



# The Economic Value of College of the North Atlantic



**C**OLLEGE OF THE NORTH ATLANTIC (CNA) creates value in many ways. The college 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 Newfoundland & Labrador. CNA provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, CNA is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

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

This study measures the economic impacts created by CNA on the business community and the benefits the college 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 college, for fiscal year (FY) 2020–21. Impacts on the Newfoundland & Labrador 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 Newfoundland & Labrador are reported under the investment analysis.



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# Economic impact analysis



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

## Operations spending impact



CNA adds economic value to Newfoundland & Labrador as an employer of provincial residents and a large-scale buyer of goods and services. In FY 2020-21, the college employed faculty and staff equivalent to 1,249 full-time employees, all of whom lived in Newfoundland & Labrador. Total payroll at CNA was \$104.8 million, much of which was spent in the province for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the college spent \$20.5 million on day-to-day expenses related to facilities, supplies, and professional services.

CNA's day-to-day operations spending added \$115.9 million in income to the province during the analysis year. This figure represents the college's payroll, the multiplier effects generated by the in-province spending of the college and its employees, and a downward adjustment to account for funding that the college received from provincial sources. The \$115.9 million in added income is equivalent to supporting 1,370 jobs in the province.

## Student spending impact



Around 9% of credit students attending CNA originated from outside the province in FY 2020-21, all of whom relocated to Newfoundland & Labrador to attend CNA. These students may not have come to the province if the college did not exist. In addition, some in-province students, referred to as retained students, would have left Newfoundland & Labrador if not for the existence of CNA. While attending the college, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$15.2 million in added income for the provincial economy in FY 2020-21, which supported 213 jobs in Newfoundland & Labrador.

### Impacts created by CNA in FY 2020-21



Operations spending impact

**\$115.9 million**

+



Student spending impact

**\$15.2 million**

+



Alumni impact

**\$969.3 million**



Total economic impact

**\$1.1 billion**

OR

Jobs supported

**9,359**



## Impact of international students

International students are an important part of the CNA community. In FY 2020-21, CNA served 458 international students, all of whom relocated to Newfoundland & Labrador. These students brought new money to the provincial economy through their spending on housing, food, and other living expenses. International student spending in FY 2020-21 generated \$4.5 million in added income for the provincial economy.

It is estimated that 72% of international students remain in the province after finishing their time at CNA. Today, thousands of these students are employed in Newfoundland & Labrador, receiving higher earnings and increasing the productivity of the businesses that employ them. In FY 2020-21, these active alumni generated \$5.6 million in added income for the economy.

## Alumni impact



The education and training CNA provides for provincial residents has the greatest impact. Since its establishment, students have studied at CNA and entered the provincial workforce with greater knowledge and new skills. Today, thousands of former CNA students are employed in Newfoundland & Labrador. As a result of their CNA educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2020-21, CNA alumni generated \$969.3 million in added income for the provincial economy, which is equivalent to supporting 7,777 jobs.

## Total impact

CNA added \$1.1 billion in income to the Newfoundland & Labrador 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 \$1.1 billion impact was equal to approximately 4.3% of the total gross provincial product (GPP) of Newfoundland & Labrador. This contribution that the college provided on its own is larger than the entire Transportation & Warehousing industry in the province.

CNA's total impact can also be expressed in terms of jobs supported. The \$1.1 billion impact supported 9,359 provincial jobs, using the jobs-to-sales ratios specific to each industry in the province. This means that one out of every 24 jobs in Newfoundland & Labrador is supported by the activities of CNA and its students. In addition, the \$1.1 billion, or 9,359 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, CNA's activity and alumni in the Health Care & Social Assistance industry sector supported 2,028 jobs in FY 2020-21. These are impacts that would not have been generated without the college's presence in Newfoundland & Labrador.

### Top industry impacts (jobs supported)



2,028

Health Care & Social Assistance



816

Public Administration



547

Professional, Scientific, & Technical Services



429

Finance & Insurance



383

Information & Cultural Industries

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# 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 CNA as an investment from the perspectives of students, taxpayers, and society in Newfoundland & Labrador.

