	x	x	x
Festivals	0	0	0	100	100	100	100	100
Support services	2,000	2,000	1,700	2,000	1,900	1,600	2,200	F
Culture employment, all categories	13,900	14,000	14,300	15,000	14,500	14,300	13,800	14,200
Provincial employment	456,300	465,500	469,900	471,600	473,600	460,600	468,300	475,400
Culture employment as a percentage of provincial employment	3.0	3.0	3.0	3.2	3.1	3.1	3.0	3.0
Full time employment in culture sector (%)	73	76	80	78	79	79	80	78
Percentage of culture workers in the public sector	6	6	8	4	7	5	7	6
Percentage of culture workers in the private sector	71	69	71	75	69	71	68	72
Percentage of culture workers self-employed	23	25	22	21	24	24	25	22

x suppressed to meet the confidentiality requirements of the *Statistics Act*

F too unreliable to be published

0 true zero or a value rounded to zero

Notes: Employment estimates rounded to the nearest hundred.

Data may not add up due to rounding.

Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

Source: Culture Statistics Program, Statistics Canada.

Table 10.3
Culture output and employment by economic activity, Saskatchewan, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Culture output (\$ million)								
Creation	99	101	103	103	117	116	112	115
Production	360	315	363	337	349	374	413	405
Support	150	138	126	129	155	143	157	170
Manufacturing	63	64	63	61	75	76	69	72
Distribution	98	99	114	108	86	95	142	137
Total activity	769	716	769	739	782	803	893	900
Culture employment								
Creation	1,600	1,600	1,800	1,400	1,700	1,200	1,500	1,400
Production	7,100	7,000	7,400	8,200	7,300	8,000	6,700	8,100
Support	2,000	2,000	1,700	2,000	1,900	1,600	2,200	1,300
Manufacturing	800	1,000	1,000	800	900	800	700	800
Distribution	2,400	2,400	2,400	2,600	2,700	2,700	2,700	2,600
Total activity	13,900	14,000	14,300	15,000	14,500	14,300	13,800	14,200

Notes: Data may not add up due to rounding.

Employment estimates rounded to the nearest hundred.

Source: Culture Statistics Program, Statistics Canada.

11. Alberta

Highlights:

- Alberta was the fourth largest producer of culture employment and output in Canada.
- The province experienced the fastest growth in culture output in Canada from 1996 to 2003.
- *Written media, Broadcasting and Advertising* were the top three culture sub sectors in terms of output.
- Output fell in *Performing arts, Sound recording and music publishing and Visual arts*.
- Alberta was the only province to have a decline in per-capita federal spending on culture activities.
- Employment in the culture sector grew less than provincial employment.
- The majority of culture workers in Alberta were employed full-time and the rate of full-time employment increased.
- *Written media, Broadcasting and Film* were the top three culture employers.
- The rate of self-employment rose in the provincial culture sector.
- Jobs were lost in *Design and Advertising*.

Alberta enjoyed large increases in culture output

In recent years, Alberta experienced strong momentum in its economy due to its burgeoning natural resource sector. This has translated into substantial growth in provincial output and a competitive labour market. The strong growth evident in the provincial economy was also prevalent in the province's culture sector. Compared to the other provinces, Alberta reported the largest increase in culture output (74%) between 1996 and 2003 (Table 11.1). Most significantly, culture output grew more than did provincial GDP (47%).

Overall, Alberta ranked fourth among the provinces in both culture output and employment. In 2003, Alberta produced approximately \$4.6 billion in culture output, second only to Ontario. In 2003, culture output amounted to more than 3% of the provincial GDP, about the same as the proportion of provincial employment from the culture sector.

Even though Alberta experienced strong growth in the culture sector overall, some sub-sectors such as *sound recording* and *visual arts* reported declining output.

In 2003, annual spending amounted to \$2.3 billion on culture goods and services in Alberta, an increase of 49% from 1996 (Table 11.1). In 2003, household spending on culture accounted for approximately 3% of average household expenditures in the province. The growth in annual spending was evident in all

culture sub-sectors except *Visual arts*, where spending fell between 1996 and 2003 (Table D10, Appendix D).

Decline in per-capita federal spending in culture

Alberta experienced a decline in per-capita federal government spending on culture activities from 1996 to 2003. Compared to other provinces, Alberta had the second lowest level of per-capita federal government spending on culture in 2003. In total, federal spending on culture activities amounted to \$149 million in 2003, or 5% of total federal spending on culture. Federal per-capita spending on culture was also lower than the per-capita spending levels of provincial and municipal governments in the province. In 2003, per-capita federal spending in culture in the province amounted to \$47 (Table 11.1) and was only higher than that of Saskatchewan. In terms of sub-sector allocation, the main recipients of federal spending were *Heritage* (49%) and *Broadcasting* (28%).

Provincial spending on culture was also below the national average. Alberta's provincial per-capita culture spending was the third smallest in Canada. However, it increased 32% from \$48 in 1996 to \$63 in 2003 (Table 11.1). The provincial government spent approximately \$199 million on culture activities in 2003, most of which went to *Libraries*, which accounted for 42% of all provincial culture spending, followed by *Heritage* with 24%.

Per-capita municipal spending on culture in Alberta was also below the Canadian average but was fourth largest in Canada. In 2003, municipal culture spending amounted to \$59 per resident, most of which went to *Libraries*. In total, municipalities spent \$186 million on culture activities in the province in 2003.

Written media, Broadcasting and Advertising were the major contributors to culture output

Most of the culture output generated by Alberta came from *Written media*, which produced \$1.4 billion in output in 2003 (Table 11.1). Output from this sub-sector increased 71% over the period, to a 31% share of provincial culture output in 2003. *Broadcasting* and *Advertising* were second and third, with 28% and 9% of provincial culture output in 2003, respectively. Growth in output from *Broadcasting* and *Advertising* exceeded that of total culture output in the province from 1996 to 2003.

Broadcasting, which includes establishments engaged in public and private broadcasting, reported output worth \$1.3 billion in 2003, most of which (75%) came from private broadcasting (Table 11.1). Television broadcasting was the largest component of private broadcasting. Between 1996 and 2003, growth in output from radio broadcasting (60%) exceeded that of television broadcasting (24%). The main reason for the strong growth in output from radio broadcasting was that the radio market in Alberta (especially in Calgary) was the most profitable in Canada. The 2003 profit margin in radio broadcasting in the Calgary area stood at 29.2%, the highest in Canada.¹ *Broadcasting* accounted for the largest share of annual spending (29%) on culture goods and services in 2003 (Table D10, Appendix D). Spending also grew the most (151%) in this sub-sector between 1996 and 2003. *Advertising* was the only culture sub-sector to show an increase in output in every year from 1996 to 2003. The subsector generated approximately \$400 million in output in 2003, an increase of 89% from 1996.

Lack-lustre growth in culture employment

The robust growth in culture output was not reflected in culture employment in Alberta, which increased only 16% from 1996 to 2003, while provincial employment increased 22%. The culture sector actually lost jobs in 1998 and 2002 (Table 11.2).

Alberta's culture sector employed 57,800 workers in 2003, accounting for approximately 3% of provincial employment (Table 11.2). Most of these workers were employed full-time in 2003 (83%), compared to 81% in 1996. Interestingly, the percentage of employees working full-time was higher for the culture sector than for the province overall.

The largest culture employer in Alberta was *Written media*, with 14,700 workers in 2003, an increase of 8% from 1996 (Table 11.2). *Broadcasting* reported the second largest employment level of 8,900 workers in 2003, mainly from private broadcasting. It is interesting to note that, despite a drop in federal and provincial spending in this sub-sector, both employment and output from this sub-sector increased. In 2003, federal spending in *Written media* dropped 24% and provincial spending declined 7%.

The proportion of culture workers in the private sector fell slightly from 71% in 1996 to 69% in 2003 (Table 11.2). Meanwhile, the proportion of self-employed workers in the culture sector increased from 26% to 29% between 1996 and 2003. The proportion of culture workers who were self-employed in Alberta was the second largest in Canada.

Strong increase in employment in *Film*

Film was the third largest culture sub-sector in terms of employment. The sub-sector employed 5,200 workers in 2003.

Establishments engaged in production activities were vital to the culture sector

All of Alberta's culture sector activities reported gains in output and employment over the period 1996 to 2003 (Table 11.3). In 2003, establishments engaged in production activities generated almost half of the sector's employment and output in the province. Establishments engaged in distribution enjoyed the largest increase in culture output (215%) from 1996 to 2003, whereas those providing support activities had the largest increase (40%) in culture employment over the period.

Endnote

1. Statistics Canada (2004), *Broadcasting and Telecommunications: Service Bulletin*, Catalogue No. 56-001-XIE.

Table 11.1
Output by culture category, Alberta, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Written media	826	902	992	1,085	1,204	1,367	1,443	1,412
Broadcasting	461	952	751	844	1,015	1,136	1,223	1,317
Advertising	210	250	252	291	323	342	365	397
Film industry	176	174	184	188	211	269	235	239
Architecture	77	75	101	99	131	126	139	171
Design	104	122	125	123	130	143	157	155
Heritage	87	89	52	98	106	120	119	127
Visual arts	130	101	102	109	105	89	91	117
Performing arts	142	121	126	126	100	108	113	106
Libraries	79	83	83	87	81	81	80	80
Photography	39	31	31	46	47	46	55	57
Sound recording and music publishing	58	67	74	39	43	44	44	44
Festivals	3	3	4	5	5	6	7	8
Support services	273	289	297	294	355	344	378	398
Culture output, all categories	2,665	3,260	3,173	3,434	3,857	4,223	4,449	4,627
Provincial GDP	93,211	101,936	105,617	109,803	122,031	125,688	128,679	137,448
Per-capita federal spending on culture (\$)	52	45	45	40	49	50	51	47
Per-capita provincial spending on culture (\$)	48	44	45	48	65	57	56	63
Per-capita municipal spending on culture (\$)	48	48	52	49	49	51	53	59
Culture output as percentage of provincial GDP (%)	2.9	3.2	3.0	3.2	3.2	3.4	3.5	3.4

Notes: Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage. As data on tax credits are not included in the expenditure data, estimates will be somewhat under-estimated. Estimates on government expenditures are revised as more robust data becomes available. Data may not add up due to rounding.

Source: Culture Statistics Program, Statistics Canada.

Table 11.2
Employment by culture category, Alberta, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Written media	13,600	13,200	13,900	12,200	12,800	12,600	14,100	14,700
Broadcasting	5,800	6,100	5,900	7,300	7,300	7,900	8,900	8,900
Film industry	F	F	4,200	4,900	4,700	5,700	4,900	5,200
Heritage	4,100	4,300	5,200	4,300	4,500	4,600	4,500	4,800
Design	4,700	5,000	4,100	F	3,800	3,800	F	4,200
Advertising	F	F	F	F	4,800	6,000	F	F
Libraries	F	2,300	F	F	F	F	F	F
Architecture	x	x	x	x	x	x	F	F
Performing arts	F	3,900	F	3,800	F	F	x	x
Sound recording and music publishing	x	F	x	F	x	F	x	x
Photography	x	x	x	x	x	x	x	x
Visual arts	x	x	x	x	x	x	x	x
Festivals	200	200	300	300	300	400	400	400
Support services	4,800	6,300	5,000	5,600	6,500	5,100	5,700	6,700
Culture employment, all categories	50,000	52,500	51,300	53,200	55,200	55,700	53,500	57,800
Provincial employment	1,403,700	1,450,200	1,507,700	1,542,200	1,583,600	1,630,000	1,671,500	1,717,900
Culture employment as a percentage of provincial employment	3.6	3.6	3.4	3.4	3.5	3.4	3.2	3.4
Percentage of full time employment in the culture sector	81	82	84	84	84	83	85	83
Percentage of culture workers in the public sector	3	3	4	3	2	1	2	2
Percentage of culture workers in the private sector	71	67	65	69	69	72	71	69
Percentage of culture workers self-employed	26	30	31	29	29	27	27	29

x suppressed to meet the confidentiality requirements of the *Statistics Act*

F too unreliable to be published

Notes: Employment estimates rounded to the nearest hundred.

Data may not add up due to rounding.

Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

Source: Culture Statistics Program, Statistics Canada.

Table 11.3
Culture output and employment by economic activity, Alberta, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Culture output (\$ million)								
Creation	504	512	540	554	602	633	652	703
Production	1,305	1,438	1,402	1,563	1,678	1,858	1,990	2,035
Support	273	289	297	294	355	344	378	398
Manufacturing	253	272	287	334	408	459	450	451
Distribution	330	749	647	689	814	928	980	1,040
Total activity	2,665	3,260	3,173	3,434	3,857	4,223	4,449	4,627
Culture employment								
Creation	9,800	8,800	9,400	7,800	7,700	8,100	8,700	10,800
Production	24,600	26,400	25,300	27,400	27,700	29,000	26,800	28,100
Support	4,800	6,300	5,000	5,600	6,500	5,100	5,700	6,700
Manufacturing	3,900	4,100	4,400	4,400	4,600	4,600	4,300	4,300
Distribution	6,900	6,900	7,200	8,000	8,700	8,900	8,000	7,900
Total activity	50,000	52,500	51,300	53,200	55,200	55,700	53,500	57,800

Notes: Data may not add up due to rounding.

Employment estimates rounded to the nearest hundred.

Source: Culture Statistics Program, Statistics Canada.

