

Sponsored Research Revenue 2018-2019



Research Funding at Alberta's Comprehensive Academic
Research Universities (CARUs)

Alberta



Alberta Jobs, Economy and Innovation

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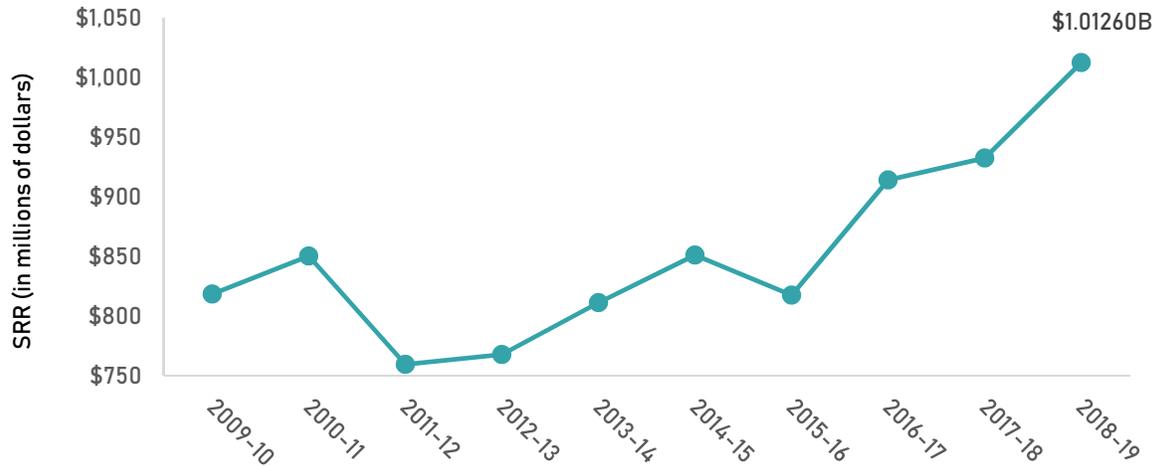
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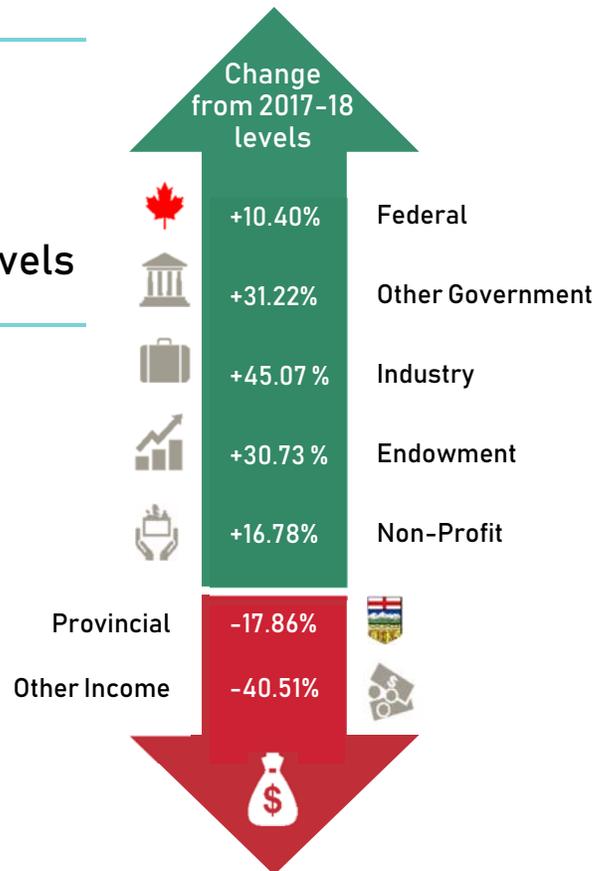
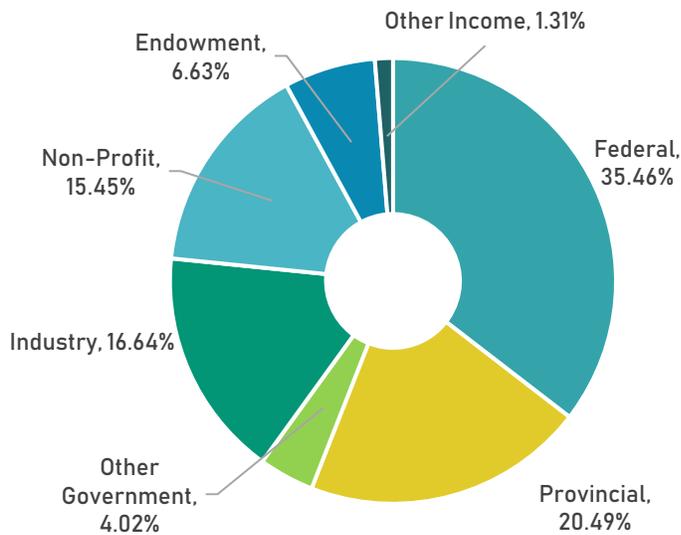
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Highlights 2018-2019

Sponsored Research Revenue (SRR)



SRR increased by
\$79.997 million
 (+8.58%) from 2016-17 levels



Preface

Sponsored Research Revenue 2018-19: Research Funding at Alberta's Comprehensive Academic Research Universities is produced on an annual basis by the Government of Alberta's Ministry of Jobs, Economy and Innovation (JEI). The Ministry's Annual Report and Business Plan will include data derived from this report to demonstrate the capacity and capabilities of Alberta's Comprehensive Academic Research Universities (CARUs).

Sponsored research revenues (SRRs) are research funds garnered outside of regular university operating grants. Research contracts, grants and donations are used to support the operating and infrastructure costs of research at institutions. The data in this report is provided directly to the Government of Alberta by the institutions and is derived from a combination of audited financial statements and supplemental financial reports.

Contributing to this report are Alberta's Comprehensive Academic Research Universities:



The data collected for this report is consistent with the overall sponsored research revenue totals reported by the institutions to the Canadian Association of University Business Officers (CAUBO). Alberta's SRR report presents a 10-year overview of CARU data, with a more detailed focus on the data span from 2013-14 to 2018-19.

Note: due to rounding, some totals may not correspond exactly with the sum of the separate figures in the graphs.



Alberta's Focus on Research and Innovation

Alberta's CARUs play a key role in advancing the province's research and innovation system. To maintain and expand Alberta's competitive position as a leader in research and innovation, the CARUs continue to build research capacity with a focus on excellence with the following innovation targets:



Strengthening Alberta's research capacity requires attracting talent, supporting advanced training opportunities, bringing investment from around the world, building bridges between industry and research, and providing and maintaining top-level research infrastructure. A critical mass of globally competitive research facilities and highly talented researchers are essential for Alberta to deliver on its key priorities. This is partly why the Government of Alberta and Alberta Innovates developed the [Alberta Research and Innovation Framework \(ARIF\)](#), released in December 2017. The ARIF guides institutions as to where provincial investments will be focused, enabling them to build capacity to help grow Alberta's economy, enhance competitiveness and productivity, and support the well-being of Albertans.

