



The Economic Value of Thompson Rivers University to British Columbia

EXECUTIVE SUMMARY



THOMPSON Rivers University (TRU) creates value in many ways. The university plays a key role in helping students increase their employability and achieve their individual potential. It draws students to the province, generating new dollars and opportunities for British Columbia. TRU provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, TRU is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

TRU influences both the lives of its students and the provincial economy. The university supports a variety of industries in British Columbia, serves provincial businesses, and benefits the provincial government through increased tax revenues and public sector savings. The benefits created by TRU even extend to society as a whole in British Columbia, which benefits from an expanded economy and improved quality of life.

This study measures the economic impacts created by TRU on the business community and the benefits the university generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:



Economic impact analysis



Investment analysis

All results reflect employee, student, and financial data, provided by the university, for fiscal year (FY) 2018-19. Impacts on the British Columbia economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students, taxpayers, and society in British Columbia are reported under the investment analysis.

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Economic impact analysis

TRU promotes economic growth in British Columbia through its direct expenditures and the resulting expenditures of students and provincial businesses. The university serves as an employer and buyer of goods and services for its day-to-day operations. The university's reputation and activities attract students from outside British Columbia, whose expenditures benefit provincial vendors. In addition, TRU is a primary source of postsecondary education to British Columbia residents and a supplier of trained workers to provincial industries, enhancing overall productivity in the provincial workforce.

Operations Spending Impact



TRU adds economic value to British Columbia as an employer of provincial residents and a large-scale buyer of goods and services. In FY 2018-19, the university employed faculty and staff equivalent to 1,263 full-time employees. Of these, 100% lived in British Columbia. Total payroll at TRU was \$129.1 million, much of which was spent in the province for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the university spent \$72.8 million on day-to-day expenses related to facilities, supplies, and professional services.

TRU's day-to-day operations spending added \$160.7 million in income to the province during the analysis year. This figure represents the university's payroll, the multiplier effects generated by the in-province spending of the university and its employees, and a downward adjustment to account for funding that the university received from provincial sources. The \$160.7 million in added income is equivalent to supporting 1,553 jobs in the province.

Student Spending Impact



Around 33% of students attending TRU originated from outside the province in FY 2018-19, and some of these students relocated to British Columbia to attend TRU. These students may not have come to the province if the university did not exist. In addition, some in-province students, referred to as retained students, would have left British Columbia if not for the existence of TRU. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$99.7 million in added income for the provincial economy in FY 2018-19, which supported 1,484 jobs in British Columbia. Of this impact, \$64.8 million is attributable to international students who relocated to British Columbia to attend TRU.

IMPACTS CREATED BY TRU
IN FY 2018-19



\$160.7 million
Operations Spending Impact



\$99.7 million
Student Spending Impact



\$1.2 billion
Alumni Impact



\$1.5 billion
TOTAL IMPACT

- OR -

17,437
JOBS SUPPORTED

Impact of International Students

International students are an important part of the TRU community. The university strives to support international learners, promoting globally-engaged teaching, learning, and knowledge. In FY 2018-19, TRU served 5,615 international students from over 90 countries, over 96% of whom relocated to British Columbia. These students bring new money to the provincial economy through their spending on housing, food, and other living expenses. International student spending in FY 2018-19 generated \$64.8 million in added income for the provincial economy.

Approximately 56% of international students remain in the province after finishing their time at TRU. Today, thousands of these students are employed in British Columbia, receiving higher earnings and increasing the productivity of the businesses that employ them. In FY 2018-19, these active alumni generated \$236.9 million in added income for the economy.

Alumni Impact



The education and training TRU provides for provincial residents has the greatest impact. Since its establishment, students have studied at TRU and entered the provincial workforce with greater knowledge and new skills. Today, thousands of former TRU students are employed in British Columbia. As a result of their TRU educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2018-19, TRU alumni generated \$1.2 billion in added income for the provincial economy, which is equivalent to supporting 14,400 jobs. Of this impact, \$236.9 million is attributable to former international students who are active in the provincial workforce.

Total Impact

TRU added \$1.5 billion in income to the British Columbia economy during the analysis year, equal to the sum of the operations spending impact, the student spending impact, and the alumni impact. For context, the \$1.5 billion impact was equal to approximately 0.6% of the total gross provincial product (GPP) of British Columbia.