12. British Columbia

Highlights:

- British Columbia was the third largest producer of culture output in Canada.
- Culture output in the province increased every year from 1996 to 2003.
- Culture employment grew less than provincial employment.
- *Performing arts* and *Libraries* experienced output declines.
- Per-capita federal spending on culture in British Columbia was one of the lowest in Canada.
- Municipalities in British Columbia spent the most a per-capita basis.
- *Written media*, *Broadcasting* and *Film* were the top three culture sub-sectors in both output and employment.
- The majority of culture workers in the province were employed full-time.
- British Columbia reported the highest rate of self-employment amongst culture workers in Canada.
- Job losses were experienced in *Design*.

Steady increase in culture output

British Columbia was the third largest producer of culture output in Canada, accounting for \$5.2 billion, or 12%, of the country's culture output in 2003 (Table 12.1). This translated into the fourth largest per-capita culture output (\$1,183) in 2003. Culture output contributed almost 4% to provincial GDP, on average, from 1996 to 2003. British Columbia, along with Ontario and Quebec, reported increases in culture output in every year of this period. As well, the growth in culture output in British Columbia was higher than the overall growth in provincial GDP. From 1996 to 2003, output in the culture sector increased 43%, as compared to a 35% increase in provincial output. However, the province's increase in culture output fell short of the growth experienced by some other provinces – British Columbia had the fifth largest increase in culture output, relative to other provinces over the period.

In general, output in most sub-sectors in British Columbia increased over the period, with the exception of *Performing arts* and *Libraries*, which reported declines in output of 13% and 4%, respectively, over the period. The *Performing arts* sub-sector, which includes establishments engaged in theatre, dance, promotion, and other performing arts activities, reported drops in both federal (-12%) and provincial spending (-13%) in 2003.

Estimated annual spending on culture goods and services in British Columbia amounted to approximately \$2.8 billion in 2003, an increase of 41% from 1996 (Table 12.1). Spending levels increased in every year except 1999, when annual spending on culture goods and services fell 1%. Culture spending accounted for

approximately 3% of total average household expenditures in the province in 2003. Growth in household spending was evident in all culture sub-sectors except *Libraries* and *Photography*, where spending levels fell 9% and 1%, respectively, over the period (Table D11, Appendix D).

Low federal per-capita culture spending mitigated by high provincial and municipal per-capita spending

British Columbia received approximately \$203 million in federal culture spending in 2003, or 6% of total federal spending on culture in Canada. Federal per-capita spending in the culture sector in British Columbia was among the lowest of the provinces. In 2003, federal per-capita spending in British Columbia amounted to \$49 (Table 12.1). The major recipient of federal spending was *Broadcasting* (36%) followed by *Heritage* (29%).

In this report, British Columbia's provincial per-capita culture spending is one of the lowest in Canada and below the Canadian average, with spending of approximately \$243 million in 2003 (Table 1.3). The reason for these levels, however, is because British Columbia invests in the *Film* primarily through a tax credit system for film, animation, publishing and television, rather than through grants or donations. Unfortunately, data on tax credits are not included in the existing Statistics Canada *Survey of Government Expenditures on Culture*. Other provinces may rely on grants or contributions, which are measured by this Survey. Until the *Survey of Government Expenditures on Culture* can be revised to take into account the growth of tax credit systems, data will be somewhat underestimated for provinces such as British Columbia.

In per-capita terms, provincial culture spending declined from \$71 to \$58 between 1996 and 2003 (Table 12.1). Most of the provincial spending went to *Libraries*, which accounted for 66% of all provincial culture spending in 2003. However, per-capita municipal spending on culture activities in British Columbia was the largest in Canada. In 2003, approximately \$75 per person was spent by municipalities in the province, most of which also went to *Libraries*.¹ In total, municipalities in the province spent approximately \$310 million on culture activities in 2003.

The top three sub-sectors reported large increases in culture output

The biggest culture sub-sector in terms of output was *Written media*, composed of establishments engaged in publishing activities (newspaper, books and periodicals). *Written media* reported an output of approximately \$1.7 billion in 2003 (Table 12.1), an increase of 52% from 1996. The sub-sector's share of output increased from 31% to 33% between 1996 and 2003. It is interesting to note that output from *Written media* continued to grow despite recent cuts in federal and provincial spending in this sub-sector. For instance, federal spending in this sub sector declined 19% in 2003 over the previous year, while provincial spending declined 5%.

Broadcasting and *Film* were the second and third largest culture sub-sectors, with 19% and 10% of provincial culture output in 2003 (Table 12.1). *Broadcasting* benefited from federal spending² and reported an output of \$964 million in 2003, an increase of 55% from 1996. Public broadcasting saw a large increase in output (62%) compared to private broadcasting (33%) over this period. Interestingly, radio

broadcasting in British Columbia reported larger gains in output than television broadcasting from 1996 to 2003, which was mainly due to the strong radio market in the Vancouver area. The *Broadcasting* sub-sector accounted for the largest share of total annual spending on culture goods and services (33%) in 2003 (Table D11, Appendix D).

Film experienced the second largest increase in culture output, doubling from 1996 to 2003, due mainly to strong growth in film production revenues. Overall, output in these three sub-sectors, *Written media*, *Broadcasting* and *Film*, grew more than the average growth in culture output in British Columbia from 1996 to 2003.

British Columbia third largest contributor to culture goods trade

British Columbia exported \$264 million and imported \$318 million in culture goods in 2004,³ accounting for 9% of imports and 11% of exports in Canada. However, exports rose more than imports, with exports more than doubling and imports increasing 34% from 1996 to 2004.

Small increase in culture employment

The culture sector in British Columbia employed 78,000 workers and accounted for approximately 4% of provincial employment in 2003 (Table 12.2). Most of the jobs (80% in 2003) in the culture sector were full-time. From 1996 to 2003, employment in the culture sector increased 9%, which was lower than the 11% growth in provincial employment. Culture employment declined for most of these years, except for 1998, 2001 and 2002.

The province reported a slight fall in its share of culture employment in Canada, from 13% in 1996 to 12% in 2003, due to the sluggish pace of job creation. Growth in the province's culture employment was the fifth largest in Canada and was lower than the growth in culture sector output. Culture output grew almost five times more than culture employment from 1996 to 2003.

Even though a majority of culture workers in British Columbia were employed in the private sector, the proportion declined from 66% in 1996 to 61% in 2003 (Table 12.2). Over the same period, the proportion of self-employed culture workers increased from 31% to 37%. Compared to other provinces, British Columbia had the largest proportion of culture workers in Canada who were self-employed in 2003.

Film reported the largest increase in employment

Film is composed of establishments engaged in creation, production and manufacturing of motion pictures, films and videos, and was the second largest culture employer in British Columbia. Compared to other culture sub-sectors, *Film* experienced the largest increase in culture employment in the province. Employment more than doubled from 4,400 workers in 1996 to 11,400 workers in 2003, which led to an increase in this sub-sector's share of culture sector employment from 6% to 15% (Table 12.2). Most of the growth in employment was in full-time and freelance jobs, while part-time employment dropped. The main reason behind the rise of employment in *Film* was the emergence of the province, particularly the Vancouver area, as the largest venue of foreign film production in Canada. In 2002, the province

produced more than 44% of all foreign films in Canada.⁴ British Columbia is now considered the third largest film production region in North America.⁵ However, the increase in employment in *Film* was not evident in every year – employment fell in 2001 and 2002.

Most of the culture sub-sectors in British Columbia enjoyed increases in employment from 1996 to 2003. However, some sub-sectors reported declines in employment – such as *Design* (-4%).

Most of the culture output and employment came from establishments engaged in production activities

Establishments engaged in production contributed a substantial part of the employment and output in the culture sector in British Columbia. In 2003, these firms accounted for 48% of total output, and 42% of employment in the culture sector (Table 12.3). Establishments engaged in creation activities generated approximately \$850 million in output and employed 22,300 workers.

All components of British Columbia's culture sector showed gains in output from 1996 to 2003 (Table 12.3). Manufacturing firms saw the largest increases in culture output (79%), whereas firms involved in creation activities saw the smallest increases (30%) over the period. However, the scenario was different in the case of culture employment, where job losses over this period occurred in production (-6%) and support (-1%). Job growth was experienced in only creation (47%), distribution (10%) and manufacturing (4%) activities.

Endnotes

1. This sub-sector includes libraries, archives and news syndicates.
2. Broadcasting was the biggest recipient of federal culture spending in British Columbia accounting for 36% of all federal spending in 2003.
3. The trade numbers refers to origin and destination and do not necessarily mean that they are consumed or produced in the exporting and importing province.
4. See Film BC website, <http://film.bc.ca>
5. Film BC, <http://film.bc.ca> and Statistics Canada, Film, Video and Audio-visual Production Survey, *The Daily*, 18 July 2006. <http://www.statcan.ca/Daily/English/060718/d060718a.htm>

Table 12.1
Output by culture category, British Columbia, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
	\$ millions							
Written media	1,130	1,175	1,305	1,245	1,427	1,590	1,668	1,720
Broadcasting	623	696	675	665	723	794	915	964
Film industry	250	260	298	383	419	422	447	497
Advertising	231	244	244	263	288	287	288	313
Performing arts	205	188	201	218	172	180	192	179
Visual arts	164	149	152	177	166	139	138	178
Heritage	133	139	145	150	154	171	160	171
Libraries	168	168	167	167	164	163	162	161
Architecture	85	73	98	90	117	105	109	135
Design	114	119	121	111	116	120	124	122
Sound recording and music publishing	89	116	119	71	80	84	87	93
Photography	44	31	31	43	43	40	45	46
Festivals	4	4	6	6	7	8	9	10
Support services	392	467	435	447	575	556	606	603
Culture output, all categories	3,630	3,829	3,997	4,036	4,450	4,659	4,950	5,194
Provincial GDP	100,090	104,554	104,762	109,873	119,842	123,011	128,127	135,613
Per-capita federal spending on culture (\$)	38	33	38	36	39	39	44	49
Per-capita provincial spending on culture (\$)	71	67	72	74	76	75	62	58
Per-capita municipal spending on culture (\$)	76	74	69	72	71	77	77	75
Culture output as percentage of provincial GDP (%)	3.6	3.7	3.8	3.7	3.7	3.8	3.9	3.8

Notes: Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage. As data on tax credits are not included in the expenditure data, estimates will be somewhat under-estimated. Estimates on government expenditures are revised as more robust data becomes available. Data may not add up due to rounding.

Source: Culture Statistics Program, Statistics Canada.

Table 12.2
Employment by culture category, British Columbia, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Written media	18,800	18,700	19,200	17,100	19,300	19,400	19,900	19,800
Film industry	4,400	6,300	8,200	8,700	10,800	10,700	10,500	11,400
Broadcasting	7,400	7,000	7,800	7,900	8,300	9,100	9,800	8,700
Design	7,000	4,300	6,400	7,600	7,000	7,100	5,500	6,700
Heritage	5,600	5,700	5,900	6,300	6,000	6,000	5,700	6,100
Libraries	F	F	F	F	F	F	F	F
Performing arts	F	F	4,500	F	F	x	4,800	F
Architecture	x	x	F	x	x	F	F	F
Advertising	F	F	4,500	4,400	F	F	F	F
Visual arts	F	F	F	F	x	F	x	F
Photography	x	x	F	x	x	x	F	x
Sound recording and music publishing	F	F	4,600	F	x	x	x	x
Festivals	300	300	400	400	400	500	500	500
Support services	8,700	7,500	6,600	8,300	9,500	7,900	7,600	8,600
Culture employment, all categories	71,900	67,300	80,400	76,000	74,900	75,500	79,800	78,000
Provincial employment	1,813,300	1,854,000	1,853,500	1,893,100	1,930,000	1,922,100	1,960,100	2,014,200
Culture employment as a percentage of provincial employment	4.0	3.6	4.3	4.0	3.9	3.9	4.1	3.9
Full time employment in culture sector (%)	81	77	80	80	81	77	78	80
Percentage of culture workers in the public sector	3	2	2	2	2	2	1	2
Percentage of culture workers in the private sector	66	66	62	61	65	64	63	61
Percentage of culture workers self-employed	31	31	36	37	34	35	36	37

x suppressed to meet the confidentiality requirements of the *Statistics Act*

F too unreliable to be published

Notes: Employment estimates rounded to the nearest hundred.

Data may not add up due to rounding.

Festival data only include those festivals that received funding from the Culture Initiatives Program of Department of Canadian Heritage.

Source: Culture Statistics Program, Statistics Canada.

Table 12.3
Culture output and employment by economic activity, British Columbia, 1996 to 2003

	1996	1997	1998	1999	2000	2001	2002	2003
Culture output (\$ million)								
Creation	653	663	703	740	781	794	792	847
Production	1,790	1,858	2,005	2,002	2,083	2,221	2,387	2,479
Support	392	467	435	447	575	556	606	603
Manufacturing	361	374	387	410	531	559	581	647
Distribution	435	466	466	436	480	529	585	618
Total activity	3,630	3,829	3,997	4,036	4,450	4,659	4,950	5,194
Culture employment								
Creation	15,200	14,500	21,000	16,400	16,400	18,100	22,300	22,300
Production	34,400	31,700	38,900	36,300	31,600	32,900	35,300	32,500
Support	8,700	7,500	6,600	8,300	9,500	7,900	7,600	8,600
Manufacturing	5,200	4,900	4,800	5,200	6,700	5,700	5,300	5,400
Distribution	8,400	8,700	9,100	9,800	10,700	10,900	9,300	9,200
Total activity	71,900	67,300	80,400	76,000	74,900	75,500	79,800	78,000

Notes: Data may not add up due to rounding.

Employment estimates rounded to the nearest hundred.