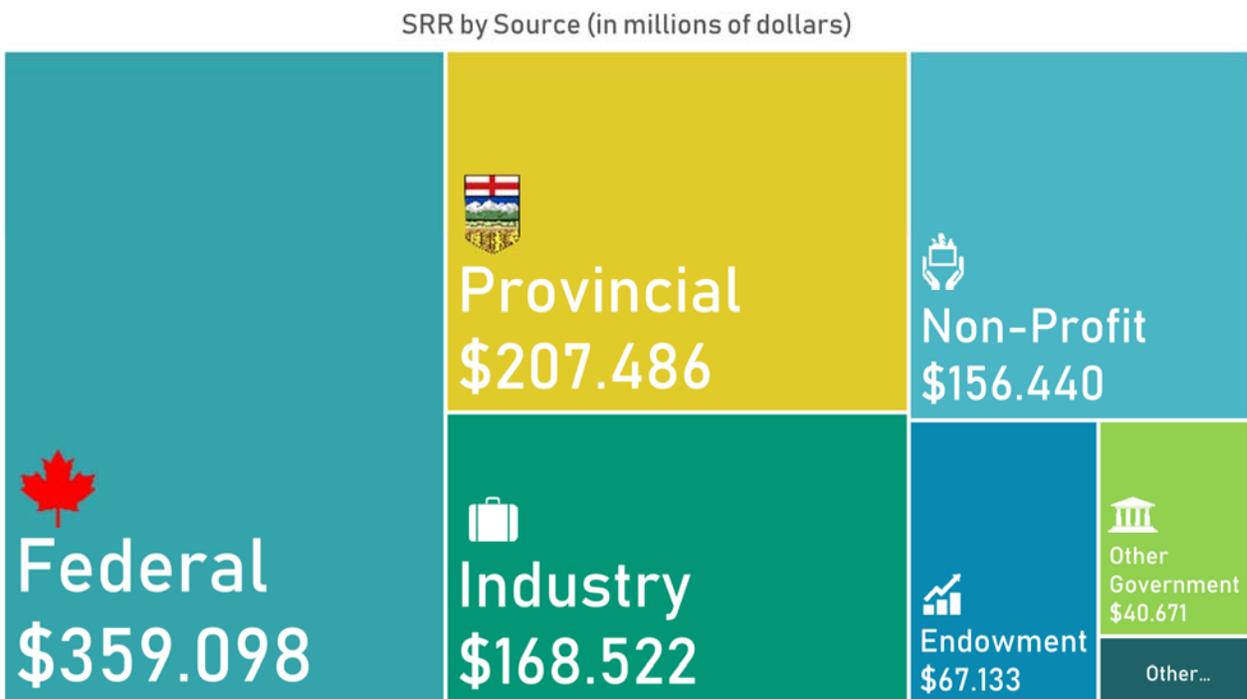
Strengthening research capacity supports the formation of strategic partnerships between researchers, advanced technology enterprises, and Alberta's innovation system, leading to targeted investment attraction and pre-commercial technology support.

Alberta continues to expand research excellence in emerging technologies, including nanotechnology, digital technology, artificial intelligence, and omics (genomics, metabolomics, etc.). At the same time, expertise is being enhanced in the health, environment and climate, fibre and bioindustry, food and agriculture, and energy sectors, enabling Alberta to add value and strengthen its economy. Research capacity in Alberta is supported by investments from the Government of Alberta, Alberta Innovates, the federal government, industry, and other non-governmental sources.

Total Sponsored Research Revenue

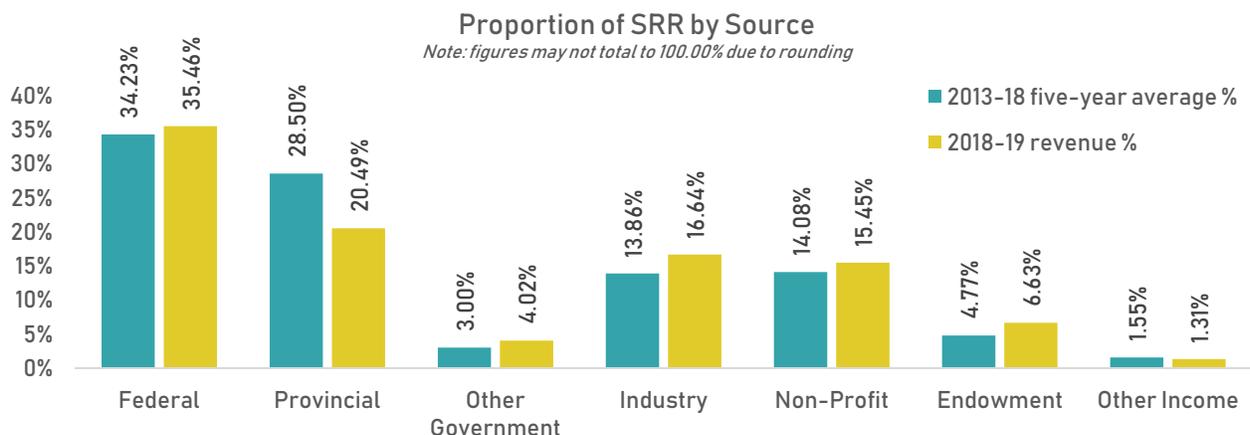
2018-19

In 2018-19, total sponsored research revenue increased by 8.58 per cent from 2017-18 levels to \$1.01260 billion. This rise was primarily due to increases to industry, federal, non-profit, endowment, and other government sources. Consistent with previous years, the federal and provincial governments remain the largest funders of sponsored research revenue (35.46 per cent and 20.49 per cent of total funding, respectively).



Five-Year Overview

Compared to the five-year average (2013-18), sponsored research revenue increased modestly from endowment and industry funding sources and decreased slightly from provincial sources. Federal funding, other government, non-profit, and other income sources remained stable.

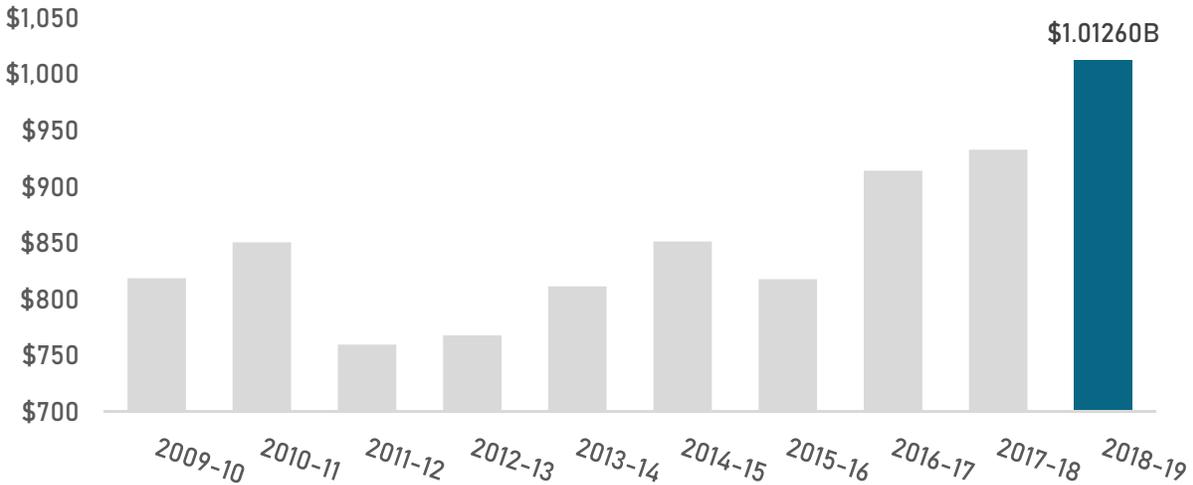


SRR Since 2013-14 By Source (in Millions of Dollars)