TRU's total impact can also be expressed in terms of jobs supported. The \$1.5 billion impact supported 17,437 provincial jobs, using the jobs-to-sales ratios specific to each industry in the province. This means that one out of every 150 jobs in British Columbia is supported by the activities of TRU and its students. In addition, the \$1.5 billion impacted provincial industries in different ways. Among non-education industry sectors, TRU has the largest impact on the Health Care & Social Assistance industry sector, generating \$233.2 million in added income in FY 2018-19. These are impacts that would not have been generated without the university's presence in British Columbia.

TOP INDUSTRIES IMPACTED BY TRU (ADDED INCOME)



One out of every 150 jobs in British Columbia is supported by the activities of TRU and its students.



Investment analysis

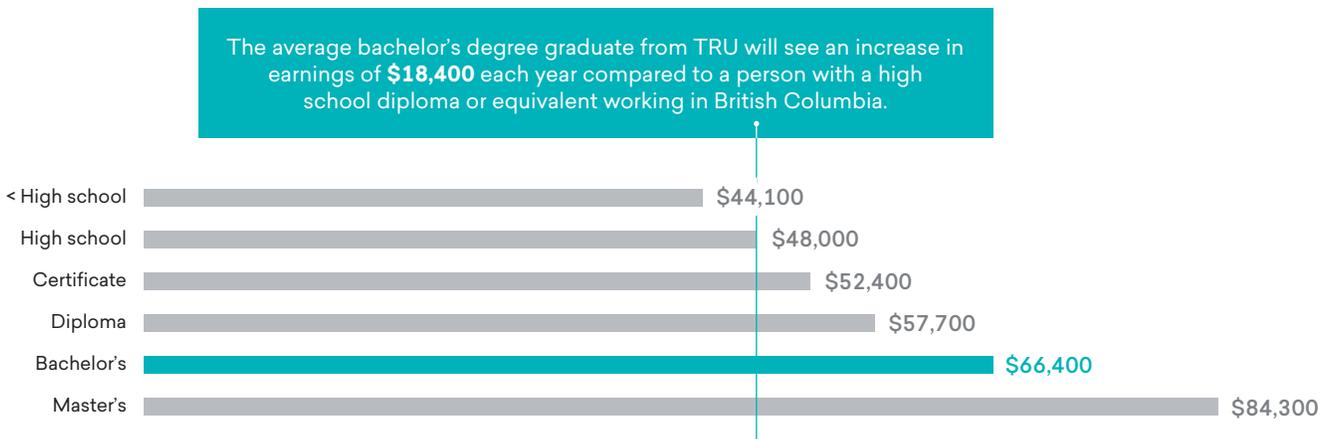
An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. If the benefits outweigh the costs, then the investment is financially worthwhile. The analysis presented here considers TRU as an investment from the perspectives of students, taxpayers, and society in British Columbia.

Student Perspective



In FY 2018-19, TRU served 26,070 credit and 2,517 non-credit students. In order to attend the university, the students paid for tuition, fees, books, and supplies. Additionally, students gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by TRU's students in FY 2018-19 amounted to a present value of \$320.8 million, equal to \$128.9 million in out-of-pocket expenses and \$191.9 million in forgone time and money.

In return for their investment, TRU's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average TRU bachelor's degree graduate from FY 2018-19 will see an increase in earnings of \$18,400 each year compared to a person with a high school diploma or equivalent working in British Columbia. Over a working lifetime, a bachelor's degree graduate from TRU will earn a cumulative value of \$2.5 million (undiscounted). The benefits of the bachelor's degree over a high school diploma will amount to an undiscounted value of \$699.2 thousand in higher earnings per graduate over a working lifetime. Altogether, TRU's FY 2018-19 students will receive \$487 million in higher future earnings over their working lives, as a result of their education and training at TRU.



Source: Derived from data supplied by Statistics Canada and the Emsi CRIO model.

The students' benefit-cost ratio is 1.5. In other words, for every dollar students invest in TRU, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$1.50 in higher future earnings. Annually, the students' investment in TRU has an average annual internal rate of return of 10.6%.

Taxpayer Perspective



TRU generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the provincial government will collect from the added revenue created in the province.

As TRU students earn more, they will make higher tax payments throughout their working lives. Students' employers will also make higher tax payments as they increase their output and purchases of goods and services. By the end of the FY 2018-19 students' working lives, the provincial government will have collected a present value of \$243.3 million in added tax revenue.