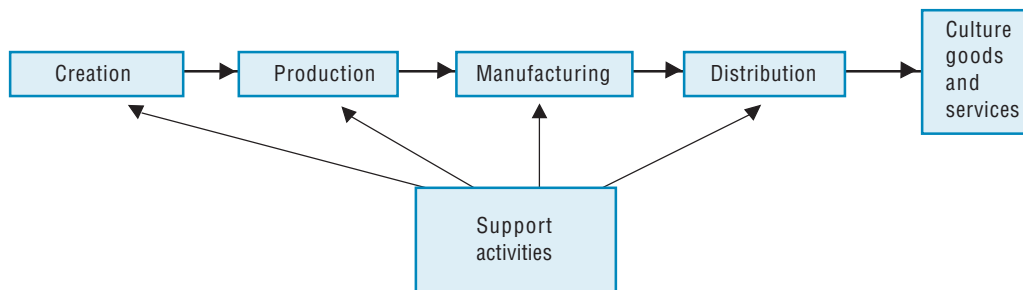
Source: Culture Statistics Program, Statistics Canada.

Appendix A: Creative chain¹

The creative chain

To be consumed, a culture good or service must first be created, produced, perhaps manufactured, and distributed to consumers. This is illustrated in Figure 1 as a creative chain.

Figure 1
Creative chain



This creative chain includes a number of distinct steps or activities, each of which occurs in establishments that can be assigned an industrial classification. These steps include the following:

- **Creation** – These are establishments involved in the development of a creative artistic idea. This would include, for instance, independent artists, writers and performers (NAICS 71151). Much of this creative activity, however, can be undertaken in other establishments whose primary activity is something other than creation (for example, newspapers).
- **Production** – These include establishments involved primarily in the act or process of producing a creative good or service that can be readily identified. Goods are tangible (books, magazines, sound recording) while services are intangible (concerts, theatre performances, or exhibitions at an art gallery).
- **Manufacturing** – These are establishments involved in the mass reproduction of culture core goods (film duplication, printing, visual arts posters) from a master copy. They can be distinguished from those engaged in production as they do not add value to the culture content of the good.
- **Distribution** – These include establishments that distribute core culture goods, the mass distribution of visual arts and photography to a variety of players such as wholesalers and retailers, radio and television broadcasters, or the Internet.

- **Support activities** – In addition, there are activities related to culture that help to finance or support creation and production (copyright collectives, agents, managers, promoters).

There is not always a clean differentiation among the activities in culture establishments. For instance, creation can be undertaken by culture establishments whose principal activity is not creation (e.g. production). In such cases, creation is called a secondary activity, and is included, but separately reported in the results for that establishment. Similarly, some establishments whose primary activity is culture may have secondary non-culture activities (e.g. accounting) that are included but separately reported in the measurement of culture statistics. Finally, there are non-culture establishments (e.g. automobile manufacturing) that also include culture activities (e.g. design) that are not included in culture statistics.

In addition, there may be some products that do not flow through all steps in the creative chain. An original artwork, for instance, may not be mass produced (i.e. manufactured).

Example of the creative chain

The creative chain can be applied, in whole or in part, to all culture goods and services. Take, for instance, books:

- **Creation** – The book is written by a self-employed writer (NAICS 71151).
- **Production** – The book is produced by a book publisher (NAICS 51113), who provides value-added to the content of the product (i.e. editorial services).
- **Manufacturing** – The mass reproduction of the book is undertaken by a printer (NAICS 32311)
- **Distribution** – Books are distributed by book wholesalers (NAICS 41442) and retailed through various retailers such as book stores (NAICS 451210), general merchandise stores (NAICS 452), and electronic shopping and mail-order houses (NAICS 454110).
- **Support services** – A number of industries provide support to different elements on the creative chain. In addition to support activities related to printing (NAICS 32312), these include agents and managers (NAICS 71151) and organizations representing publishers and writers (NAICS 81390).

Heritage – a special case

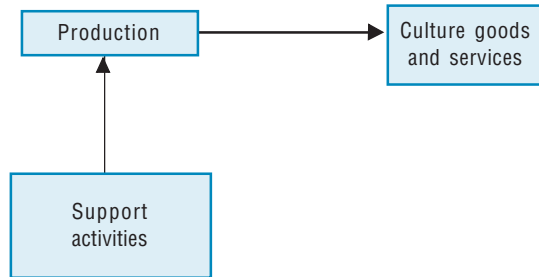
The creative chain works best for physical goods. Some modification is required for culture services, especially those related to the preservation of human heritage.

A number of activities are undertaken in the production of these services. An artefact is first recognized (i.e. discovered or identified). It is then conserved (i.e. repaired, restored or stabilized), interpreted and presented. In this case, creation, manufacturing and distribution activities are not relevant. All of the activities involved

in the production and the delivery of that service are located within the same establishment, which carries an industrial classification that describes these activities. The result is a simplified creative chain.

Figure 2

Heritage services



In the case of heritage services, two issues remain. One issue is the discovery and preservation of heritage objects that may not necessarily ever be displayed. Another issue concerns the preservation of built heritage that is undertaken by establishments and individuals which are outside this sector (see Appendix B).

Endnote

1. Statistics Canada (2004), "Canadian Framework for Culture Statistics," Research Paper Series, Catalogue no. 81-595-MIE2004021, Statistics Canada, available at: <http://dissemination.statcan.ca:8083/english/research/81-595-MIE/81-595-MIE2004021.pdf>.

Appendix B: Definition of culture

Defining the culture sector

The creative chain describes the activities that occur in order to deliver a final product for consumption. These activities are classified into industries as defined by the NAICS nomenclature. The set of industries that form the creative chain constitute the culture sector. The industries that are involved in the creation, production, manufacturing, distribution and preservation of core culture goods are the core culture sector. Likewise those involved in the creation, production, manufacturing and distribution of non-core products are in the non-core culture sector.

Appendix B outlines the culture goods and services (the industries involved in their creation, production, manufacture and distribution, as well as the associated support services) that constitute the culture sector for statistical purposes. It also maps these goods and services into the creative chain.

The Culture Sector

Defined using North American Industry Classification System (NAICS) codes

Written and published works

Creation	Production	Manufacturing	Distribution	Support services
71151 Independent artists, writers, performers	51111 Newspaper publishers	323113 Commercial screen printing	41442 Book, periodical and newspaper wholesalers	61161 Fine arts schools
	51112 Periodical publishers	323114 Quick printing	45121 Book stores and news dealers	71141 Agents and managers for artists, athletes, entertainers and other public figures
	51113 Book publishers	323115 Digital printing		81321 Grant making and giving services
	51119 Other publishers	323119 Other printing		81331 Social advocacy organizations
	51611 Internet publishing and broadcasting	32312 Support activities for Printing. This industry comprises establishments primarily engaged in providing support services to commercial printers, such as pre-press and bindery work.		8139 Business, professional, labour and other membership organizations

Film and video

Creation	Production	Manufacturing	Distribution	Support services
71151 Independent artists, writers, performers	51211 Motion picture and video production	33461 Manufacturing and reproducing magnetic and optical media	41445 Video cassette wholesalers	61161 Fine arts schools
		51219 Post-production and other motion picture and video industries	45122 Pre-recorded tape, compact disc and record stores	71141 Agents and managers for artists, athletes, entertainers and other public figures
			51212 Motion picture and video distribution	81321 Grant making and giving service
			51213 Motion picture and video exhibition	81331 Social advocacy organizations
			53223 Video tape and disc rental	8139 Business, professional, labour and other membership organizations

Broadcasting

Creation	Production	Manufacturing	Distribution	Support services
71151 Independent artists, writers, performers	51511 Radio broadcasting		51511 Radio broadcasting	61161 Fine arts schools
	51512 Television broadcasting		51512 Television broadcasting	71141 Agents and managers for artists, athletes, entertainers and other public figures
	5152 Pay and specialty television		5175 Cable and other program distribution	81321 Grant making and giving services
	51611 Internet publishing and broadcasting			81331 Social advocacy organizations
				8139 Business, professional, labour and other membership organizations

Note: Establishments involved in Radio and television broadcasting are involved in both production and distribution.

The Culture Sector – continued**Sound recording and music publishing**

Creation		Production		Manufacturing		Distribution		Support services	
71113	Musical groups and artists	51221	Record production	33461	Manufacturing and reproducing magnetic and optical media	41444	Sound recording wholesalers (rack-jobbers)	45114	Musical instruments and supplies stores
71151	Independent artists, writers, performers	51222	Integrated record production and distribution	51222	Integrated record production and distribution	45122	Pre-recorded tape, compact disc and record stores	61161	Fine arts schools
		51224	Sound recording studios					71141	Agents and managers for artists, athletes, entertainers and other public figures
		71113	Promoters (presenters) of performing arts, sports and similar events	51223	Music publishers – publishing and printing combined	51222	Integrated record production and distribution	81321	Grant making and giving services
								81331	Social advocacy organizations
								8139	Business, professional, labour and other membership organizations

Performing arts

Creation		Production		Manufacturing		Distribution		Support services	
71113	Musical groups and artists	71111	Theatre companies (including musical theatre and opera companies) and dinner theatres			711321	Performing arts promoters (presenters) without facilities	45114	Musical instruments and supplies stores
71151	Independent artists, writers, performers	71112	Dance companies					61161	Fine arts schools
		71119	Other performing arts companies (including circuses, magic shows, ice shows, puppet theatre, mime shows)					71141	Agents and managers for artists, athletes, entertainers and other public figures
		711311	Live theatre and other performing arts producers (presenters) with facilities					81321	Grant making and giving services
								81331	Social advocacy organizations
								8139	Business, professional, labour and other membership organizations

Visual art (original art)

Creation		Production		Manufacturing		Distribution		Support services	
71151	Independent artists, writers, performers					45392	Art dealers – Retailing of original works of art	61161	Fine arts schools
								81321	Grant making and giving services
								81331	Social advocacy organizations
								8139	Business, professional, labour and other membership organizations

The Culture Sector – continued

Visual art – other (non-core)

Creation		Production		Manufacturing		Distribution		Support services	
71151	Independent artists, writers, performers	32711	Pottery, ceramics and plumbing fixture manufacturing Includes organizations engaged in the mass-production of collector plates (Bradford Exchange, Franklin Mint, etc.) and figurines, statues and statuettes: china, porcelain, ceramic, wood, metal).	323113	Commercial screen printing Includes establishments engaged in the manufacturing of mass-produced visual arts goods.	45392	Art dealers - Retailing of original works of art	61161	Fine arts schools
								81321	Grant making and giving services
								81331	Social advocacy organizations
								8139	Business, professional, labour and other membership organizations

Architecture (non-core)

Creation		Production		Manufacturing		Distribution		Support services	
54131	Architectural services							81321	Grant making and giving services
54132	Landscape architectural services							81331	Social advocacy organizations
								8139	Business, professional, labour and other membership organizations

Photography

Creation		Production		Manufacturing		Distribution		Support services	
54192	Photographic services	812921	Photo finishing laboratories (except one hour)			45392	Art dealers - Retailing of original works of art	61161	Fine arts schools
								81321	Grant making and giving services
								81331	Social advocacy organizations
								8139	Business, professional, labour and other membership organizations

Design (non-core)¹

Creation		Production		Manufacturing		Distribution		Support services	
54141	Interior design services								
54142	Industrial design services								
54143	Graphic design services								
54149	Other specialized design services								

The Culture Sector – concluded

Advertising (non-core)

Creation ²	Production	Manufacturing	Distribution	Support services
54143 Graphics design services	54181 Advertising agencies		54183 Media buying agencies	
	54185 Display advertising		54184 Media representatives	
541899 All other services related to advertising	54186 Direct mail advertising		54187 Advertising material distribution services	
	541891 Specialized advertising distributors		541899 All other services related to advertising	

Festivals

Creation	Production	Manufacturing	Distribution	Support services
7111 Performing arts companies	711322 Festivals without facilities			81321 Grant making and giving services
71113 Musical groups and artists				81331 Social advocacy organizations
				8139 Business, professional, labour and other membership organizations

Heritage

Creation	Production	Manufacturing	Distribution	Support services
	71211 Museums			81321 Grant making and giving services
	71212 Heritage and historic sites			81331 Social advocacy organizations
	71213 Zoos and botanical gardens			8139 Business, professional, labour and other membership organizations
	71219 Other heritage institutions			

Other information services

Creation	Production	Manufacturing	Distribution	Support services
51911 News syndicates	519121 Libraries			81321 Grant making and giving services
	519122 Archives			81331 Social advocacy organizations
				8139 Business, professional, labour and other membership organizations

1. The cultural output of this industry – the design – is an intermediate input to a non-cultural output. In this instance, production, manufacturing, distribution and support services are not appropriate.
2. A number of industries in production are also involved in creation, including advertising agencies, direct mail advertising and display advertising.

