

Saskatchewan Post-Secondary Education Indicators



Economic Impact of Saskatchewan's Post-Secondary Sector 2021-22

Executive Summary

This report provides summary results for an economic impact analysis of Saskatchewan's post-secondary sector for 2021-22. The report was developed by the Ministry of Advanced Education (the ministry) and the Post-Secondary Indicators Working Group. The methodology was originally developed by RTI International, a non-profit independent research institute.

The primary objective of the study is to quantify the economic impact that the sector's annual operating activity has on the broader Saskatchewan economy. The economic impact measures of interest are gross domestic product (GDP), jobs, and labour income.

The study concludes that the Saskatchewan post-secondary sector had a total economic impact of almost \$2.6 billion in 2021-22. This includes business activity stimulated by institutions' teaching and research missions, spending by students from out of province or abroad, on-campus construction activity, and out-of-province visitor spending associated with the post-secondary institutions.

In addition, the sector supported 17,540 jobs across the province and \$1.5 billion in labour income (the combined annual earnings of the employees in these jobs).

About 3% of the Saskatchewan economy is directly or indirectly related to the post-secondary sector and for every 10 jobs with post-secondary institutions, there are more than five other jobs elsewhere in the economy that rely on them.

Economic impact reports vary considerably from one another due to different methodologies, estimates, and spending categories used. A full discussion of these differences is presented on pages 6 and 7 of the report and the key assumptions and data sources used in the study are found on page 5.

About This Report

This report is a collaboration of the ministry and the Saskatchewan Post-Secondary Education Indicators Project. The Project's working group is composed of ministry staff and representatives from Saskatchewan's four credential-granting institutions: the University of Saskatchewan, the University of Regina, Saskatchewan Polytechnic, and Saskatchewan Indian Institute of Technologies. Saskatchewan's federated colleges, regional colleges, and the Dumont Technical Institute are indirect participants in the working group because the credentials their students receive are brokered by the aforementioned four institutions.

The methodology was originally developed by RTI International, in collaboration with the Ministry of Advanced Education and the Post-Secondary Indicators Working Group. The modelling and analysis are anticipated to be updated on an annual basis.

Economic Impact of Saskatchewan's Post-Secondary Sector

The economic impact of the post-secondary sector is measured by assessing the on-going contribution the sector makes to the provincial economy. There are three components:

- Effect on GDP;
- Effect on labour income (how much money is going into people's pockets); and
- Effect on jobs.



There are three types of impacts that happen:

- Direct impact: immediate activity;
- Indirect impact: activity stimulated as businesses mobilize to meet post-secondary institutions' demand for goods and services; and
- Induced impact: activity stimulated as households spend the income they earn.

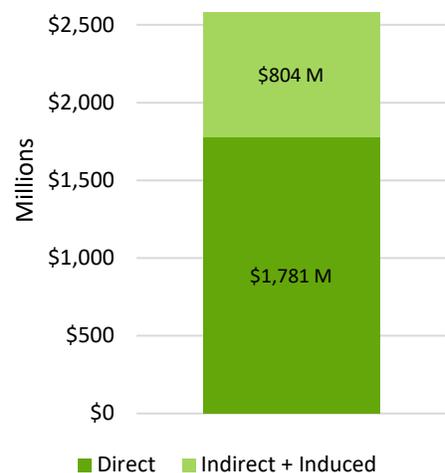
The post-secondary sector had a total economic impact of nearly \$2.6 billion in 2021-22, which amounted to 3.1% of Saskatchewan's \$82.5 billion dollar economy (2021 GDP at market prices). Due to the consistency of post-secondary funding and expenditures, the absolute magnitude of the sector's impact is likely to be stable from year to year, though its relative contribution to the provincial economy (in percentage terms) will be variable depending on market conditions for key Saskatchewan commodities.

In 2021-22, the Government of Saskatchewan provided \$936 million in funding to the post-secondary sector. This amounted to 51% of institutions' combined total revenue of \$1,844 million. The balance of revenue came from a variety of sources, including grants and contracts, tuition and fees, investment income, donations, and sales of goods and services.