Benefits to taxpayers also consist of savings generated by the improved lifestyles of TRU students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' TRU educations will generate savings in three main categories: 1) healthcare, 2) crime, and 3) income assistance. Improved health will lower students' demand for health care services. In addition, students will be less likely to interact with the criminal justice system, resulting in a reduced demand for law enforcement and reduced victim costs. TRU students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. For a list of study references, contact the university for a copy of the main report. Altogether, the present value of the benefits associated with a TRU education will generate \$7.9 million in savings to provincial taxpayers.

Total taxpayer benefits amount to \$251.2 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$82.1 million, equal to the amount of provincial government funding TRU received in FY 2018-19. These benefits and costs yield a benefit-cost ratio of 3.1. This means that for every dollar of public money invested in TRU in FY 2018-19, taxpayers will receive a cumulative value of \$3.10 over the course

*For every dollar of public money invested in TRU, taxpayers will receive a cumulative value of **\$3.10** over the course of the students' working lives.*



STUDENT PERSPECTIVE

\$487 million
Present value benefits

\$320.8 million
Present value costs

\$166.2 million
Net present value

Benefit-cost Ratio Rate of Return

1.5

10.6%



TAXPAYER PERSPECTIVE

\$251.2 million
Present value benefits

\$82.1 million
Present value costs

\$169.1 million
Net present value

Benefit-cost Ratio Rate of Return

3.1

21.2%



SOCIAL PERSPECTIVE

\$1.5 billion
Present value benefits

\$413.9 million
Present value costs

\$1.4 billion
Net present value

Benefit-cost Ratio Rate of Return

4.3

n/a*

* The rate of return is not reported for the social perspective because the beneficiaries of the investment are not necessarily the same as the original investors.

of the students' working lives. The average annual internal rate of return for taxpayers is 21.2%, which compares favorably to other long-term investments in the public and private sectors.

Social Perspective



Society as a whole in British Columbia benefits from the presence of TRU in two major ways. Primarily, society benefits from an increased economic base in the province. This is attributed to higher student earnings and increased business output, which raise economic prosperity in British Columbia.

Benefits to society also consist of the savings generated by the improved lifestyles of TRU students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Healthcare savings include avoided medical costs associated with smoking, alcohol dependence, obesity, and mental illness. Crime savings include reduced criminal justice system expenditures, lower victim costs, and increased productivity of individuals who are working rather than spending time in custody. Income assistance savings include the reduced demand for employment insurance benefits and employment-related social assistance. For a list of study references, contact the university for a copy of the main report.

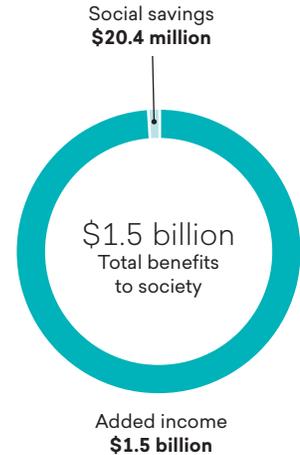
Altogether, the social benefits of TRU equal a present value of \$1.5 billion. These benefits include \$1.5 billion in added income through students' increased lifetime earnings and increased business output, as well as \$20.4 million in social savings related to health, crime, and income assistance in British Columbia. People in British Columbia invested a present value total of \$413.9 million in TRU in FY 2018-19. These costs include all university and student costs.

The benefit-cost ratio for society is 4.3, equal to the \$1.5 billion in benefits divided by the \$413.9 million in costs. In other words, for every dollar invested in TRU, people in British Columbia will receive a cumulative value of \$4.30 in benefits. The benefits of this investment will occur for as long as TRU's FY 2018-19 students remain employed in the provincial workforce.

Summary of Investment Analysis Results

The results of the analysis demonstrate that TRU is a strong investment for all three major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return for their investments in a TRU education. At the same time, taxpayers' investment in TRU returns more to government budgets than it costs and creates a wide range of social benefits throughout British Columbia.

SOCIAL BENEFITS IN BRITISH COLUMBIA FROM TRU



Conclusion

The results of this study demonstrate that TRU creates value from multiple perspectives. The university benefits provincial businesses by increasing consumer spending in the province and supplying a steady flow of qualified, trained workers to the workforce. TRU enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The university benefits provincial taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, TRU benefits society as a whole in British Columbia by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.

About the Study

Data and assumptions used in the study are based on several sources, including the FY 2018-19 academic and financial reports from TRU, industry and employment data from Statistics Canada, outputs of Emsi's Canadian Regional Input-Output model, and a variety of studies and surveys relating education to social behaviour. The study applies a conservative methodology and follows standard practice using only the most recognised indicators of investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact TRU for a copy of the main report.

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multiple perspectives.



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