Appendix C: Standard Occupational Classification (SOC) – Culture occupations as defined by the Canadian Framework for Culture Statistics

I Culture occupations

a) Creative and artistic production occupations

C051	Architects
C052	Landscape architects
C152	Industrial designers
F021	Writers
F022	Editors
F023	Journalists
F031	Producers, directors, choreographers and related occupations
F032	Conductors, composers and arrangers
F033	Musicians and singers
F034	Dancers
F035	Actors
F036	Painters, sculptors and other visual artists
F121	Photographers
F132	Other performers
F141	Graphic designers and illustrating artists
F142	Interior designers
F143	Theatre, fashion, exhibit and other creative designers
F144	Artisans and crafts persons

b) Heritage collection and preservation occupations

F011	Librarians
F012	Conservators and curators
F013	Archivists

II Culture support occupations

a) Cultural management

- A341 Library, archive, museum and art gallery managers
- A342 Managers in publishing, motion pictures, broadcasting and performing arts
- B413 Supervisors, library, correspondence and related information clerks

b) Technical and operational occupations

- B551 Library clerks
- B552 Correspondence, publication and related clerks
- C125 Landscape and horticultural technicians and specialists
- C151 Architectural technologists and technicians
- C153 Drafting technologists and technicians
- F024 Professional occupations in public relations and communications
- F025 Translators, terminologists and interpreters
- F111 Library and archive technicians and assistants
- F112 Technical occupations related to museums and galleries
- F122 Film and video camera operator
- F123 Graphic arts technicians
- F124 Broadcast technicians
- F125 Audio and video recording technicians
- F126 Other technical occupations in motion pictures, broadcasting and the performing arts
- F127 Support and assisting occupations in motion pictures, broadcasting and the performing arts
- F131 Announcers and other broadcasters
- F145 Patternmakers, textile, leather and fur products

c) Manufacturing occupations

- B523 Typesetters and related occupations
- H018 Supervisors, printing and related occupations
- H521 Printing press operators
- J181 Printing machine operators
- J182 Camera, platemaking and other pre-press occupations
- J183 Binding and finishing machine operators
- J184 Photographic and film processors

Appendix D: Household spending on culture activities

Table D1
Canada

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Heritage	213	403	421	442	462	436	492	493	132
Broadcasting	3,260	3,650	4,037	4,456	4,896	5,426	5,817	6,542	101
Performing arts	765	896	868	883	993	968	1,161	1,170	53
Written media	3,874	4,378	4,510	4,737	4,869	4,949	5,093	5,315	37
Library	125	143	131	134	136	123	164	155	24
Photography	1,191	1,338	1,341	1,459	1,482	1,486	1,584	1,466	23
Film industry	3,711	3,754	3,997	4,229	4,203	4,649	4,411	4,484	21
Visual arts	915	520	815	616	721	818	806	804	-12
Total	14,054	15,082	16,120	16,955	17,762	18,854	19,527	20,430	45

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Table D2
Newfoundland and Labrador

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Heritage	2	3	4	4	3	3	4	4	148
Performing arts	5	6	7	7	7	8	10	12	120
Broadcasting	63	70	75	84	91	98	103	117	85
Photography	18	19	19	22	23	22	22	24	31
Written media	60	69	74	75	79	71	72	77	28
Library	1	1	2	1	1	1	1	1	17
Film industry	58	51	54	58	56	60	55	56	-4
Visual arts	9	3	6	6	9	12	8	6	-28
Total	217	223	241	257	270	275	275	297	37

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Table D3
Prince Edward Island

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Heritage	0	1	1	1	1	1	1	1	178
Broadcasting	13	17	17	20	23	25	28	31	146
Library	0	1	1	1	1	0	1	1	139
Visual arts	1	1	1	1	1	1	3	2	107
Performing arts	2	2	2	2	2	2	2	3	77
Photography	5	5	6	6	7	6	7	7	42
Written media	15	18	17	18	20	19	20	20	30
Film industry	16	14	16	14	17	17	16	16	1
Total	52	58	61	63	72	72	78	81	55

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Table D4
Nova Scotia

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Heritage	5	10	11	11	11	12	10	13	150
Broadcasting	100	115	131	144	161	175	210	228	127
Performing arts	13	16	17	16	15	18	17	21	60
Library	2	4	4	3	4	3	3	3	45
Photography	31	37	39	40	42	41	44	44	41
Visual arts	18	12	21	8	12	20	24	24	32
Written media	121	138	130	145	136	137	139	156	29
Film industry	107	104	115	110	114	124	110	126	19
Total	398	436	469	477	495	530	557	616	55

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Table D5
New Brunswick

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Performing arts	9	11	10	12	12	10	14	17	97
Broadcasting	87	89	103	112	120	137	144	162	87
Heritage	4	7	7	6	7	7	7	8	77
Written media	88	94	99	102	96	105	101	114	29
Photography	26	30	30	32	35	31	36	33	25
Film industry	74	77	77	82	81	83	80	83	13
Library	1	2	1	1	3	2	3	1	13
Visual arts	15	5	5	9	5	13	8	5	-69
Total	304	316	332	356	357	389	392	423	39

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Table D6
Quebec

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Library	13	27	17	21	21	18	32	28	117
Heritage	46	75	79	72	74	70	84	92	102
Performing arts	151	191	189	203	208	218	271	263	75
Broadcasting	776	881	957	972	1,104	1,134	1,235	1,303	68
Film industry	815	894	940	969	984	1,025	1,006	1,019	25
Written media	985	1,110	1,088	1,169	1,097	1,106	1,147	1,225	24
Photography	209	225	210	238	222	221	246	242	15
Visual arts	111	51	89	41	63	105	74	92	-17
Total	3,106	3,455	3,569	3,685	3,775	3,898	4,095	4,266	37

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Table D7
Ontario

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Heritage	86	176	183	199	215	194	217	221	157
Broadcasting	1,222	1,379	1,503	1,725	1,870	2,167	2,196	2,611	114
Written media	1,465	1,671	1,751	1,817	1,953	1,948	2,053	2,159	47
Performing arts	356	390	361	364	446	427	538	518	45
Photography	446	525	538	569	617	358	671	595	33
Library	45	51	47	53	59	45	59	56	25
Film industry	1,389	1,323	1,456	1,584	1,625	1,660	1,702	1,723	24
Visual arts	410	181	379	306	333	343	410	374	-9
Total	5,420	5,695	6,218	6,619	7,119	7,575	7,846	8,258	52

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Table D8
Manitoba

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Heritage	7	15	16	16	17	19	17	16	117
Broadcasting	112	129	141	167	186	196	218	237	112
Performing arts	23	35	33	31	33	29	36	40	75
Written media	138	152	160	169	179	176	179	193	39
Photography	48	55	54	62	61	60	58	63	32
Film industry	151	158	150	168	149	161	148	157	4
Visual arts	34	14	22	13	22	24	19	17	-49
Library	16	4	9	4	5	6	6	5	-67
Total	529	561	585	631	652	670	682	728	38

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Table D9
Saskatchewan

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Broadcasting	92	113	132	149	163	184	210	233	152
Heritage	8	15	15	15	12	16	17	15	83
Performing arts	17	21	22	22	22	23	25	26	53
Written media	114	126	121	138	142	139	151	160	41
Film industry	90	123	127	130	116	132	122	120	33
Photography	48	53	54	58	56	55	64	54	12
Library	6	5	4	5	5	4	5	4	-26
Visual arts	22	11	12	23	16	20	24	15	-33
Total	397	467	487	539	531	573	618	627	58

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Table D10
Alberta

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Broadcasting	269	329	383	443	472	539	602	676	151
Heritage	26	56	54	65	64	71	64	65	149
Performing arts	75	104	100	95	115	114	114	113	51
Photography	147	165	176	192	195	197	194	204	39
Written media	396	450	484	522	536	525	553	547	38
Library	15	23	20	24	18	19	19	20	34
Film industry	453	461	497	515	501	603	556	564	25
Visual arts	107	78	58	80	81	131	98	86	-19
Total	1,487	1,666	1,772	1,937	1,983	2,199	2,201	2,277	53

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Table D11
British Columbia

	1996	1997	1998	1999	2000	2001	2002	2003	Percentage change (1996 to 2003)
\$ millions									
Heritage	27	41	50	46	48	47	65	60	123
Broadcasting	465	515	580	629	695	752	851	934	101
Performing arts	113	121	125	130	119	109	126	151	33
Visual arts	116	131	200	98	118	141	122	151	30
Written media	492	544	599	571	616	638	639	636	29
Film industry	515	529	555	583	539	668	605	604	17
Photography	204	220	218	229	217	232	234	201	-1
Library	27	26	26	20	22	18	38	24	-9
Total	1,959	2,127	2,353	2,306	2,373	2,605	2,702	2,762	41

Source: Survey of Household Spending / Family Expenditure Survey, Statistics Canada.

Appendix E: Methodology

Measurement of Output or Gross Domestic Product (GDP)

Value added for a country as a whole is often described as its gross domestic product. GDP or output is calculated by measuring the gross value of production of each industry and subtracting each industry's costs of production in the form of its purchases from other industries. The residual amount indicates how much value the industry itself has added. Where possible, outputs derived from the *Value added* method are used to estimate output levels of culture industries. However, since GDP data is not always available at the level of industry detail necessary for measuring culture, it was not always possible to use this "pure value added" approach to calculate output for some culture categories. For example, the use of manufacturing data to estimate manufacturing activities involved the use of a measure of 'manufacturing valued added.' This is because the annual survey of manufactures does not collect information on purchases of services as a regular part of the census. As a result, the value added used is not measured net of most purchases of services or indirect taxes (such as property taxes). In this instance, the only inputs deducted from gross output in obtaining value added are purchased commodities or products, including energy. Other forms of data are also used in the paper to approximate a measure of 'value added', and are identified in the detailed methodology.

Measurement of Employment

Employment data are obtained from a number of different sources at Statistics Canada and elsewhere. Where possible, a description of what the data represents is included. For example, employment data from Labour Statistics Division refers to the civilian non-institutional population 15 years of age and over, who, during the survey reference week, worked for pay or were self-employed; whereas employment data from CTCES surveys refers to persons drawing pay for service rendered or for paid absence and for whom the employer are required to complete a Canada Revenue Agency T-4 form.

It should be noted that the employment levels associated with culture workers who work in non-culture industries are not estimated since these jobs are in industries clearly outside the framework. However, non-culture workers who are employed in culture industries are included in the employment estimates. The contributions of volunteer workers are not presented in this report.

Data Sources

Employment and Output data used throughout the paper came from a number of different surveys. For example, GDP contributions of the culture sector are estimated by Industry Accounts Division and are released on CANSIM on the following tables: 379-0017, 379-0025, 301-0003. Other data sources used to tabulate output are the culture surveys from Culture, Tourism, and the Centre for Education Statistics, and are released in various Catalogues. Some employment data came from Labour Statistics Division and Distributive Trades Division. Data used in the paper contains published as well as unpublished data by this division. Additionally, some external data sources were also used in the paper, such as the National Core Library Statistics Program (NCLSP) for the *Libraries* category and data from the Department of Canadian Heritage for the *Festival* category. For a complete listing of data sources see, Appendix F entitled 'Data Sources'.

Estimation by Culture Category

1. Written media

Written media creation: includes the activities of establishments primarily engaged in NAICS 71151 *Independent Artists, Writers and Performers*.

Output

GDP data is not available at this level of industry detail. The portion of output for NAICS 7115 is estimated by applying an approximated output share for NAICS 7115 to the aggregated GDP value from NAICS 71 Arts, Entertainment and Recreation. The proxy output share represents an employment share, derived using labour force data from NAICS 7115 and NAICS 71 for the following SOC occupations: F021 Writers, F022 Editors, F023 Journalists, and F025 Translators.

Output for the creation portion of NAICS 7115 for written media is obtained by applying an approximated output share for creation activities to the derived output for NAICS 7115. The proxy output share is estimated using employment data, for NAICS 7115, for the following SOC occupations: F021 Writers, F022 Editors, F023 Journalists, F025 Translators.

Provincial level breakouts for the creation portion of written media are derived by applying provincial share estimates to the output value for NAICS 7115 creation. The provincial shares were calculated using aggregated GDP level estimates, distributed by province, from NAICS 71 (Arts, Entertainment and Recreation) estimated by Industry Accounts Division.

Employment

Employment estimates for written media creation represents workers employed in the *Independent Artists, Writers and Performers* industry (NAICS 7115), in the following occupations: F021 Writers, F022 Editors, F023 Journalists, F025 Translators.

Written media production: includes the activities of establishments primarily engaged in NAICS 51111 Newspaper Publishers, NAICS 51112 Periodical Publishers, NAICS 51113 Book Publishers, NAICS 51119 Other Publishers and NAICS 51611 Internet Publishing and Broadcasting.

Data for the required individual NAICS categories are not available at the industry (5 digits) level of detail. An aggregated output estimate for NAICS 511 Publishing Industries (except Internet) is used to approximate the employment and output estimates for written media production. As a result, data values for NAICS 51114 Directory and Mailing List Publishers are included in the estimates and may lead to an overestimation of output and employment for written media production. Industry data is not available for NAICS 51611; hence, data for this industry is not included in the employment and output estimates for production activities.

Output

Output for NAICS 511 – excluding NAICS 5112 – is estimated by the Industry Accounts Division. The current price estimates of Gross Domestic Product (GDP) at basic prices by industry are measured directly by summing the factor incomes and depreciation or indirectly by deducting the cost of the intermediate goods and services used in the production process from the value of gross production or output. NAICS 5112 is not part of written media production, and hence the portion of GDP attributed to this industry was subtracted from the GDP for NAICS 511 Publishing

Industries (except Internet). GDP from NAICS 5112 was estimated by applying an approximated output share for the industry to the total output for NAICS 511 using employment data.

Provincial level output data are allocated by applying an estimated percentage share of output, by province, to the summary output estimate of the production portion of written media. Shares for each province are calculated using aggregated GDP level estimates, by province, from the combined GDP from NAICS 511 and NAICS 514 Information Services and Data Processing Services estimated by the Industry Accounts Division of Statistics Canada.

Employment

Employment estimates for written media production represents workers employed in the *Newspaper, Periodical, Book and Database Publishers* industry (NAICS 5111).

Provincial level employment data are allocated by applying an estimated percentage share of employment, by province, to the summary employment estimate for written media production. Shares for each province are calculated based on employment data from NAICS 511 and NAICS 514 Publishing Industries, Information Services and Data Processing Services, by province, available from Labour Statistics Division of Statistics Canada.