10-Year Overview

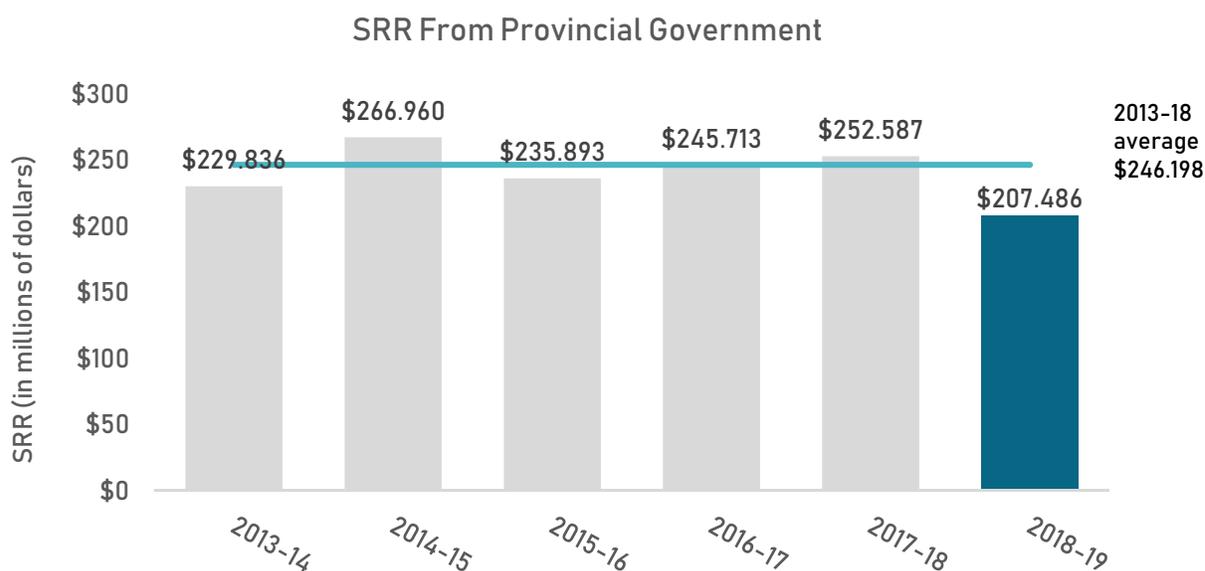
SRR (All Sources) in Millions of Dollars



Over the past 10 years (2009-10 to 2018-19), research funding for Alberta’s CARUs increased by 23.72 per cent. This overall increase has enabled Alberta’s research-intensive universities to build and strengthen their capacity for innovation and support the retention and attraction of highly skilled talent.

Provincial Government

Provincial sponsored research revenue is comprised of funding from Alberta Innovates and government sources, including JEI. Funding for 2018-19 totalled \$207.486 million, a decrease of \$45.101 million (17.86 per cent) from 2017-18, and dipped below the five-year average of \$246.198 million (2013-18).



SOURCE OF FUNDING IN 2018-19	FUNDING (IN MILLIONS)	% OF TOTAL
Alberta Innovates	\$ 84.285	40.6%
Jobs, Economy and Innovation	\$ 22.313	10.8%
Other government departments	\$ 100.888	48.6%

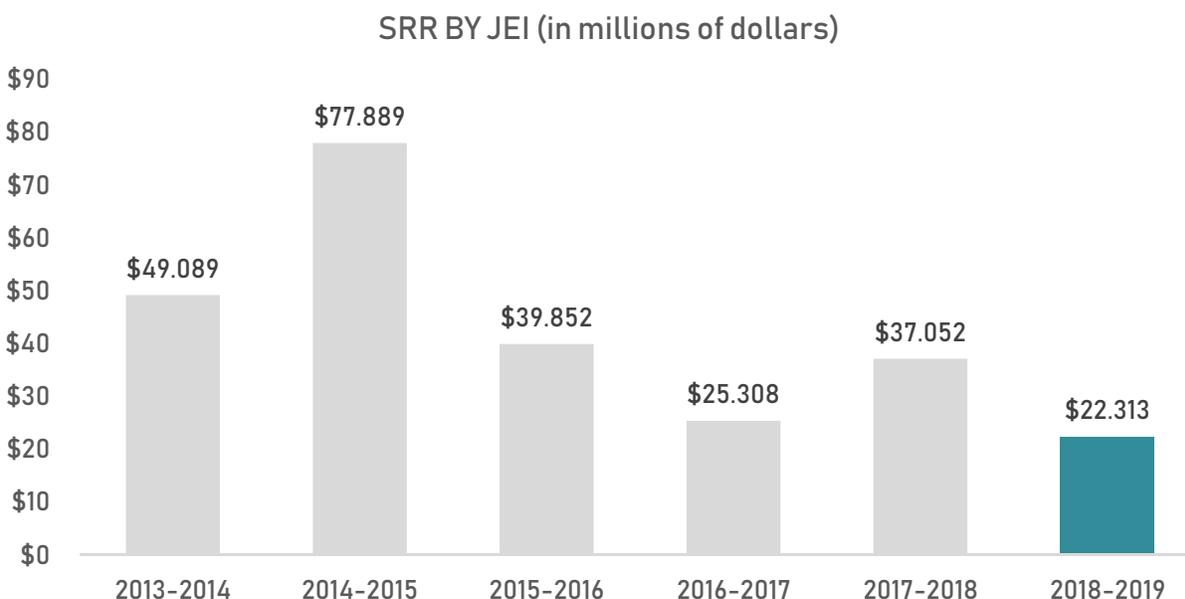
The 17.86 per cent decrease in funding levels can be attributed to lower contributions from Alberta Innovates, JEI, and other Government of Alberta departments. Compared to 2017-18, funding from Alberta Innovates and JEI fell by \$18.971 million and \$14.739 million, respectively. Funding from other Government of Alberta departments also fell by \$11.391 million.

In addition to directly funding research, Alberta Advanced Education supports ongoing operations of the post-secondary institutions, including teaching, research, and administrative activities. The operational funding for the four CARUs totalled more than \$1.3 billion in 2018-19. Based on estimates by the department, institutions allocate approximately 40 per cent of operational grants to support research-related activities. These include salaries of faculty and staff, administration and support services for research projects, as well as support for facilities, operating costs, and some indirect research costs not covered by research revenue sources detailed in this report.

Developing and maintaining Alberta’s capacity to generate knowledge and innovate is essential to the long-term competitiveness of the province. The Government of Alberta continues to build research capacity at Alberta’s CARUs through ongoing investment in research facilities, faculty, and technicians. This has allowed the province to attract and retain world-class researchers and train students and skilled workers, contributing to building a highly qualified workforce in Alberta.

Jobs, Economy and Innovation (JEI)

In 2018-19, JEI funding for sponsored research revenue totalled \$22.313 million, down by \$14.739 million from 2017-18 levels. This decrease is due to timing in grant funding cycles.



Translating knowledge and discoveries into new and innovative products and processes is a priority for Alberta. Alberta's CARUs play a key role in the innovation system and contribute significantly to Alberta's success as a knowledge-driven economy. JEI also provides targeted funding for research equipment and industry partnerships at Alberta's CARUs.