For every \$1 provided by the provincial government, \$0.97 comes from somewhere else. A substantial proportion of combined revenue comes from outside of Saskatchewan, including from the federal government, foundations, non-profits, private-sector firms and out-of-province and out-of-country students.

Of the sector's \$2.58 billion GDP impact, 69% (\$1,781 million) were direct impacts and 31% (\$804 million) were indirect and induced impacts (see figure 1).

Figure 1
GDP Impacts of the Saskatchewan Post-Secondary Sector, 2021-22



For every \$10 of GDP generated by post-secondary institutions, \$5.52 is generated by businesses that rely on the sector for work.

The sector supported 17,540 jobs and \$1.5 billion in labour income. Excluding casual employment for students, total sector employment was 12,910 jobs. This means that the sector also supports 4,630 jobs elsewhere in the economy (see figure 2).

For every 10 jobs in the sector, there are 5.4 elsewhere in the economy.

The majority of the sector’s economic impacts stem from institutional operating expenditures on their teaching, research and service missions. However, other components played a significant role, representing 7% of the sector’s overall GDP impact (see figure 3), including:

- \$154 million contributed by over 15,000 out-of-province and international students;
- \$9 million from new capital construction; and
- \$17 million from out-of-province visitor spending associated with institutions.

Figure 2
Employment Impacts of the Saskatchewan Post-Secondary Sector, 2021-22

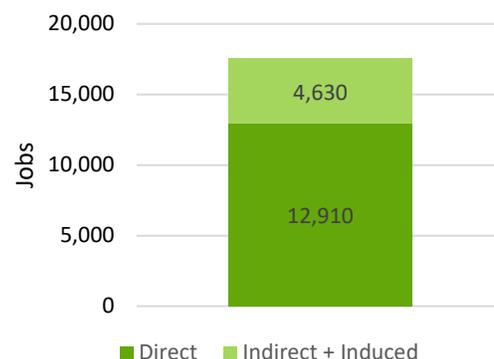


Figure 3
Category Contributions to GDP Impact, 2021-22

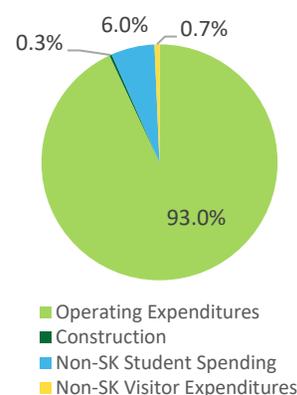


Table 1

Summary Economic Impact Results, 2021-22

	Operations	Non-SK Student Spending	New Capital Construction	Visitor Spending	Total
Direct Impacts					
GDP Impact (millions)	\$1,665	\$99	\$5	\$11	\$1,781
Employment Impact (jobs)	11,400	1,300	40	170	12,910
Labour Income Impact (millions)	\$1,127	\$52	\$3	\$7	\$1,189
Indirect and Induced Impacts					
GDP Impact (millions)	\$739	\$55	\$3	\$6	\$804
Employment Impact (jobs)	4,100	450	30	50	4,630
Labour Income Impact (millions)	\$283	\$25	\$2	\$3	\$312
Total Impacts					
GDP Impact (millions)	\$2,404	\$154	\$9	\$17	\$2,584
Employment Impact (jobs)	15,500	1,750	70	230	17,540
Labour Income Impact (millions)	\$1,410	\$77	\$5	\$10	\$1,501