Written media manufacturing: includes the activities of establishments primarily engaged in NAICS 323113, *Commercial Screen Printing*, NAICS 323114, *Quick Printing*, NAICS 323115, *Digital Printing*, NAICS 323119, *Other Printing*, and NAICS 32312, *Support Activities for Printing*.

Data for the required individual NAICS categories are not available at the industry (5 digits) level of detail. An aggregated output estimate for NAICS 32311 and NAICS 32312 is used to approximate the employment and output estimates for written media manufacturing. As a result, data values for NAICS 323116 (Manifold Business Forms Printing) are included in the estimates and may lead to an overestimation of output and employment for written media manufacturing.

Output

Output estimates for the manufacturing portion of written media represents manufacturing value added for NAICS 32311 and NAICS 32312. The annual survey of manufactures does not collect information on the purchases of services as a regular part of the census, hence it is not possible to derive 'pure value added' that is normally associated with gross domestic output. In this instance, the only inputs deducted from gross output in obtaining value added are purchased commodities or products, including energy. That is to say, value added is not measured net of most purchases of services or indirect taxes (such as property taxes) as in other measures of output used in the paper. This may lead to double-counting in the national estimates.

Employment

Employment estimates for the manufacturing portion of written media represents production workers employed in NAICS 32311 (Printing) and NAICS 32312 (Support Activities for Printing.)

Written media distribution: includes the activities of establishments primarily engaged in NAICS 41442, *Book, Periodical and Newspaper Wholesalers-Distributors* and NAICS 45121, *Book Stores and News Dealers*.

Output

Output estimates of written media distribution are derived by applying an estimated share of output for NAICS 41442 to the GDP value from total wholesale trade (NAICS 41). The industry output share is estimated using total operating revenue data from wholesale trade, by industry. Provincial level output is allocated by applying an estimated percentage share of output, by province, to the summary output estimate for written media distribution. Shares for each province are calculated based on GDP data for the wholesale sector, by province, available from the Industry Accounts Division of Statistics Canada. A similar technique is used to estimate the retail portion of output for written media (NAICS 45121) distribution, using retail trade GDP and net operating revenues from retail industries.

Employment

Employment estimates for written media distribution are derived by applying an estimated share of employment for NAICS 41442 to the total employment value from wholesale trade. The industry employment share is estimated using total operating revenue data from wholesale trade, distributed by industry. A similar technique is used to estimate the retail portion of employment for written media (NAICS 45121) distribution, using retail trade GDP and net operating revenues from retail industries.

Provincial level employment data are allocated by applying an estimated percentage share of employment, by province, to the summary employment estimate for visual arts distribution. Employment shares for each province are estimated based on employment data from wholesale trade, by province, by Labour Statistics Division.

2. Film and video

Film and video creation: includes the activities of establishments primarily engaged in NAICS 71151, Independent artists, writers and performers.

Output

GDP data are not available at this level of industry detail. Output for NAICS 7115 is estimated by applying an approximated output share for NAICS 7115 to the aggregated GDP value from NAICS 71 Arts, Entertainment and Recreation. The proxy output share represents an employment share, derived using Labour force data from NAICS 7115 and NAICS 71 for the following SOC occupations: F021 Writers, F022 Editors, F023 Journalists, and F025 Translators.

Output for the creation portion of NAICS 7115 for written film and video is obtained by applying an approximated output share for creation activities to the derived output for NAICS 7115. The proxy output share is estimated using employment data, for NAICS 7115, for the following occupations: F031 Producers, directors, F035 Actors, F123 Film and Video Camera operators, F125 Audio and Video Recording Technicians, F126 Other Technical Occupations, and F127 Support and Assisting Occupations in Motion Pictures.

Provincial level breakouts for the creation portion of film and video are derived by applying provincial share estimates to the output value for NAICS 7115 creation. The provincial shares were calculated using aggregated GDP level estimates, distributed by province, from NAICS 71 (Arts, Entertainment and Recreation), available from Industry Accounts Division.

Employment

Employment estimates for film creation represents workers employed in the Independent Artists, Writers and Performers industries in the following occupations: F031, F035, F122, F125, F126, and F127.

Film and video production: includes the activities of establishments primarily engaged in NAICS 51211 Motion Picture and Video Production.

Output

Respondent data from the *Film, Video and Audio-Visual Production Survey* was used as a proxy for NAICS 51211. The last available data from the survey was for 2001. Data for 2002 and 2003 was estimated based on an annualized rate of growth for the years 1996-1999. Caution should be used when interpreting these numbers as the population surveyed is based on type of activity rather than primary activity or industry. This may lead to inconsistencies in coverage for this industry.

Output data for NAICS 51211, for each province, was estimated based on the following formula: Total revenue less total operating expenses + Total Salaries and Wages + depreciation.

Employment

Employment estimates for film production represents the sum of full time, part-time, free-lancers, and working proprietors reporting employment in the Film, Video and Audio-Visual Production Survey.

Film and video manufacturing: includes the activities of establishments primarily engaged in NAICS 33461, *Manufacturing and Reproducing Magnetic and Optical Media*, and NAICS 51219, *Post-production and Other Motion Picture and Video Industries*. Respondent data from the *Film, Video and Audio-Visual Post Production Survey* is used as a proxy for NAICS 51219. Caution should be used when

interpreting these numbers as the population surveyed is based on type of activity rather than primary activity or industry. This may lead to inconsistencies in coverage for this industry. The culture framework classifies NAICS 33461 to both film and video manufacturing and sound recording and music publishing manufacturing, hence, 50% of the employment and output estimates of NAICS 33461 is allocated to film and video manufacturing.

Output

Output estimates for the manufacturing portion of written media represents manufacturing value added for NAICS 33461. The annual survey of manufactures does not collect information on purchases of services as a regular part of the census, hence it is not possible to derive 'pure value added' that is normally associated with gross domestic output. In this instance, the only inputs deducted from gross output in obtaining value added are purchased commodities or products, including energy. That is to say, value added is not measured net of most purchases of services or indirect taxes (such as property taxes) as in other measures of output used in the paper. This may lead to double-counting in the national estimates.

Manufacturing output for NAICS 51219 is estimated using the following formula: Total revenues less total operating expenses + Total salaries and wages + depreciation.

The output values for NAICS 51219 and NAICS 33461 are combined to develop summary estimates. The totals are then pro-rated to the provincial level using provincial ratios that are derived from the film post-production survey.

Employment

Employment estimates for NAICS 51219 represents the sum of full-time, part-time, and free-lancers workers employed in the film and video industry. Employment estimates for NAICS 33461 refers to production workers employed in this industry, in the manufacturing sector.

Film and video distribution: the activities of establishments primarily engaged in NAICS 41445 Video Cassette Wholesalers, 45122 Pre-Recorded Tape, Compact Disc and Record Stores, 51212 Motion Picture and Video Distribution, NAICS 51213 Motion Picture and Video Exhibition and NAICS 53223 Video Tape and Disc Rental.

Respondent data from the *Film, Video and Audio-Visual Distribution and Videocassette Wholesaling Survey* is used as a proxy for NAICS 41445 Video Cassette Wholesalers and 51212 Motion picture and Video distribution. The retail portion of film output includes respondent data from the Survey of Motion Pictures, Theatres and Drive-ins, which was used as a proxy for NAICS 51213 Motion Picture and Video Exhibition. Caution should be used when interpreting these numbers as the population surveyed from these surveys are based on type of activity rather than primary activity or industry. This may cause inconsistencies in coverage for these industries.

Data from annual retail trade are used to estimate output data for NAICS 45122 Pre-recorded tape, Compact Disc and Record stores. SIC 6552 was used as a proxy for NAICS 45122 for years 1996 to 1999. This may lead to some underestimation of NAICS 45122 because there is a one to many concordance between the SIC and the NAICS industrial classifications. In addition, the framework allocates NAICS 45122 to sound recording and music publishing distribution as well as film and video distribution, hence, only 50% of the estimated output from this industry is allocated to film and video distribution.

Output

Output data for NAICS 41445 and NAICS 51213 are estimated using the following formula: Total revenues less total expenses + salaries and wages + depreciation. Output data for NAICS 45122 are estimated by applying an approximated share of output for this industry to the GDP data from retail trade (NAICS 44-45). The industry output share is estimated using total operating revenue from the retail trade data by industry. A similar technique is used to estimate the retail portion of output for written media (NAICS 45121) distribution, using retail trade GDP and net operating revenues from retail industries.

Provincial level output is allocated by applying an estimated percentage share of output, by province, to the summary output estimate for film and video distribution. Shares for each province are calculated based on GDP data for the wholesale sector, by province, estimated by Industry Accounts Division. Provincial level estimates for NAICS 51213 are estimated by applying approximate provincial shares to the summary estimate for the industry, using the following formula: total revenues less total expenses + salaries and wages + depreciation.

Employment

Employment from NAICS 41445 and NAICS 51512 and NAICS 51213 represents workers employed in the Motion Pictures industry. Employment estimates for NAICS 45122 represent workers in retail trade activities. Estimates for NAICS 45122 are obtained by applying an approximated industry share to the total employment value from retail trade. The industry share is based on total operating revenues from retail, by industry.

Provincial estimates are calculated separately for wholesale and retail employment. Wholesale trade by province is estimated by applying a percentage share to the summary employment estimate. Provincial shares are derived from wholesale data by province. Provincial estimates for retail employment are estimated by summing retail employment by province from the Motion Picture Survey with retail trade employment estimates from NAICS 45122. Provincial shares of employment for NAICS 45122 are derived by applying approximated provincial shares to the summary estimate for NAICS 45122. The provincial share is derived using employment data from retail trade, by province, available from Labour Statistics Division.

3. Broadcasting

Broadcasting creation: includes the activities of establishments primarily engaged in NAICS 7115 Independent Artists, Writers and Performers.

Output

GDP data are not available at this level of industry detail. The portion of output for NAICS 7115 is estimated by applying an approximated output share for NAICS 7115 to the aggregated GDP value from NAICS 711 Performing Arts, Spectator Sports and Related Industries and NAICS 712 Heritage Institutions. The proxy output share represents an employment share, derived using labour force data, for NAICS 711 and NAICS 712 for the following SOC occupations: F021 Writers, F022 Editors, F023 Journalists, and F025 Translators.

Output for the creation portion of NAICS 7115 is obtained by applying an approximated output share for creation activities to the derived output for NAICS 7115. The proxy output share is estimated using employment data for NAICS 7115 for the following occupations: F031 Producers, directors, F035 Actors, F123 Film and Video Camera operators, F125 Audio and Video Recording Technicians, F126 Other Technical Occupations, and F127 Support and Assisting Occupations in Motion Pictures.

Provincial level breakouts for the creation portion of broadcasting are derived by applying provincial share estimates to the summary output estimate for broadcasting creation. The provincial shares are calculated using aggregated GDP level estimates, distributed by province, from NAICS 71 (Arts, Entertainment and Recreation), estimated by Industry Accounts Division.

Employment

Employment estimates for broadcasting creation represents workers employed in NAICS 7115 Independent Artists, Writers and Performers industries in the following occupations: F124 Broadcast Technicians, F126 Other Technical Occupations in Motion Pictures, Broadcasting and the Performing Arts Announcers and Other Broadcasters, F127 Support and Assisting Occupations in Motion Pictures, Broadcasting and the Performing Arts, and F131 Announcers and Other Broadcasters.

Broadcasting production: includes the activities of establishments primarily engaged in NAICS 51511 Radio Broadcasting, NAICS 51512 Television Broadcasting and NAICS 5152 Pay and Specialty Television. Respondent data from the Radio and Television Broadcasting survey are used as a proxy for NAICS 51311 and NAICS 51312. Caution should be used when interpreting these numbers as the population surveyed is based on type of activity rather than primary activity or industry. This may lead to inconsistencies in coverage for these industries. Data is not available for NAICS 51611 Internet Publishing and Broadcasting. As a result, the employment and output values for broadcasting production may have been underestimated.

Output

Output data for NAICS 51511 and NAICS 51512 are estimated, based on the following formula: Total revenue less total operating expenses + Total Salaries and Wages + depreciation. Since these two industries also account for distribution activities in broadcasting, 50% of the estimated output is allocated to the production portion of output for Broadcasting.

Output data for NAICS 5152 is estimated by the Industry Accounts Division. The current price estimates of Gross Domestic Product (GDP) at basic prices (or value added) by industry are measured directly by summing the factor incomes and depreciation or indirectly by deducting the cost of the intermediate goods and services used in the production process from the value of gross production or output.

Provincial breakouts of output are not available for individual Atlantic provinces. Output data are allocated to Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick by applying derived provincial shares to the summary estimate. The provincial shares are estimated from the aggregated GDP value from NAICS 513 Broadcasting and Telecommunications industries.

Employment

Employment estimates for NAICS 51511 and NAICS 51512 represents workers employed in the Television and Radio Broadcasting sector. Employment estimates for NAICS 5152 represents persons employed in Pay TV, Specialty TV and Program Distribution sector.

Provincial allocations of employment are not available for individual Atlantic provinces for NAICS 51511 and NAICS 51512. Employment values were assigned to Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick based on provincial shares derived from the aggregated GDP value from NAICS 513 Broadcasting and Telecommunications industries, available from Industry Accounts Division.

Broadcasting distribution: includes the activities of establishments primarily engaged in NAICS 51511 Radio Broadcasting, NAICS 51512 Television Broadcasting, and NAICS 5175 Cable and Other Program Distribution.