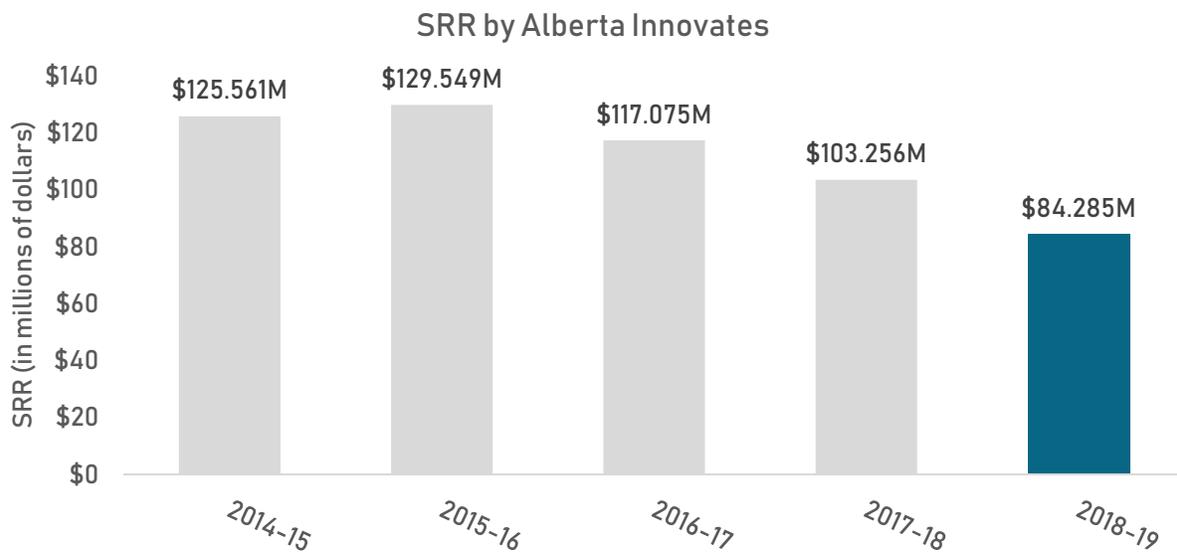
JEI's Research Capacity Program (RCP) is a competitive funding program to support the acquisition of small equipment and large research infrastructure. The department also supports a range of technology partnerships in areas such as life sciences, information and communications technologies, and emerging technology industries. This funding allows researchers to build on and leverage other funding streams, increasing the impact of provincial support in the innovation system.

Through partnership at the local and global levels, and targeted grant funding, the ministry provides opportunities for researchers and companies to move innovative ideas from research and development to commercialization in the market. JEI enhances the market success of new products and processes while contributing to environmental, economic, and social benefits for all Albertans.

Alberta Innovates

Alberta Innovates is a public agency that operates at arm's length from the Government of Alberta. JEI is Alberta Innovates' sole shareholder and their main funder. Alberta Innovates provides a suite of funding programs, cross-sectoral expertise, and research facilities to foster innovation in the province. The organization's funding programs are designed to accelerate commercialization activity and offset research and development costs for researchers, industry, public institutions, and other stakeholders. In 2016, Alberta Innovates' four corporations were consolidated into a single entity.

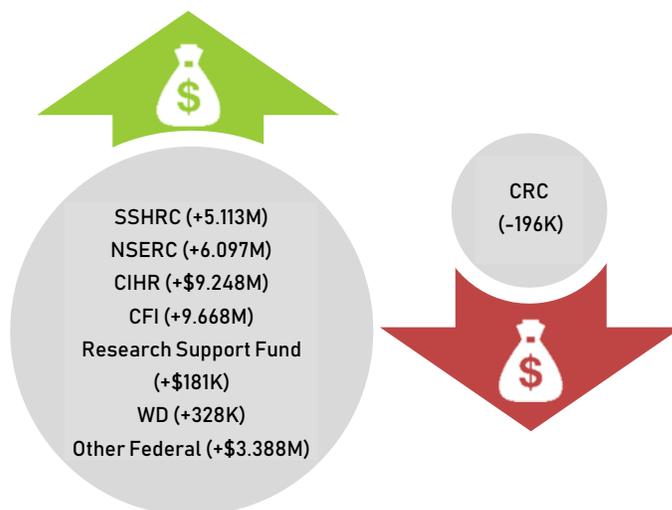
Total funding from Alberta Innovates reached \$84.285 million in 2018-19, comprising 40.6 per cent of all provincial funding sources. The decrease of \$18.971 million from 2017-18 levels can be attributed in part to program completions and changes.



Federal Government

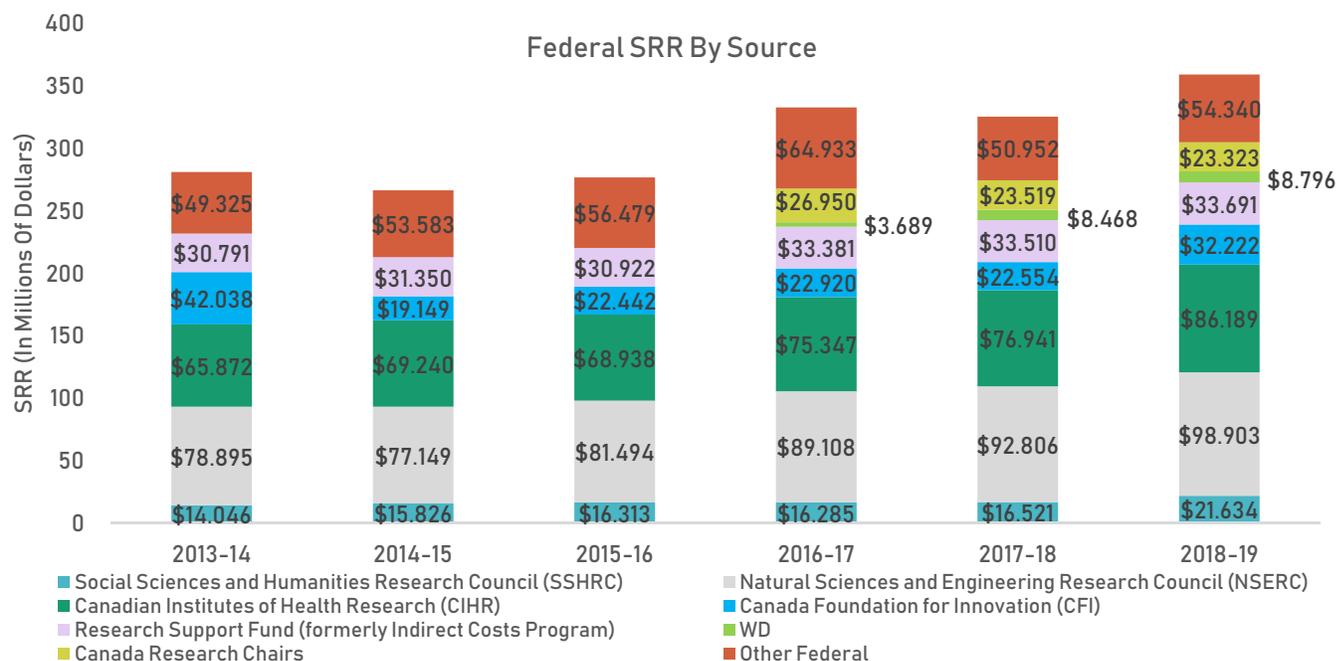
Federal sponsored research revenue is comprised of the Social Sciences and Humanities Research Council (SSHRC), the Natural Sciences and Engineering Research Council (NSERC), the Canadian Institutes of Health Research (CIHR), the Canada Foundation for Innovation (CFI), the Research Support Fund, Western Economic Diversification (WD), Canada Research Chairs (CRC), and other federal sources (e.g., Industrial Research Assistance Program and Health Canada).

