2022 Earnings Premium and 2022-23 Economic Impact Results Institutional Breakout

University of Regina

Executive Summary

The Ministry of Advanced Education, in collaboration with the Post-Secondary Indicators Working Group has completed an economic impact analysis of Saskatchewan's post-secondary sector for 2022-23. The methodology for this study was originally developed by RTI International, a non-profit research institute based in the United States.

While the ministry will not publicly release institution-specific results, these results are shared with working group members to use as they see fit. The provincial level results will be posted on the <u>Indicators website</u>.

This short report provides summary results for the 2022-2023 analysis for the University of Regina (U of R).

The primary objectives of the study were (1) to quantify the impact that earning a postsecondary credential has on graduates' income potential, and (2) to quantify the economic impact that the sector's annual operating activity has on the broader Saskatchewan economy. Economic impact measures of interest were gross domestic product (GDP), jobs, and labour income.

The additional income a person earns because of attaining a higher level of education is referred to as an earnings premium. We find that the credentials granted by U of R in 2022 will **enable graduates to increase their earnings by \$46.4 million more per year in aggregate**.

With regard to the provincial economy, U of R had a **total economic impact of \$525.9 million in 2022-2023**, including business activity stimulated by institutions' teaching and research missions and spending by students from out of province or abroad. In addition, U of R supported **4,200 jobs** across the province and **\$290.7 million in labour income**.

Note that the earnings premium and the provincial economic impact measures are separate measures and should not be combined. The former is a measure of the earnings impact of a credential, and the latter is a measure of the total value added contributed to the provincial economy through the institution's activities and the activities it stimulates among Saskatchewan businesses and the workforce.

Earnings Premium for Graduates from University of Regina

The earnings premium is calculated as the difference between the mean earnings of people with a given level of education compared to people with the next highest level of education. We used 2021 Census data to calculate the average earnings premium achieved by men and women for each credential level.¹ We scale the Census-driven earnings premium figures by the number of credentials of varying levels provided by U of R to determine the total annual earnings premium generated for graduates (see Table 1)².

Education Level	Credentials Granted in 2022	Average Earnings Premium Above Previous Education Level	Aggregate Earnings Premium
Men			
Post-Secondary Certificate/Diploma	483	\$14,515	\$7,010,750
Bachelor's Degree	663	\$9,549	\$6,330,990
Above Bachelor's Degree	226	\$13,035	\$2,945,910
Women			
Post-Secondary Certificate/Diploma	599	\$10,632	\$6,368,570
Bachelor's Degree	1,285	\$15,467	\$19,875,100
Above Bachelor's Degree	348	\$11,079	\$3,855,490
Total	3,604		\$46,386,800

Table 1. Calculation of Aggregate Earnings Premium of U of R Graduates in 2022

We find that the credentials granted by U of R in 2022 will enable graduates to increase their earnings by \$46.4 million more per year in aggregate³.

¹ Earnings Premium data is sourced from Statistics Canada's 2021 Census, Table 98-10-0427-01 "*Employment income statistics by Indigenous identity and highest level of education: Canada, provinces and territories, census metropolitan areas and census agglomerations with parts.*" We focused on average income for those aged 25 to 64 (total work activity during the reference year). Employment income data reported in the 2021 Census is based on an individual's full-year 2020 income, which has been inflated to report 2022 average incomes and earnings premiums (using Statistics Canada Table 18-10-0005-01, "Consumer Price Index, annual average, not seasonally adjusted."

² For those awarded a post-secondary certificate/diploma, the earnings premium represents the average earnings associated with holders of these credentials compared to someone with a high school diploma. For those awarded a Bachelor's Degree, the earnings premium represents the average earnings compared to someone with a post-secondary certificate/diploma.

³ In 2022 U of R awarded credentials to 23 individuals who did not identify as either male or female. These individuals have been excluded from our calculations because the Census only reports earnings data for men and women. We recognize that with the inclusion of these individuals U of R's aggregate earnings premium would be even higher, however we are unable to quantify that impact due to current data limitations.

Economic Impact of University of Regina

U of R had a total impact of \$525.9 million on Saskatchewan's gross domestic product (GDP) for 2022-2023. GDP is the most common measure of the total value of all goods and services produced by an economy.

In 2022-2023, the Government of Saskatchewan provided \$130.9 million in funding to U of R. This amounted to 39% of U of R's combined total revenue of \$339.1 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, \$1.59 comes from somewhere else. A proportion of combined revenue comes from outside of Saskatchewan, including from the federal government, foundations, non-profits, and private-sector firms.

We estimated impacts by combining data from U of R—principally, financial, enrolment, and employee headcount reports—with economic data from Statistics Canada and the Inter-Provincial Input-Output Modelling System. Student spending was included only for those students who are from out of province or abroad.

Our analysis quantified secondary impacts, including for businesses that mobilise to meet institutions' demand for goods and services ("indirect impacts") and for households spending the wages employees earn ("induced impacts").

U of R's total GDP impact was \$525.9 million, of which \$368.3 million (70%) were direct impacts and \$157.6 million (30%) were indirect and induced impacts (see Table 2).

The total employment impact was 4,200, of which 2,510 jobs are with U of R and 1,690 with businesses elsewhere in the economy. For every 10 jobs at U of R, there are 6.74 elsewhere in the economy.

	Operations	Non-SK Student Spending	New Capital Construction	Visitor Spending	Total
Direct Impacts					
GDP Impact (million)	\$322.7	\$37.5	\$1.3	\$6.8	\$368.3
Employment Impact (jobs)	2,510	470	10	100	3,090
Labour Income Impact (million)	\$203.9	\$19.8	\$0.8	\$4.3	\$228.8
Secondary Impacts (Indirect and Induc	ced)				
GDP Impact (million)	\$132.2	\$20.7	\$0.8	\$3.9	\$157.6
Employment Impact (jobs)	900	170	10	30	1,100
Labour Income Impact (million)	\$50.3	\$9.4	\$0.4	\$1.7	\$61.9
Total Impacts					
GDP Impact (million)	\$454.8	\$58.3	\$2.1	\$10.7	\$525.9
Employment Impact (jobs)	3,410	640	20	130	4,200
Labour Income Impact (million)	\$254.3	\$29.2	\$1.2	\$6.0	\$290.7

Table 2. University of Regina Summary Economic Impact Results for 2022-2023

Source: Data from U of R (financial data from audited financial statements, enrolment and graduate data, and construction spending estimates), methodology from RTI International and Statistics Canada's Interprovincial Input-Output Modelling System. All dollar values are 2023\$. Sums may not amount to totals because of independent rounding.

The majority of the economic impacts we quantified stem from U of R's on-going teaching, research, and service missions. However, the proportion contributed by out-of-province and international students (\$58.3 million) is not insignificant (about 11%). Around 5,450 such students are being educated at U of R and it is estimated that each spends approximately \$16,220 per year in the local economy.