Output

Output data for NAICS 51511 and NAICS 51512 was estimated, based on the following formula: Total revenue less total operating expenses + Total Salaries and Wages + depreciation. Since these two industries also account for production activities in broadcasting, only 50% of the estimated output was allocated to the distribution portion of output for Broadcasting. Output estimates for NAICS 5175 are derived using a similar calculation.

Provincial allocations of output are not available for individual Atlantic provinces. Output data is assigned to Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick based on provincial shares derived from the aggregated GDP value from NAICS 513 Broadcasting and Telecommunications industries.

Employment

Employment estimates for NAICS 51511, NAICS 51512, and NAICS 5175 represents workers employed in the Television and Radio Broadcasting sector. Provincial allocations of employment are not available for individual Atlantic provinces for NAICS 51511 and NAICS 51512. Employment data is allocated to Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick based on provincial shares that are derived from the aggregated GDP value from NAICS 513 Broadcasting and Telecommunications industries.

4. Sound recording and music publishing

Sound recording and music publishing creation: includes the activities of establishments primarily engaged in NAICS 71151 Independent Artists, Writers and Performers and NAICS 71113. Data are not available for NAICS 71113 Musical groups and artists. As a result, the employment and output values for sound recording and music publishing creation may be underestimated.

Output

GDP data are not available at this level of industry detail. The portion of output for NAICS 7115 is estimated by applying an approximated output share for NAICS 7115 to the aggregated GDP value from NAICS 71 Arts, Entertainment and Recreation. The proxy output share represents an employment share, derived using labour force data from NAICS 7115 and NAICS 71 for the following occupations: F021 Writers, F022 Editors, F023 Journalists, and F025 Translators.

Output for the creation portion of NAICS 7115 for sound recording and music publishing is obtained by applying an approximated output share for creation activities to the derived output for NAICS 7115. The proxy output share was derived using employment data for NAICS 7115 for the following occupations: F032 Conductors, Composers and Arrangers, and F033 Musicians and Singers.

Provincial level breakouts for the creation portion of sound recording and music publishing are derived by applying provincial share estimates to the output value for NAICS 7115. The provincial shares were calculated using aggregated GDP level estimates distributed by province from NAICS 71.

Employment

Employment estimates for sound recording and music publishing creation represents workers employed NAICS 7115 for the following occupations: F031 Independent Artists, Writers, and Performers, F032 Conductors, Composers, and Arrangers, and F033 Musicians and Singers.

Sound recording and music publishing production: includes the activities of establishments primarily engaged in NAICS 51221 Record Production and NAICS 51222 Integrated Record Production and Distribution, NAICS 51224 Sound Recording Studios, and NAICS 7113 Promoters of Presenting Arts, Sports and Similar Events.

Output

Data for the required individual NAICS categories are not available at the industry (5 digit) level of detail. An aggregated output estimate for NAICS 5122 Sound Recording Industries is used as an approximate output for sound recording and music publishing production. As a result, output for 51223 Music Publishers and NAICS 51229 Other Sound Recording Industries are included in the estimate and may lead to an overestimation of output for sound recording and music publishing production.

Output data for NAICS 5122 is estimated by the Industry Accounts Division. The current price estimates of Gross Domestic Product at basic prices by industry are measured directly by summing the factor incomes and depreciation or indirectly by deducting the cost of the intermediate goods and services used in the production process from the value of gross production or output.

Production output for Sound Recording Studios NAICS 7113 is estimated by applying an approximated output share for this industry to the aggregated GDP value from NAICS 71 Arts, Entertainment and Recreation Industries. The industry share calculation is based on GDP data distributed by industry, from the Industry Accounts Division of Statistics Canada.

Provincial level breakouts for the production portion of sound recording and music publishing are derived by applying provincial share estimates to the combined output value for NAICS 5122 and NAICS 7113. The provincial shares are calculated using aggregated GDP level estimates distributed by province from NAICS 512 Motion Picture and Sound Recording Industries.

Employment

Employment estimates for sound recording and music publishing production represents the workers employed in NAICS 7113 and NAICS 5122.

Sound recording and music publishing manufacturing: includes the activities of establishments primarily engaged in NAICS 33461 Manufacturing and Reproducing Magnetic and Optical Media. Since NAICS 33461 is classified to both Film manufacturing and Sound recording and music publishing manufacturing, 50% of the employment and output estimates are allocated to sound recording and music publishing for this industry. Data for NAICS 51222 and NAICS 512230 are already included in the production portion of the employment and output estimates for Sound recording and music publishing. Hence, data for these two industries are not included in the employment and output estimates for manufacturing activities.

Output

Output for NAICS 33461 refers to manufacturing value added. Value added by manufacturing activity is estimated by the Manufacturing, Construction and Energy Division of Statistics Canada. Manufacturing value added is calculated by subtracting from the value of gross output (shipments adjusted for inventory): manufacturing activity, the cost of materials and supplies used in manufacturing activity and the cost of purchased energy used. Purchases of services are included in the calculation of manufacturing value-added, which may lead to double-counting in the national estimates.

Employment

Employment estimates for NAICS 33461 refers to production workers employed in this industry in the manufacturing sector.

Sound recording and music publishing distribution: includes the activities of establishments primarily engaged in NAICS 41444 Sound Recording Wholesalers, and NAICS 45122 Pre-recorded tape, Compact disc and Record Stores. NAICS 45122 is also included in the distribution activities film and video, hence, 50% of the estimated output from this industry is allocated to sound recording and music publishing distribution. Data for NAICS 51222 are included in the production portion of the employment and output estimates for Sound recording and music publishing. Hence, data for this industry is not included in the employment and output estimates for distribution activities.

Output

Output estimates for sound recording wholesalers are derived by applying an estimated share of output for NAICS 41444 to the GDP value from all wholesale trade (NAICS 51). The industry output share is estimated using total operating revenue data from wholesale trade, by industry. Provincial level output data are allocated by applying an estimated percentage share of output, by province, to the summary output estimate for the wholesale portion of sound recording and music publishing distribution. Shares for each province are calculated based on wholesale GDP data by province that are derived by the Industry Accounts Division.

NAICS 45122 refers to the retail portion of sound recording and music publishing distribution activities. Output estimates for this industry are derived using a similar approach to wholesale trade using total operating revenue data from retail trade by industry, and retail trade GDP data (NAICS 44-45) by province.

Employment

Employment estimates for sound recording wholesalers are derived by applying an estimated share of output for NAICS 41444 to the GDP value from all wholesale trade (NAICS 51). The employment share is estimated using total operating revenue data from wholesale trade, by industry. Provincial level employment data are allocated by applying an estimated percentage share of employment by province, to the summary employment estimate for the wholesale portion of sound recording and music publishing distribution. Shares for each province are calculated based on employment data from wholesale trade by province, estimated by Labour Statistics Division of Statistics Canada.

NAICS 45122 refers to the retail portion of sound recording and music publishing distribution activities. Output estimates for this industry are derived using a similar approach to wholesale trade using total operating revenue data from retail trade by industry, and retail trade employment data (NAICS 44-45) by province.

5. Performing arts

Performing arts creation: includes the activities of establishments primarily engaged in NAICS 71151 Independent Artists, Writers and Performers and NAICS 71113. Data is not available for NAICS 71113 Musical Groups and Artists. As a result, the employment and output values for performing arts creation may be underestimated.

Output

GDP data is not available at this level of industry detail. The portion of output for NAICS 7115 is estimated by applying an approximated output share for NAICS 7115 to the aggregated GDP value from NAICS 71 Arts, Entertainment and Recreation. The proxy output share represents an employment share, derived using labour force data from NAICS 7115 and NAICS 71 for the following occupations: F021 Writers, F022 Editors, F023 Journalists, and F025 Translators.

Output for the creation portion of NAICS 7115 for performing arts is obtained by applying an approximated output share for creation activities to the derived output for NAICS 7115 creation. The proxy output share is estimated using employment data for NAICS 7115, for SOC F034 Dancers.

Provincial level breakouts for the creation portion of performing arts are derived by applying provincial share estimates to the output value for NAICS 7115. The provincial shares are calculated using aggregated GDP level estimates, distributed by province, from NAICS 71, estimated by Industry Accounts Division.

Employment

Employment estimates for performing arts creation represents workers employed in NAICS 7115 Independent Artists, Writers and Performers industries in the following occupations: SOC F034 Dancers, and SOC F035 Actors.

Performing arts production: includes the activities of establishments primarily engaged in NAICS 71111 Theatre Companies and Dinner Theatres, NAICS 71112 Dance Companies, NAICS 71119 Other Performing Arts Companies, and NAICS 711311 Live Theatres and Other Performing Arts Presenters with Facilities.

Data for the required individual NAICS categories are not available at the industry (5 and 6 digit) level of detail. An aggregated output estimate for NAICS 7111 Performing Arts, Spectator Sports and Related Industries is used to approximate the employment and output shares for the following industries: NAICS 71111 Theatre Companies, NAICS 71112 Dance Companies and NAICS 71119 Other Performing Arts Companies. As a result, estimates for 71113 Musical Groups and Artists are included in the estimates and may lead to an overestimation of output and employment for performing arts production. Data for NAICS 711311 was also estimated at the aggregated level for both output and employment. Other industry output and employment data may be included in the final estimates for this industry as follows: NAICS 711319 Sports Stadiums, and NAICS 71132 Presenters of Performing Arts, Sports and Similar Events without Facilities. This may also contribute to an overestimation of output and employment for performing arts production.

Output

Output for NAICS 7111 and NAICS 7113 are estimated by applying an approximated share of output for each industry to a combined GDP estimate for NAICS 711 and NAICS 712. The industry output share is calculated using employment data for the individual industries as well as for NAICS 711 and NAICS 712. The estimated output values for NAICS 7111 and NAICS 7113 were then summed to arrive at a final value output value for performing arts production.

Provincial breakouts are estimated by applying approximated output shares for each province, based on aggregated GDP data, by province, for NAICS 71 Arts, Entertainment and Recreation industries estimated by the Industry Accounts Division of Statistics Canada.

Employment

Employment estimates for performing arts production represents the workers employed in NAICS 7111 and NACIS 7113. The production portion of the employment data for performing arts are considered to be unreliable and may cause some bias in the employment results for the performing arts. Caution is advised when using these data.

Performing arts manufacturing: Not applicable.

Performing arts distribution: includes the activities of establishments primarily engaged in NAICS 711321 Performing Arts Promoters without Facilities.

Data for NAICS 711321 are included in the production portion of the employment and output estimates for Performing Arts. Hence, employment and output data are not estimated for performing arts distribution.

6. Visual arts

Visual arts creation: includes the activities of establishments primarily engaged in NAICS 71151 Independent Artists, Writers and Performers.

Output

GDP data are not available at this level of industry detail. The portion of output for NAICS 7115 is estimated by applying an approximated output share for NAICS 7115 to an aggregated combined output value from NAICS 711 and NAICS 712. The proxy output share is derived using employment data from NAICS 7115, NAICS 711 and NAICS 712 for the following occupations: F021 Writers, F022 Editors, F023 Journalists, and F025 Translators.

Output for the creation portion of NAICS 7115 for visual arts is then obtained by applying an approximated output share for creation activities to the derived output for NAICS 7115. The proxy output share is estimated using employment data from NAICS 7115, for SOC F036 Painters, Sculptors and Other Visual Artists.

Provincial level breakouts for the creation portion of performing arts are derived by applying estimated provincial shares to the creation portion of the output value for NAICS 7115. The provincial shares were calculated using aggregated GDP level estimates distributed by province from NAICS 71, estimated by Industry Accounts Division.

Employment

Employment estimates for performing arts creation represents workers employed in NAICS 7115 Independent Artists, Writers and Performers industry in the following occupations: F034, Dancers, and SOC F035, Actors.

Visual arts production: includes the activities of establishments primarily engaged in NAICS 32711 Pottery, Ceramics and Plumbing Fixture Manufacturing.

Data for the required individual NAICS categories are not available at the industry (5 digit) level of detail. An aggregated output estimate for NAICS 3271 Clay Product and Refractory Manufacturing is used to approximate the employment and output shares for NAICS 32711. As a result, data values for 32712 Clay Building Material and Refractory Manufacturing are included in the estimates and may lead to an overestimation of output and employment for visual arts production.

Output

Output data for NAICS 3271 are estimated by Industry Accounts Division. The current price estimates of Gross Domestic Product at basic prices by industry are measured directly by summing the factor incomes and depreciation or indirectly by deducting the cost of the intermediate goods and services used in the production process from the value of gross production or output.

Provincial level output data for visual arts production are allocated by applying an estimated percentage share of output, by province, to the summary output estimate of the production portion of visual arts. Shares for each province are calculated using aggregated GDP level estimates, by province, from NAICS 327 Non-metallic Mineral Product Manufacturing except Cement and Concrete Product Manufacturing.

Employment

Employment data for visual arts production are estimated by Distributive Trades Division, and represent workers employed in NAICS 3271 Clay Product and Refractory Manufacturing industry.

Visual arts manufacturing: includes the activities of establishments primarily engaged in NAICS 323113 Commercial Screen Printing. This NAICS is included in the Written media manufacturing category.

Data for NAICS 323113 are included in the manufacturing portion of the employment and output estimates for written media. Hence, employment and output data are not estimated for visual arts distribution.

Visual arts distribution: includes the activities of establishments primarily engaged in NAICS 45392 Art Dealers. SIC 6593 Art Galleries and Artists Supply Stores is used as a proxy for NAICS 45392 for years, 1996 to 1998. This may lead to some underestimation of NAICS 45392 for these years due to the one-to-many concordance between the SIC and the NAICS industrial classifications for this industry. The culture framework also classifies NAICS 45392 to photography distribution; hence, 50% of the estimates from this industry are allocated to visual arts distribution.