In 2018-19, federal government funding totalled \$359.098 million, an increase of \$33.827 million from 2017-18 levels. This increase was driven largely by CFI and CIHR, where funding rose by 42.87 per cent and 12.02 per cent, respectively. NSERC, SSHRC, and other federal funding also grew by 6.57 per cent, 30.95 per cent, and 6.65 per cent, respectively. WD and the Research Support Fund had modest increases of \$0.181 million and \$0.328 million, respectively, from the year prior.



CRC showed a slight decrease in funding of \$0.196 million (-0.83%).

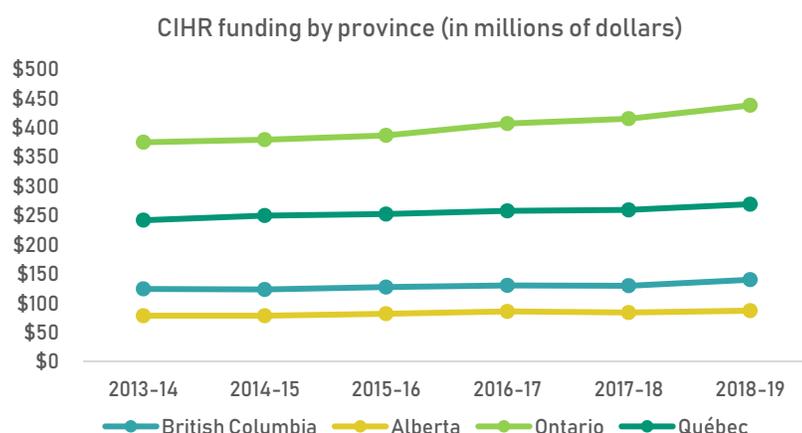
In 2018-19, federal government funding of \$359.098 million was higher than the five-year average (2013-18) of \$296.347 million. The following graph illustrates funding by source since 2013-18



Jurisdictional Tricouncil Funding Comparison

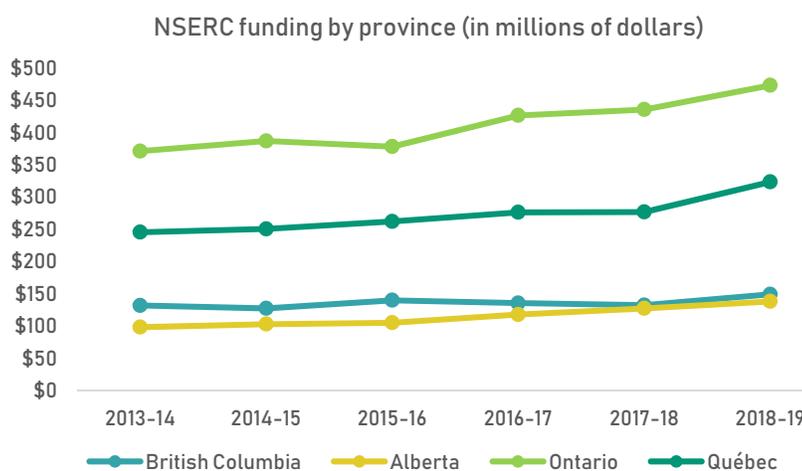
Canadian Institutes of Health Research (CIHR)

The total amount of CIHR funding for Canada in 2018-19 was \$998.655 million, an increase of \$50.819 million from the previous year. Alberta's post-secondary institutions (PSIs) received \$86.659 million in 2018-19, an increase of \$3.142 million (3.76 per cent) from 2017-18 levels. The amount as a percent of total award remained consistent with previous years.



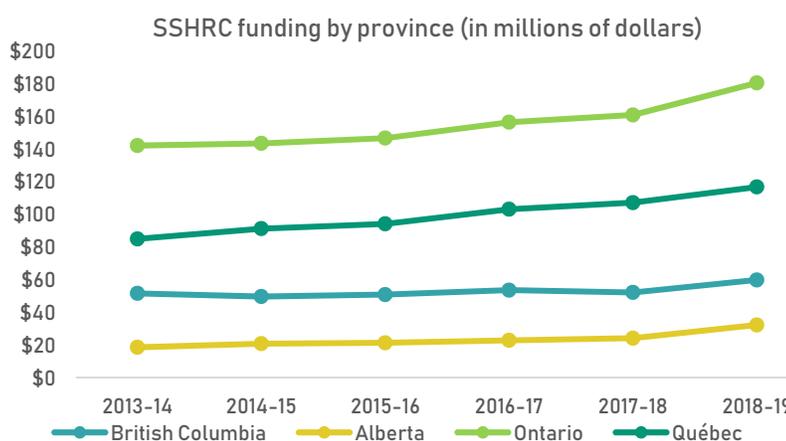
Natural Sciences and Engineering Research Council (NSERC)

The total amount of NSERC funding in Canada in 2017-18 was \$1.274 billion. Alberta PSIs received \$137.850 million, an increase of \$10.771 million from 2017-18 levels. Alberta's proportion of NSERC funding has remained stable at 9 to 11 per cent over the past 10 years.



Social Sciences and Humanities Research Council (SSHRC)

The total amount of SSHRC funding in 2017-18 was \$440.269 million. Alberta PSIs received \$32.335 million in overall funding, an increase of \$8.104 million from 2017-18 levels. While annual SSHRC funding in Alberta has remained generally stable over the years at approximately \$20 million, 2018-19 showed a notable increase of 33.45 per cent from 2017-18 levels.



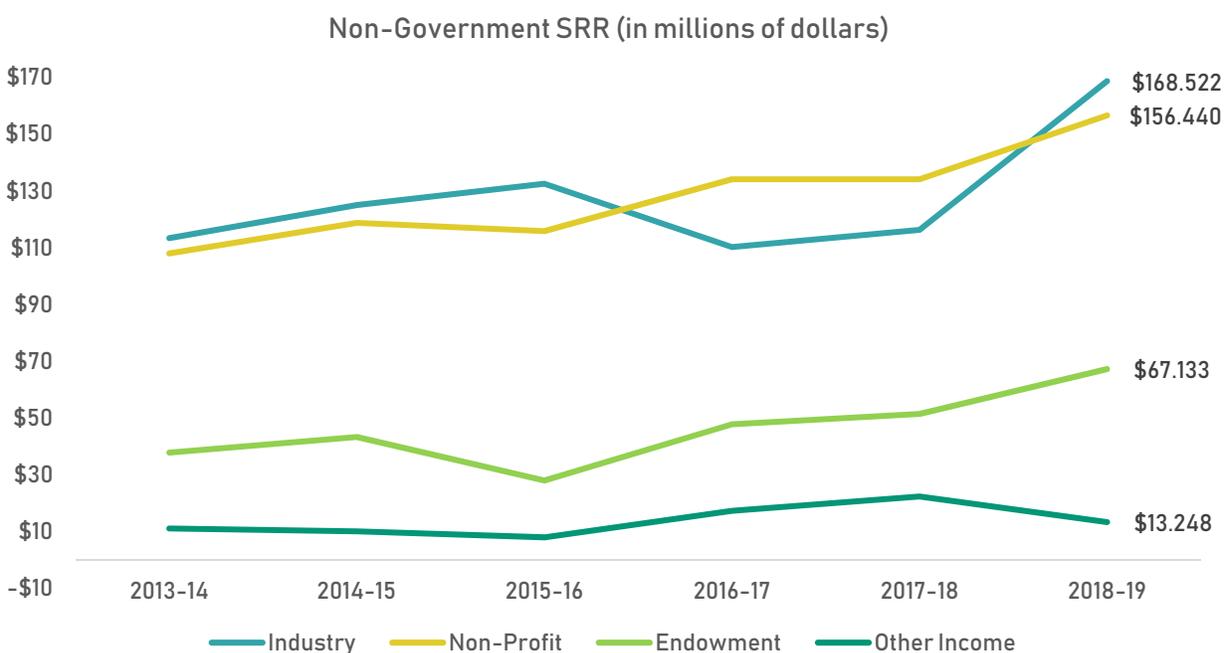
*Note: The values for the TriCouncil (CIHR, NSERC, and SSHRC) on this page reflect total funding across the CARUs and all other Alberta post-secondary institutions. Data was retrieved from the respective online funding databases.