Note: Subgroups may not add up to total amounts due to rounding

Data Sources

- Impacts are estimated using data from Saskatchewan’s post-secondary institutions – principally, financial, enrolment, and employee headcounts – with economic data from Statistics Canada and input-output multipliers from Statistics Canada Table 36-10-0595-01.
- Saskatchewan’s overall GDP figure comes from dashboard.saskatchewan.ca and is also published on Statistics Canada Table 36-10-0222-01 “Gross domestic product, expenditure-based, provincial and territorial, annual.” This study employs the 2021 figure for Gross domestic product at market prices.
- Institutional financial data (revenues and expenditures) comes from each institution’s Audited Financial Statements for 2021-22.
 - Sector totals are produced by combining the figures for the University of Regina, University of Saskatchewan, Saskatchewan Polytechnic, Saskatchewan Indian Institute of Technology, Saskatchewan’s four Federated Colleges, St. Peter’s College, Dumont Technical Institute, and the seven Regional Colleges (Cumberland and Parkland are treated separately as their merger did not take place until 2023).
- Student spending was included only for those students who are from out of province or abroad. Annual spending per student estimates are derived from the 2022-23 Canada-SK Integrated Student Loans Program Administrative Guidelines, page 19. These estimates are based on the CMHC Rental Market Survey Canada, 2021 and Statistics Canada’s Survey of Family Expenditures (Famex) 1996 indexed to 2021.
- Capital construction spending is limited to projects directly managed by the University of Saskatchewan and University of Regina.
- Visitor spending is based on an estimate that 10-15% of non-Saskatchewan visitors to Regina and Saskatoon are related to the post-secondary institutions there. We use a midpoint figure of 12.5% and employ data from Tourism Saskatchewan to calculate the total spending of non-Saskatchewan visitors related to the institutions.

Differences Between Economic Impact Studies

Aiming to understand the financial impact of their activities on local and national economies, post-secondary institutions in Canada and around the world have produced a multitude of economic impact assessments. In the same way, governments are increasingly interested in assessing the financial returns of public investments and the social impacts of the education sector.

The ministry's economic impact study may differ from those done by individual institutions or in other jurisdictions in the following ways:

- **Methodologies** – These types of research studies can employ a variety of methodologies. Different inputs or variables may also be used, which creates variability in the results of different models.
 - Some economic impact studies quantify financial impact in terms of Gross Output, which takes the total expenditures of an institution, students and visitors and multiplies by a constant multiplier, often set at 1.5.
 - This study instead prioritizes the sector's impact on GDP – the value added to the economy by the province's institutions and the additional economic activity they generate. While Gross Output is a broader measure of economic impact than GDP (and would therefore produce a higher number) we employ GDP to avoid double - counting and to allow for an estimate of the sector's share of Saskatchewan's total GDP.
 - Some models may consider additional components such as the economic impact of post-secondary research activity and research outcomes; this study does not.
 - Similarly, this study does not include the economic impact of alumni earnings premiums, the additional employment income earned by graduates of an institution that remain working in the province of study. A companion report published by the ministry, "Earnings Premiums of Saskatchewan Post-secondary Credentials 2021" quantifies the financial impact of a post-secondary credential for an individual over the course of their working life, but does not seek to tabulate an annual total for all alumni who reside in the province.
 - These two components together (research and alumni earnings) can make up 75% or more of a study's total economic impact figure, far exceeding the components that are included in the ministry's model.
- **Assumptions** – There are several notable assumptions and analytical decisions that drive these types of studies. The ministry's model uses quite conservative assumptions such as visitor spending which assumes a moderate 12.5% of out-of-province visitors to Regina and Saskatoon are related to post-secondary institutions. This conservatism means that actual impacts are more likely to be larger than our results rather than less. One should interpret our results as a reasonable, lower-bound estimate.

- **Multipliers** – Economic models use multipliers to calculate the additional economic impacts (indirect and induced) generated by institutions’ immediate expenditures (direct impacts). These multipliers can vary between studies. Our study employs published multipliers from Statistics Canada’s input-output modelling system.
- **Impact of intraprovincial mobility** – Because this study seeks to quantify the economic impact for the entire Saskatchewan post-secondary sector rather than a single institution, we employ different assumptions regarding the number of students included in our calculations than may be seen in other economic impact reports.
 - While nearly all studies factor in the economic impact of international and out-of-province student spending in the local economy, some studies also include spending by students from elsewhere in an institution’s province or state. As this study is done at the provincial level, living expenses for students who were Saskatchewan residents at the time of application are not included because these expenses can reasonably be assumed to have occurred in the province even if the individual had not attended post-secondary.
 - For visitor spending, this study’s calculations exclude visitors to Regina and Saskatoon from elsewhere in Saskatchewan and are limited to international and out-of-province visitors.