Output

Output estimates of visual arts distribution are derived by applying an estimated share of output for NAICS 45392 to the GDP value from total retail trade (NAICS 44-45). The industry output share is estimated using total operating revenue data from retail trade, by industry. Provincial level output are allocated by applying an estimated percentage share of output, by province, to the summary output estimate for visual arts distribution. Shares for each province are calculated based on GDP data for the retail sector by province, estimated by the Industry Accounts Division.

Employment

Employment estimates for visual arts distribution are derived by applying an estimated share of employment for NAICS 45392 to the total employment value from retail trade. The industry employment share is estimated using total operating revenue data from retail trade, distributed by industry. Provincial level employment data are allocated by applying an estimated percentage share of employment by province, to the summary employment estimate for visual arts distribution. Shares for each province are calculated based on employment estimates from retail trade by province, from Labour Statistics Division.

7. Architecture

Architecture creation: includes the activities of establishments primarily engaged in NAICS 54131 Architectural Services and NAICS 54132 Landscape Architectural Services. Data for the required individual NAICS categories are not available at the industry (5 digit) level of detail. An aggregated output estimate for NAICS 5413 Architectural, Engineering and Related Services is used as an approximate output for NAICS 54131 and NAICS 54132. As a result, output for NAICS 54133-NAICS 54138 are included in the overall data and may lead to an overestimation of the employment and output estimates for Architecture creation.

Output

Output for the creation portion of NAICS 5413 for Architecture services is obtained by applying an approximated output share for the industry to the aggregated output value from NAICS 5413. The proxy output share represents an employment share, derived using labour force data from NAICS 5413 for the following occupations: SOC C051 Architects, SOC C052 Landscape Architects, and SOC C151 Architectural Technologists and Technicians.

Provincial level breakouts are derived by applying estimated provincial shares to the creation portion of output for NAICS 5413. The provincial shares are calculated using aggregated GDP level estimates, distributed by province, from NAICS 54 Professional, Scientific and Technical Services estimated by Industry Accounts Division.

Employment

Employment estimates for the creation portion of architecture services represents workers employed in NAICS 5413 Architectural, Engineering and Related Services industry in the following SOC occupations: C051 Architects, C052 Landscape Architects, and C151 Architectural Technologists and Technicians.

8. Photography

Photography creation: includes the activities of establishments primarily engaged in NAICS 54192 Photographic Services. Data are not available at the industry (5 digit) level of detail. An aggregated output estimate for NAICS 5419 Other Professional, Scientific and Technical Services is used as an approximate value for NAICS 54192. As a result, data values from NAICS 54191, NAICS 54193, NAICS 54194, and NAICS 54199 may be included in the overall estimate, and can lead to an overestimation of employment and output levels for Architecture creation.

Output

Output for the creation portion of NAICS 54192 is obtained by applying an approximated output share for the industry to the combined output value from NAICS 5415, NAICS 5416, NAICS 5417, and NAICS 5419. The proxy output share represents an employment share, derived using labour force data from NAICS 5415, NAICS 5416, NAICS 5417, and NAICS 5419, for SOC F121 Photographers.

Provincial level breakouts are derived by applying estimated provincial shares to the creation portion of output for NAICS 54192. The provincial shares were calculated using aggregated GDP level estimates distributed by province from NAICS 54 Professional, Scientific and Technical Services estimated by Industry Accounts Division.

Employment

Employment estimates for creation portion of architecture services represents workers employed as SOC F121 Photographers in NAICS 5419 Other Professional, Scientific and Technical Services industry.

Photography production: includes the activities of establishments primarily engaged in NAICS 812921 Photo Finishing Laboratories. Data for NAICS 812921 are not available.

Photography distribution: includes the activities of establishments primarily engaged in NAICS 45392 Art Dealers. SIC 6593 Art Galleries and Artists Supply Stores is used as a proxy for NAICS 45392 for years 1996 to 1998. This may lead to some underestimation of NAICS 45392 due to the one-to-many concordance between the SIC and the NAICS industrial classifications for this industry. The culture framework also assigns NAICS 45392 to visual arts distribution, hence, 50% of the estimates from this industry is allocated to photography distribution.

Output

Output estimates of photography distribution are derived by applying an estimated share of output for NAICS 45392 to the GDP value from total retail trade (NAICS 44-45). The industry output share is estimated using total operating revenue data from retail trade, by industry. Provincial level outputs are allocated by applying an estimated percentage share of output, by province, to the summary output estimate for photography distribution. Shares for each province are calculated based on GDP data for the retail sector by province estimated by Industry Accounts Division.

Employment

Employment estimates for photography distribution are derived by applying an estimated share of employment for NAICS 45392 to the total employment value from retail trade. The industry employment share is estimated using total operating revenue data from retail trade, distributed by industry. Provincial level employment data are allocated by applying an estimated percentage share of employment, by province, to the summary employment estimate for photography distribution. Shares for each province are calculated based on employment data from retail trade, by province, estimated by Labour Statistics Division.

9. Design

Design creation: includes the activities of establishments primarily engaged in NAICS 54141 Interior Design Services, NAICS 54142 Industrial Design Services, NAICS 54143 Graphic Design Services, and NAICS 54149 Other Specialized Design Services.

Output

Output data for NAICS 5414 are estimated, based on the following formula: Operating revenue less operating expenses + Total Salaries and Wages + depreciation. Provincial level outputs are allocated by applying an estimated percentage share of industry output to the summary output estimate for design creation. Shares for each province are calculated based on the aggregated GDP data from NAICS 54 Professional, Scientific and Technical Services by province estimated by Services Industry Division.

Employment

Employment estimates for creation portion of design creation represents workers employed in NAICS 5414 Specialized Design Services.

10. Advertising

Advertising creation: includes the activities of establishments primarily engaged in NAICS 54143 Graphics Design Services and NAICS 541899 All Other Services Related to Advertising. NAICS 541899 is included in Advertising production category and NAICS 54143 is included in Design creation category.

Advertising production: includes the activities of establishments primarily engaged in NAICS 54181 Advertising Agencies, NAICS 54185 Display Advertising, NAICS 54186 Direct Mail Advertising and NAICS 541891 Specialized Advertising Distribution.

Data for the required individual NAICS categories are not available at the industry (5 digit) level of detail. An aggregated output estimate for NAICS 5418 Advertising and Related Services is used to approximate the employment and output shares for Advertising production. As a result, NAICS 54182, NAICS 54183, NAICS 54184, NAICS 54187, and NAICS 541899 may be included in the estimates and can lead to an overestimation of output and employment levels for advertising production.

Output

Output data for NAICS 5418 are estimated by the Industry Accounts Division. The current price estimates of Gross Domestic Product at basic prices by industry are measured directly by summing the factor incomes and depreciation or indirectly by deducting the cost of the intermediate goods and services used in the production process from the value of gross production or output.

Provincial level output data are allocated by applying an estimated percentage share of output, by province, to the summary output estimate of the production portion of advertising. Shares for each province are calculated using aggregated GDP level estimates by province from NAICS 54 Professional, Scientific and Technical Services estimated by Industry Accounts Division.

Employment

Employment estimates for creation portion of design creation represents workers employed in NAICS 5418 Advertising and Related Services industry.

Advertising distribution: includes the activities of establishments primarily engaged in NAICS 54183 Media Buying Agencies, NAICS 54184 Media Representatives, NAICS 54187 Advertising Material Distribution Services, and NAICS 541899 All Other Services Related to Advertising. Data for these industries are included in the employment and output estimates of production activities for advertising. Hence, employment and output estimates are not calculated for distribution activities.

11. Festivals

Festivals creation: includes the activities of establishments primarily engaged in NAICS 7111 Performing Arts Companies. This NAICS is included in Performing arts production category. This category also includes the activities of establishments engages in NAICS 71113 musical groups and artists, for which data are not available.

Festivals production: includes the activities of establishments primarily engaged in NAICS 711322 Festivals without Facilities. Festivals data was obtained from the Department of Canadian Heritage. It should be noted that the festival data used in the employment and output estimates is not comprehensive since the data from Canadian Heritage only includes data on those festivals, which receive funding through the *Cultural Initiatives Program*.

Output

Output data for NAICS 71132 are estimated based on the following formula: Surplus + Salaries and Wages + Performers Fees and Benefits + depreciation. Provincial level output is allocated by applying an estimated percentage share of industry output to the summary output estimate for festivals production. Shares for each province are calculated based on the total operating revenue data from NAICS 711322 Festivals without Facilities by province, estimated by Services Industry Division.

Employment

Employment estimates for production portion of advertising production is derived from salaries and wages and average salaries data from festivals data from the Department of Canadian heritage. Shares for each province are calculated based on the total operating revenue data from NAICS 711322 Festivals without Facilities by province available from Services Industry Division of Statistics Canada.

12. Heritage

Heritage production: includes the activities of establishments primarily engaged in NAICS 71211 Museums, NAICS 71212 Heritage and Historic Sites, NAICS 71213 Zoos and Botanical Gardens, and NAICS 71219 Other Heritage Institutions. Respondent data from *Survey of Heritage Institutions* is used as a proxy for these NAICS industries. Caution should be used when interpreting these numbers as the population surveyed is based on type of activity rather than primary activity or industry. This may lead to inconsistencies in coverage for these industries.

Output

Output data for heritage production is estimated, based on the following formula: Operating revenue less operating expenses + Total Salaries and Wages + depreciation. Provincial level breakouts are derived for heritage output – excluding nature parks - using the same formula. Output for heritage nature parks are derived by applying an approximated provincial share of output to the estimated output for heritage production. The provincial share is derived based on number of institutions data by province, estimated by Service Industries Division and Culture, Tourism and the Centre for Education Statistics Division.

Employment

Employment estimates for heritage production represent workers employed in the heritage sector.

13. Libraries

Libraries creation: includes the activities of establishments primarily engaged in NAICS 51911 News Syndicates. Employment and GDP data for this NAICS are not available.

Libraries production: includes the activities of establishments primarily engaged in NAICS 519121 Libraries and NAICS 519122 Archives. Data from *National Core Library Statistics (NCLSP)* survey is used to proxy these NAICS industries.

Output

Output data for heritage production are estimated, based on the following formula: Staff expenditure + Capital expenditure + depreciation.

Provincial level outputs are allocated by applying an estimated percentage share of industry output to the summary output estimate for libraries production. Shares for each province are calculated based on expenditure data by province from Industrial Organization and Finance Division.

Employment

Employment estimates represent workers employed in the Library sector.

Support Services

Support services includes the activities of establishments primarily engaged in NAICS 71141 Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures, NAICS 81321 Grant Making and Giving Services, NAICS 81331 Social Advocacy Organizations, and NAICS 8139 Business, Professional, Labour and Other Membership Organizations. Since many of the industries for support services are shared by various culture categories, the employment and output values for support services are presented as an aggregated value for all culture categories.

Output

Output estimates are derived for each industry and then summed, as follows: output for NAICS 71141 is estimated by applying an approximated share for NAICS 71141 to the GDP value for NAICS 71. The industry share is calculated using employment data. Output for NAICS 8132, NAICS 8133, and NAICS 8139 are derived based on output and employment totals for NAICS 813. Detailed employment data are not available for NAICS 61161. Fine Arts Schools and NAICS 451141 Musical Instruments and Supplies Stores. This may lead to an underestimation of support services output for schools in most culture categories, as well as for musical instrument and supplies stores in the Sound Recording and Music Publishing, and Performing Arts categories.

Provincial breakouts are derived by applying an approximate share to the total output value for support services. The share calculation is based on the aggregated GDP value for NAICS 8132, NAICS 8133, NAICS 8134, and NAICS 8139, by province. This may have led to an underestimation of output at the provincial level since NAICS 8133 Social Advocacy Organizations was included in the denominator and can have the effect of decreasing the size of the estimates of the provincial shares.

Employment

Employment estimates for support services represents workers employed in NAICS 7114, NAICS 8132, NAICS 8133, and NAICS 8139. Data are not available for NAICS 451141 and NAICS 61161. This may lead to an underestimation of employment levels for support services.