Non-Government

Sponsored research revenue from non-government sources, such as non-government endowments, non-profits, and industry, provided 40.03 per cent of funding at Alberta's CARUs in 2018-19. Non-government research funding increased by 25.20 per cent (\$81.59 million) to \$405.343 million from 2017-18 levels. This was driven by increases in industry (+45.07 per cent), non-profit sources (+16.78 per cent), and endowment sources (30.73 per cent). Funding from other income sources fell by \$9.023 million (-40.51 per cent).

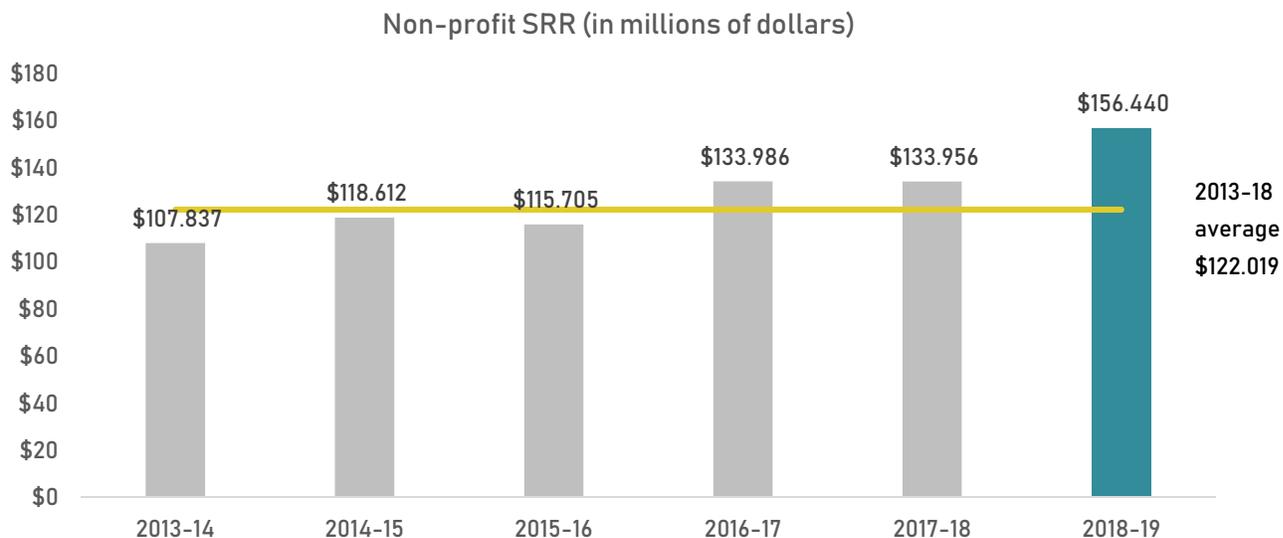


In 2018-19, industry funding accounted for the largest portion of non-government sponsored research revenue at \$168.522 million (41.58 per cent), followed by non-profit funding at \$156.440 million (38.59 per cent), endowments at \$67.133 million (16.56 per cent) and other income sources at \$13.248 million (3.27 per cent).



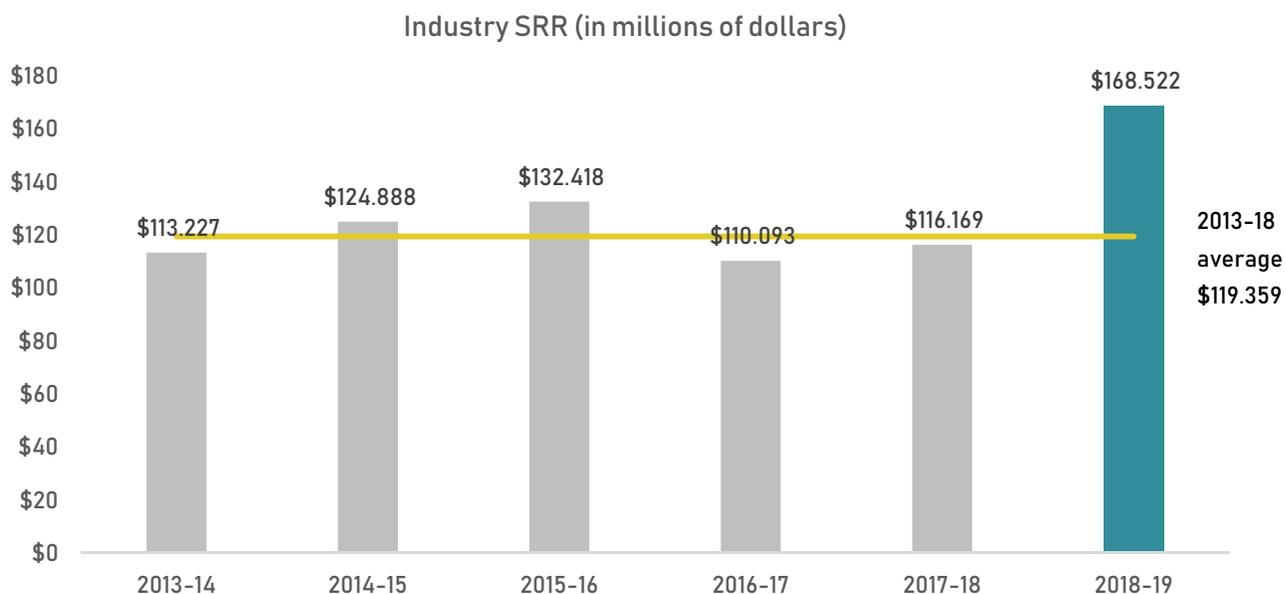
Non-Profit

Funding from the non-profit sector was \$156.440 million in 2018-19 (an increase of 16.78 per cent). The sector provided \$34.421 million more than the 2013-18 funding average of \$122.019 million.