Appendix F: Data sources

Written Media				
Creation	Production	Manufacturing	Distribution	Support services
(1) Labour Force Survey – Unpublished data (2) CANSIM 379-0017	(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0017	(1,2) CANSIM 301-0003	(1,2) Annual Wholesale Trade Survey, Unpublished Data (1,2) Annual Retail Trade Survey, Unpublished Data (1) CANSIM table 282-0008 (2) CANSIM table 379-0025	(1) Labour Force Survey – Unpublished Data (2) CANSIM 379-0025
Film				
Creation	Production	Manufacturing	Distribution	Support services
(1,2) Labour Force Survey Unpublished Data (2) CANSIM 379-0025	(1,2) Film, Video, and Audio Visual Production Survey, Catalogue 87-010-XIE	(1,2) CANSIM 301-0003 (1,2) Film, Video and Audio-Visual Post-Production Survey, Catalogue no. 87-009-XIE	(1,2) Film, Video, and Audio Visual Distribution Survey, Catalogue 87F0010XIE (1,2) Annual Wholesale Trade Survey, Unpublished Data (1,2) Annual Retail Trade Survey, Unpublished Data (1) CANSIM table 282-0008 (2) CANSIM table 379-0017 (1,2) Motion Pictures Survey Catalogue 87F0009XIE	(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025
Broadcasting				
Creation	Production	Manufacturing	Distribution	Support services
(1,2) Labour Force Survey – Unpublished data (2) Cansim 379-0017, 379-0025	(1,2) Labour Force Survey – Unpublished data (1,2) Film, Video, and Audio Visual Production Survey, Catalogue 87-010-XIE (1) CANSIM table 282-0008 (2) CANSIM table 379-0017, 379-0025, 357-0001		(2) CANSIM table 379-0017, 357-0001	(1) Labour Force Survey – Unpublished data (2) CANSIM 379-0025
Sound Recording and Music Publishing				
Creation	Production	Manufacturing	Distribution	Support services
(1,2) Labour Force Survey – Unpublished data (2) CANSIM 379-0025	(1,2) Labour Force Survey – Unpublished data (2) CANSIM table 379-0017, 379-0025	(1,2) CANSIM 301-0003	(1) CANSIM table 282-0008 (2) CANSIM table 379-0017 (1,2) Annual Wholesale Trade Survey, Unpublished Data (1,2) Annual Retail Trade Survey, Unpublished Data	(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025
Performing Arts				
Creation	Production	Manufacturing	Distribution	Support services
(1,2) Labour Force Survey – Unpublished data (2) CANSIM 379-0017	(1,2) Labour Force Survey – Unpublished data (2) CANSIM 379-0017		(1,2) Labour Force Survey – Unpublished data (2) CANSIM 379-0017	(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025

(1) = Employment and (2) = Output

Data sources concluded**Visual Art**

Creation	Production	Manufacturing	Distribution	Support services
(1,2) Labour Force Survey – Unpublished data (2) CANSIM 379-0017	(1,2) Labour Force Survey – Unpublished data (2) CANSIM 379-0017		(1,2) Annual Retail Trade Survey, Unpublished Data (1) CANSIM table 282-0008 (2) CANSIM 379-0017	(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025

Architecture

Creation	Production	Manufacturing	Distribution	Support services
(1,2) Labour Force Survey – Unpublished data (2) CANSIM 379-0017				(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025

Photography

Creation	Production	Manufacturing	Distribution	Support services
(1,2) Labour Force Survey – Unpublished data (2) CANSIM 379-0017			(1,2) Annual Retail Trade Survey, Unpublished Data (1) CANSIM table 282-0008 (2) CANSIM 379-0017	(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025

Design

Creation	Production	Manufacturing	Distribution	Support services
(1,2) Labour Force Survey – Unpublished data (2) CANSIM 360-0002				(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025

Advertising

Creation	Production	Manufacturing	Distribution	Support services
	(1,2) Labour Force Survey – Unpublished data (2) CANSIM 379-0017			(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025

Festivals

Creation	Production	Manufacturing	Distribution	Support services
	(1,2) Dept. of Cdn Heritage (PCH) (2) CANSIM 187-0001			(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025

Heritage

Creation	Production	Manufacturing	Distribution	Support services
	(1,2) Survey of Heritage Institutions Cat. No. 87F0003XDB (2) CANSIM 187-0001			(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025

Libraries

Creation	Production	Manufacturing	Distribution	Support services
	(1,2) National Core Library Statistics Program Survey, PCH (2) CANSIM 187-0001			(1) Labour Force Survey Unpublished Data (2) CANSIM 379-0025

(1) = Employment and (2) = Output

Appendix G: Government expenditures on culture

The survey of federal and provincial/territorial government expenditures on culture is a census of all 30 federal and 180 provincial/territorial departments and agencies with culture-related expenses. Data are released annually according to a financial year, which begins April 1 and ends March 31. Municipal data are based on a sample of municipalities for the financial year from January 1 to December 31.

There are three main categories of spending on culture: operating expenditures, capital expenditures, and grants and contributions. Unless otherwise stated, all values are in current dollars with no adjustment for inflation.

Categories used for the surveys of government expenditures on culture are not always directly comparable to categories used in the *Canadian Framework for Culture Statistics*. This is because the Framework is based on the NAICS classification system while the Surveys of federal and provincial/territorial government expenditures on culture were designed in the early 1980's and, at the present time, have not been revised to mirror the Framework.

Government expenditures on culture	Canadian Framework for Culture Statistics
Libraries	Other information services (libraries, archives)
Heritage resources (including archives)	Heritage
Arts education	Educational services
Literary arts	Writing and published works
Performing arts	Performing arts
Visual arts and crafts	Visual arts
Film and video	Film and video
Broadcasting	Broadcasting
Sound recording	Sound recording and music publishing
Multiculturalism	
Multi-disciplinary	Festivals
	Architecture
	Design
	Advertising
Visual arts and crafts (includes photography)	Photography

For those Framework categories for which there is no equivalent in Government expenditure, it may be because no government funding programs existed for those industries. For those Government expenditure categories for which there are no equivalents in the Framework, it is because they are excluded from the Framework's definition of culture.

Appendix H: Total annual household spending on culture goods and services

Estimated annual spending on culture goods and services

Estimates of annual spending on culture goods and services are derived from the *Family Expenditure Survey (FAMEX) / Survey of Household Spending (SHS)* and the *System of National Accounts (SNA)*. Average household expenditures are itemized for the culture goods and services listed below and their share of total average household spending (minus personal taxes) is calculated from detailed household tables. This allocation is then multiplied by total personal expenditures on consumer goods and services for Canada and for each province. Personal expenditures on consumer goods and services are available from the annual Provincial Economic Accounts, *CANSIM* Table 384-0012.

The *Canadian Framework for Culture Statistics* provides guidelines for the definition and inclusion criteria for culture goods and services. Consumer spending data on the following culture goods and services are included:

Visual arts:

- Works of art, carvings and vases
- Antiques

Film and Music

- Admissions to movie admissions
- Pre-recorded DVD's, CD's, video and audio cassette tapes and video disks
- Rental of videotapes and video disks

Photography

- Film and processing
- Photographers' and other photographic services

Broadcasting

- Rental of cablevision and satellite services

Heritage

- Admissions to museums and other activities and venues
- Collector's items (stamps, coins)

Library

- Services (duplicating, library fees and fines)

Performing Arts

- Live performing arts

Written media

- Newspapers
- Magazines and periodicals
- Books (excluding school textbooks) and pamphlets
- Maps, sheet music and other printed material
- Textbooks

Appendix I: Culture services trade

Table I.1
Canada's international trade of culture services by culture framework category

	1996	1997	1998	1999	2000	2001	2002	2003
(thousands of dollars)								
Imports								
A Writing and published works	23,958	16,732	14,784	15,422	17,631	21,947	35,095	45,612
B Film and video	651,463	700,712	875,852	977,971	1,191,067	976,961	1,194,001	1,301,850
C Broadcasting	160,892	210,498	302,459	382,199	493,150	545,974	669,678	570,842
D Sound recording and music publishing	112,667	109,523	128,909	84,789	166,238	112,087	131,257	115,628
E Performing arts	153,105	146,750	155,025	162,478	170,554	179,795	189,963	199,245
H Architecture	25,703	557	32,259	2,944	56,218	95,249	136,867	44,444
I Photography	x	x	x	x	6,365	4,777	8,037	8,062
J Design	x	x	x	x	0	x	1,683	1,683
K Festivals	1,408	3,446	3,319	6,516	7,564	8,747	16,717	17,155
U Unallocated	213,324	263,477	244,217	163,770	345,136	x	264,562	264,858
Total	1,358,441	1,512,014	1,825,529	1,840,038	2,565,042	2,415,183	2,815,158	2,720,179
Exports								
A Writing and published works	24,506	26,452	15,038	32,340	22,966	20,254	31,716	22,173
B Film and video	740,745	910,139	1,073,564	1,523,370	1,538,516	1,441,164	1,498,775	1,333,634
C Broadcasting	x	x	25,914	18,601	32,754	39,067	44,789	39,747
D Sound recording and music publishing	38,796	38,280	64,915	56,670	30,420	31,005	28,114	33,923
E Performing arts	74,216	78,108	83,020	86,272	91,450	95,418	100,855	106,078
H Architecture	19,267	30,922	51,679	36,954	45,362	66,368	65,454	101,650
I Photography	x	x	x	x	x	x	x	54,000
J Design	1,965	0	x	x	x	x	79,006	99,770
K Advertising	7,166	34,410	47,971	26,942	108,334	183,606	185,636	129,931
L Festivals	9,949	13,717	20,210	46,385	48,634	47,201	49,686	47,248
M Heritage	0	0	x	x	x	0	x	x
U Unallocated	160,261	160,583	161,386	169,455	177,928	186,824	196,525	x
Total	1,133,843	1,356,672	1,639,581	2,079,632	2,220,659	2,245,267	2,338,186	2,174,771

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Sources: Statistics Canada: Culture Trade Survey 1996-2003 ;
Culture services trade: Data tables, March 2006, catalogue no. 87-213-XWE.

Culture, Tourism and the Centre for Education Statistics

Research Papers

Cumulative index

Statistics Canada's **Division of Culture, Tourism and the Centre for Education Statistics** develops surveys, provides statistics and conducts research and analysis relevant to current issues in its three areas of responsibility.

The **Culture Statistics Program** creates and disseminates timely and comprehensive information on the culture sector in Canada. The program manages a dozen regular census surveys and databanks to produce data that support policy decision and program management requirements. Issues include the economic impact of culture, the consumption of culture goods and services, government, personal and corporate spending on culture, the culture labour market, and international trade of culture goods and services. Analysis is also published in *Focus on Culture* (87-004-XIE, free, <http://www.statcan.ca/bsolc/english/bsolc?catno=87-004-X>).

The **Tourism Statistics Program** provides information on domestic and international tourism. The program covers the Canadian Travel Survey and the International Travel Survey. Together, these surveys shed light on the volume and characteristics of trips and travellers to, from and within Canada.

The **Centre for Education Statistics** develops and delivers a comprehensive program of pan-Canadian education statistics and analysis in order to support policy decisions and program management, and to ensure that accurate and relevant information concerning education is available to the Canadian public and to other educational stakeholders. The Centre conducts fifteen institutional and over ten household education surveys. Analysis is also published in *Education Matters* (81-004-XIE, free, <http://www.statcan.ca/bsolc/english/bsolc?catno=81-004-X>), and in the *Analytical Studies Branch research paper series* (11F0019MIE, free, <http://www.statcan.ca/bsolc/english/bsolc?catno=11F0019M>).

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81-595-MIE2003002	Canadian education and training services abroad: the role of contracts funded by international financial institution
81-595-MIE2003003	Finding their way: a profile of young Canadian graduates
81-595-MIE2003004	Learning, earning and leaving – The relationship between working while in high school and dropping out
81-595-MIE2003005	Linking provincial student assessments with national and international assessments
81-595-MIE2003006	Who goes to post-secondary education and when: Pathways chosen by 20 year-olds
81-595-MIE2003007	Access, persistence and financing: First results from the Postsecondary Education Participation Survey (PEPS)
81-595-MIE2003008	The labour market impacts of adult education and training in Canada
81-595-MIE2003009	Issues in the design of Canada's Adult Education and Training Survey
81-595-MIE2003010	Planning and preparation: First results from the Survey of Approaches to Educational Planning (SAEP) 2002
81-595-MIE2003011	A new understanding of postsecondary education in Canada: A discussion paper
81-595-MIE2004012	Variation in literacy skills among Canadian provinces: Findings from the OECD PISA
81-595-MIE2004013	Salaries and salary scales of full-time teaching staff at Canadian universities, 2001-2002: final report
81-595-MIE2004014	In and out of high school: First results from the second cycle of the Youth in Transition Survey, 2002
81-595-MIE2004015	Working and Training: First Results of the 2003 Adult Education and Training Survey
81-595-MIE2004016	Class of 2000: Profile of Postsecondary Graduates and Student Debt
81-595-MIE2004017	Connectivity and ICT integration in Canadian elementary and secondary schools: First results from the Information and Communications Technologies in Schools Survey, 2003-2004

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Research papers

81-595-MIE2004018	Education and labour market pathways of young Canadians between age 20 and 22: an Overview
81-595-MIE2004019	Salaries and salary scales of full-time teaching staff at Canadian universities, 2003-2004
81-595-MIE2004020	Culture Goods Trade Estimates: Methodology and Technical Notes
81-595-MIE2004021	Canadian Framework for Culture Statistics
81-595-MIE2004022	Summary public school indicators for the provinces and territories, 1996-1997 to 2002-2003
81-595-MIE2004023	Economic Contribution of Culture in Canada
81-595-MIE2004024	Economic Contributions of the Culture Sector in Ontario
81-595-MIE2004025	Economic Contribution of the Culture Sector in Canada – A Provincial Perspective
81-595-MIE2004026	Who pursues postsecondary education, who leaves and why: Results from the Youth in Transition Survey
81-595-MIE2005027	Salaries and salary scales of full-time teaching staff at Canadian universities, 2002-2003: final report
81-595-MIE2005028	Canadian School Libraries and Teacher-Librarians: Results from the 2003/04 Information and Communications Technologies in Schools Survey
81-595-MIE2005029	Manitoba Postsecondary Graduates from the Class of 2000: How Did They Fare?
81-595-MIE2005030	Salaries and Salary Scales of Full-time teaching Staff at Canadian Universities, 2004-2005: Preliminary Report
81-595-MIE2005031	Salaries and salary scales of full-time teaching staff at Canadian universities, 2003-2004: final report
81-595-MIE2005032	Survey of Earned Doctorates: A Profile of Doctoral Degree Recipients
81-595-MIE2005033	The Education Services Industry in Canada
81-595-MIE2005034	Connectivity and ICT Integration in First Nations Schools: Results from the Information and Communications Technologies in Schools Survey, 2003/04
81-595-MIE2005035	Registered Apprentices: A Class Ten Years Later

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| 81-595-MIE2006037 | Economic Contribution of the Culture sector to Canada's Provinces |