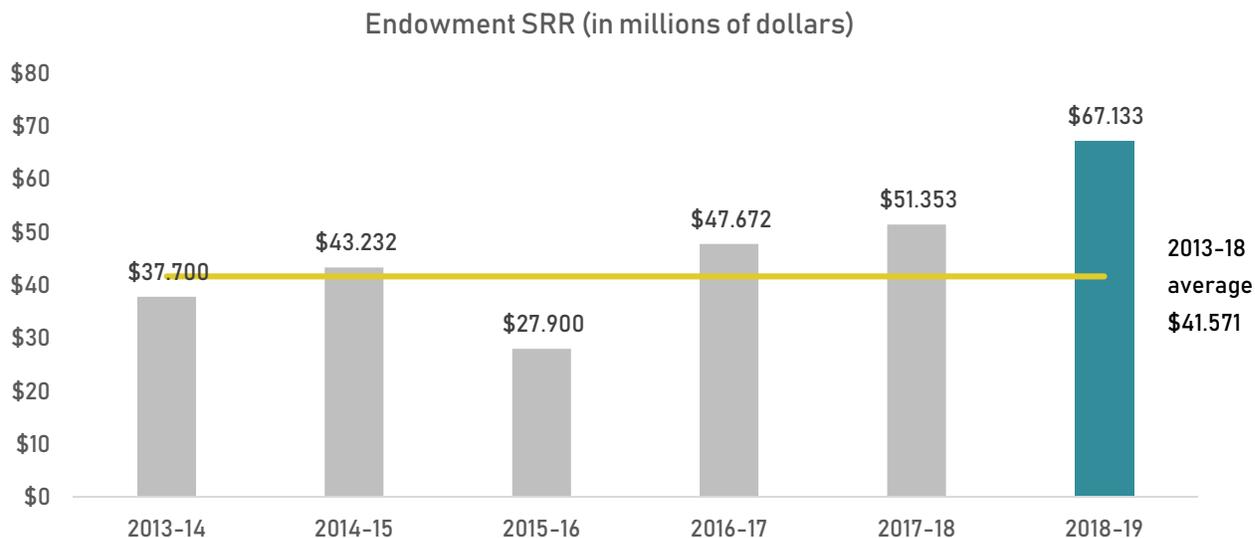
Industry

Collaborations between researchers at Alberta's CARUs and industry are a key channel through which innovative research can be translated into the private sector. Industry funding increased to \$168.522 million in 2018-19, which is \$49.163 million above the five-year average (2013-18) of \$119.359 million.



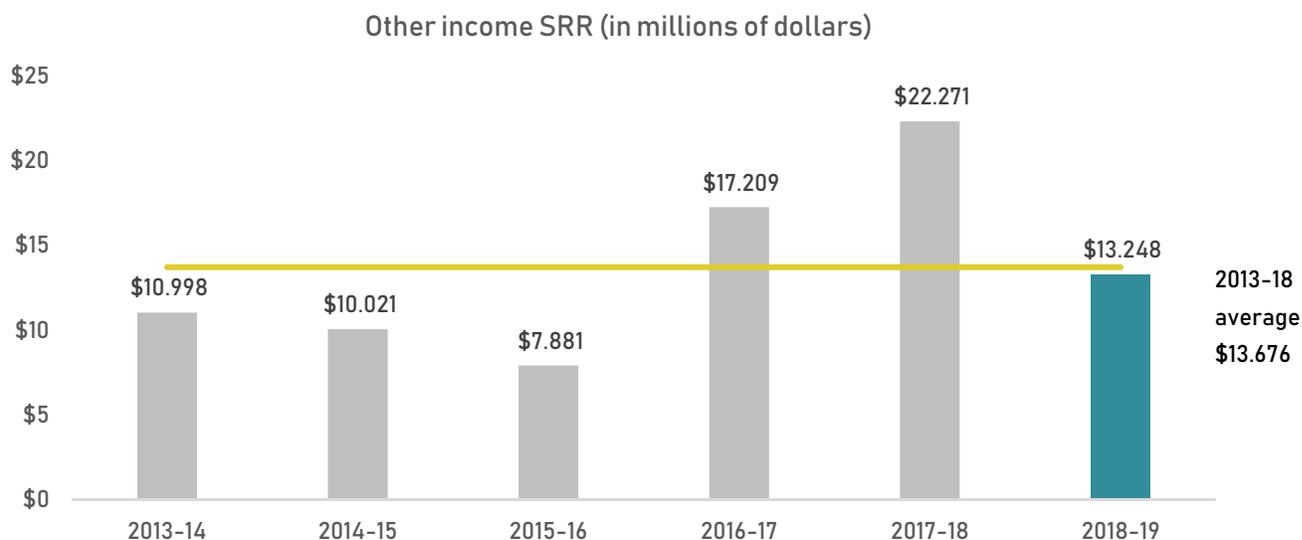
Endowment

Endowment sponsored research revenue are funds garnered through charitable funds and donations. In 2018-19, endowment funds grew 30.73 per cent from the previous year to \$67.133 million. This is \$25.562 million greater than the five-year average (2013-18) of \$41.571 million.



Other Income

Other income are sources of sponsored research revenue that do not fall into any of the above categories. In 2018-19, other income totalled \$13.248 million, down 40.51 per cent from 2017-18 levels. This is \$0.428 million less than the five-year average (2013-18) of \$13.676 million.



Appendices

SRR – All Funding Sources (in millions of dollars)

All sources	Federal	Provincial	Other Government	Industry	Non-Profit	Endowment	Other Income	Total
2006-07	\$ 288.113	\$ 223.789	\$ 17.679	\$ 90.537	\$ 63.335	\$ 29.463	\$ 6.379	\$ 719.295
2007-08	\$ 274.110	\$ 280.928	\$ 16.743	\$ 108.082	\$ 64.614	\$ 11.380	\$ 5.092	\$ 760.949
2008-09	\$ 305.899	\$ 271.042	\$ 19.085	\$ 102.199	\$ 83.028	\$ 7.022	\$ 2.939	\$ 791.214
2009-10	\$ 294.308	\$ 269.201	\$ 18.917	\$ 84.275	\$ 91.606	\$ 40.488	\$ 19.671	\$ 818.466
2010-11	\$ 323.319	\$ 255.264	\$ 27.588	\$ 86.841	\$ 101.993	\$ 32.941	\$ 22.441	\$ 850.387
2011-12	\$ 294.966	\$ 218.344	\$ 30.371	\$ 59.758	\$ 112.305	\$ 19.613	\$ 24.194	\$ 759.551
2012-13	\$ 291.473	\$ 184.722	\$ 19.244	\$ 106.884	\$ 112.892	\$ 29.408	\$ 23.224	\$ 767.847
2013-14	\$ 280.967	\$ 229.836	\$ 30.764	\$ 113.227	\$ 107.837	\$ 37.700	\$ 10.998	\$ 811.329
2014-15	\$ 266.297	\$ 266.960	\$ 21.156	\$ 124.888	\$ 118.612	\$ 43.232	\$ 10.021	\$ 851.166
2015-16	\$ 276.588	\$ 235.893	\$ 21.213	\$ 132.418	\$ 115.705	\$ 27.900	\$ 7.881	\$ 817.598
2016-17	\$ 333.910	\$ 245.713	\$ 25.494	\$ 110.093	\$ 133.986	\$ 47.672	\$ 17.209	\$ 914.077
2017-18	\$ 325.271	\$ 252.587	\$ 30.995	\$ 116.169	\$ 133.956	\$ 51.353	\$ 22.271	\$ 932.602
2018-19	\$ 359.098	\$ 207.486	\$ 40.671	\$ 168.522	\$ 156.440	\$ 67.133	\$ 13.248	\$ 1,012.60

SRR – Federal Government Funding Sources (in millions of dollars)

Federal Funding Sources	SSHRC	Health Canada	NSERC	CIHR	CFI	Canada Research Chairs	Research Support Fund	Western Economic Development (WD)	Other Federal	Total
2006-07	\$ 18.301	\$ 0.366	\$ 70.395	\$ 71.964	\$ 50.166	\$ 21.867	\$ 30.009		\$ 25.046	\$ 288.114
2007-08	\$ 25.884	\$ 0.711	\$ 76.658	\$ 71.917	\$ 14.600	\$ 18.305	\$ 31.864		\$ 34.171	\$ 274.110
2008-09	\$ 25.462	\$ 0.835	\$ 84.236	\$ 79.622	\$ 25.170	\$ 17.800	\$ 32.359		\$ 40.415	\$ 305.899
2009-10	\$ 22.622	\$ 1.163	\$ 80.967	\$ 78.352	\$ 46.229	\$ 19.116	\$ 30.935		\$ 14.924	\$ 294.308
2010-11	\$ 18.235	\$ 1.337	\$ 84.554	\$ 73.094	\$ 52.538	\$ 29.054	\$ 31.166		\$ 33.341	\$ 323.319
2011-12	\$ 17.838		\$ 84.241	\$ 66.811	\$ 35.308		\$ 31.235		\$ 59.533	\$ 294.966
2012-13	\$ 15.441		\$ 86.586	\$ 64.002	\$ 28.752		\$ 31.036		\$ 65.656	\$ 291.473
2013-14	\$ 14.046		\$ 78.895	\$ 65.872	\$ 42.038		\$ 30.791		\$ 49.325	\$ 280.967
2014-15	\$ 15.826		\$ 77.149	\$ 69.240	\$ 19.149		\$ 31.350		\$ 53.583	\$ 266.297
2015-16	\$ 16.313		\$ 81.494	\$ 68.938	\$ 22.442		\$ 30.922		\$ 56.479	\$ 276.588
2016-17	\$ 16.285		\$ 89.108	\$ 75.347	\$ 22.920	\$ 26.950	\$ 33.381	\$ 3.689	\$ 64.933	\$ 332.613
2017-18	\$ 16.521		\$ 92.806	\$ 76.941	\$ 22.554	\$ 23.519	\$ 33.510	\$ 8.468	\$ 50.952	\$ 325.271
2018-19	\$ 21.634		\$ 98.903	\$ 86.189	\$ 32.222	\$ 23.323	\$ 33.691	\$ 8.796	\$ 54.340	\$ 359.098

*From 2011-2012, Health Canada funding was consolidated under Other Federal Funding sources.

SRR – Provincial Government Funding Sources (in millions of dollars)

Provincial Funding Sources	Alberta Innovates (consolidated)	JEI	Other Government of Alberta	Buildings for Research	Government of Alberta (GoA) subtotal	Total (Alberta Innovates & GoA)
2006-07	\$ 68.619	\$ 57.831	\$ 56.523	\$ 40.817	\$ 155.171	\$ 223.790
2007-08	\$ 76.139	\$ 61.671	\$ 46.818	\$ 96.300	\$ 204.789	\$ 280.928
2008-09	\$ 88.134	\$ 42.791	\$ 54.014	\$ 86.103	\$ 182.908	\$ 271.042
2009-10	\$ 109.035	\$ 41.376	\$ 61.169	\$ 57.620	\$ 160.165	\$ 269.200
2010-11	\$ 112.077	\$ 30.082	\$ 82.633	\$ 30.472	\$ 143.187	\$ 255.264
2011-12	\$ 104.621	\$ 42.419	\$ 66.842	\$ 4.462	\$ 113.723	\$ 218.344
2012-13	\$ 93.973	\$ 25.809	\$ 62.909	\$ 2.031	\$ 90.749	\$ 184.722
2013-14	\$ 124.560	\$ 49.089	\$ 56.187	\$ -	\$ 105.276	\$ 229.836
2014-15	\$ 125.561	\$ 77.889	\$ 63.510	\$ -	\$ 141.399	\$ 266.960
2015-16	\$ 129.549	\$ 39.852	\$ 66.492	\$ -	\$ 106.344	\$ 235.893
2016-17	\$ 117.075	\$ 25.308	\$ 103.330	\$ -	\$ 128.638	\$ 245.713
2017-18	\$ 103.256	\$ 37.052	\$ 112.279	\$ -	\$ 149.331	\$ 252.587
2018-19	\$ 84.285	\$ 22.313	\$ 100.888	\$ -	\$ 123.201	\$ 207.486

SRR – Non-Government Funding Sources (in millions of dollars)

Non-Government Funding Sources	Industry	Non-profit	Endowment	Other Income	Total
2006-07	\$ 90.537	\$ 63.335	\$ 29.463	\$ 6.379	\$ 189.714
2007-08	\$ 108.082	\$ 64.614	\$ 11.380	\$ 5.092	\$ 189.168
2008-09	\$ 102.199	\$ 83.028	\$ 7.022	\$ 2.939	\$ 195.188
2009-10	\$ 84.275	\$ 91.606	\$ 40.488	\$ 19.671	\$ 236.040
2010-11	\$ 86.841	\$ 101.993	\$ 32.941	\$ 22.441	\$ 244.216
2011-12	\$ 59.758	\$ 112.305	\$ 19.613	\$ 24.194	\$ 215.870
2012-13	\$ 106.884	\$ 112.892	\$ 29.408	\$ 23.224	\$ 272.408
2013-14	\$ 113.227	\$ 107.837	\$ 37.700	\$ 10.998	\$ 269.762
2014-15	\$ 124.888	\$ 118.612	\$ 43.232	\$ 10.021	\$ 296.753
2015-16	\$ 132.418	\$ 115.705	\$ 27.900	\$ 7.881	\$ 283.904
2016-17	\$ 110.093	\$ 133.986	\$ 47.672	\$ 17.209	\$ 308.960
2017-18	\$ 116.169	\$ 133.956	\$ 51.353	\$ 22.271	\$ 323.749
2018-19	\$ 168.522	\$ 156.440	\$ 67.133	\$ 13.248	\$ 405.343

Definitions

Government of Alberta – Revenue from Government of Alberta departments and agencies including schools, universities, colleges, and hospitals.

Jobs, Economy and Innovation (Formerly Economic Development, Trade and Tourism) – Revenue from the department of Jobs, Economy and Innovation, e.g., Research Capacity Program.

Other Government of Alberta – Revenue from all other Government of Alberta sources not captured by Jobs, Economy and Innovation and Alberta Innovates.

Federal Government – Revenue from Government of Canada sources.

Canada Foundation for Innovation – Revenue from all programs of the Canada Foundation for Innovation (including Canadian Foundation for Innovation infrastructure awards to Canada Research Chair holders).

Canadian Institutes of Health Research (CIHR) - CIHR is Canada's federal funding agency for health research. It supports discoveries and innovations that improve the health of Canadians and strengthen the health care system. CIHR provides leadership and support to health researchers and trainees across Canada.

Indirect Costs Program – Revenue from the federal Indirect Costs Program.

Natural Sciences and Engineering Research Council (NSERC) - the council supports innovation and science through investing in people and infrastructure to increase Canada's scientific competitiveness and investing in research and projects involving partnerships between post-secondary institutions and industry.

Other Federal – Revenue from all other federal government sources and agencies not captured in the preceding categories (e.g., Canada Space Agency, Health Canada).

Other Government Jurisdictions – Revenue from all government sources other than the Government of Alberta (including non-Alberta schools, universities, colleges, and hospitals) and Canadian federal government sources, municipal governments, other provinces and foreign governments.

Social Sciences and Humanities Research Council (SSHRC) – The council is the federal research funding agency that promotes and supports post-secondary research and training in the humanities and social sciences.

Non-government sources – Revenue from industry, non-profits, endowments and other income sources.

Industry – Refers to sponsored research revenue obtained from industry and business sources. This category includes donations, grants, and contracts from individuals and business enterprises.

Non-profit – Refers to sponsored research revenue obtained from non-profit and community organizations. This category includes donations, grants, and contracts from non-profit and community organizations.

Endowment – Refers to the range of endowment revenue garnered by the Comprehensive Academic Research Universities from donors. Investment income generated by endowments may be used for various purposes, which are often restricted by donors.

Other income – Refers to sponsored research revenue obtained from the sale of services and products, and miscellaneous.