## Student perspective



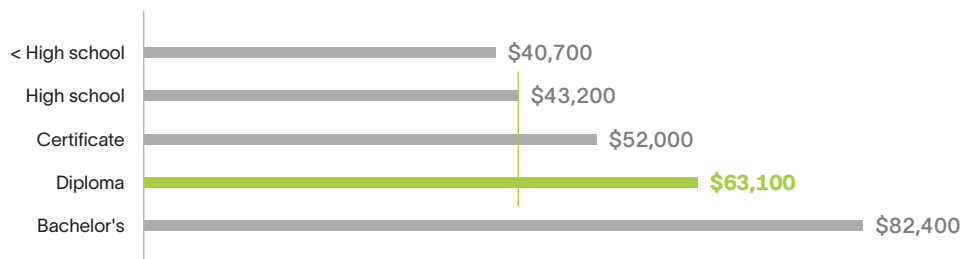
In FY 2020-21, CNA served 6,849 credit and 6,460 non-credit students. In order to attend the college, the students paid for tuition, fees, books, and supplies. Additionally, students gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by CNA's students in FY 2020-21 amounted to a present value of \$93.3 million, equal to \$18.2 million in out-of-pocket expenses and \$75.1 million in forgone time and money.

In return for their investment, CNA's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average CNA diploma graduate from FY 2020-21 will see an increase in earnings of \$19,900 each year compared to a person with a high school diploma or equivalent working in Newfoundland & Labrador. Over a working lifetime, the benefits of the diploma over a high school diploma will amount to an undiscounted value of \$776.1 thousand in higher earnings per graduate. Altogether, CNA's FY 2020-21 students will receive \$394.4 million in higher future earnings over their working lives, as a result of their education and training at CNA.

The students' benefit-cost ratio is 4.2. In other words, for every dollar students invest in CNA, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$4.20 in higher future earnings. Annually, the students' investment in CNA has an average annual internal rate of return of 27.4%.



The average diploma graduate from CNA will see an increase in earnings of **\$19,900** each year compared to a person with a high school diploma or equivalent working in Newfoundland & Labrador.



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

## Taxpayer perspective



CNA 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 CNA 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 2020-21 students' working lives, the provincial government will have collected a present value of \$422.2 million in added tax revenue.

Benefits to taxpayers also consist of savings generated by the improved lifestyles of CNA students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' CNA educations will generate savings in three main categories: 1) health-care, 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. CNA 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 college for a copy of the main report. Altogether, the present value of the benefits associated with a CNA education will generate \$10.2 million in savings to provincial taxpayers.

Total taxpayer benefits amount to \$432.4 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$103.3 million, equal to the amount of provincial government funding CNA received in FY 2020-21. These benefits and costs yield a benefit-cost ratio of 4.2. This means that for every dollar of public money invested in CNA in FY 2020-21, taxpayers will receive a cumulative value of \$4.20 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 18.2%, which compares favorably to other long-term investments in the public and private sectors.

For every dollar of public money invested in CNA, taxpayers will receive a cumulative value of **\$4.20** over the course of the students' working lives.

## Social perspective



Society as a whole in Newfoundland & Labrador benefits from the presence of CNA 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 Newfoundland & Labrador.

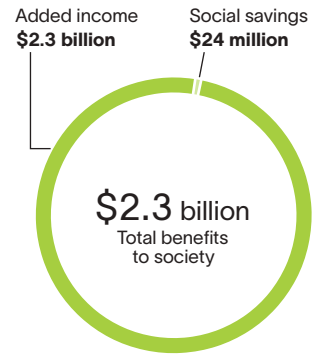
Benefits to society also consist of the savings generated by the improved lifestyles of CNA students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are 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 college for a copy of the main report.

Altogether, the social benefits of CNA equal a present value of \$2.3 billion. These benefits include \$2.3 billion in added income through students' increased lifetime earnings and increased business output, as well as \$24 million in social savings related to health, crime, and income assistance in Newfoundland & Labrador. People in the province invested a present value total of \$207.9 million in CNA in FY 2020-21. These costs include all college and student costs.

The benefit-cost ratio for society is 11.2, equal to the \$2.3 billion in benefits divided by the \$207.9 million in costs. In other words, for every dollar invested in CNA, people in Newfoundland & Labrador will receive a cumulative value of \$11.20 in benefits. The benefits of this investment will occur for as long as CNA's FY 2020-21 students remain employed in the provincial workforce.

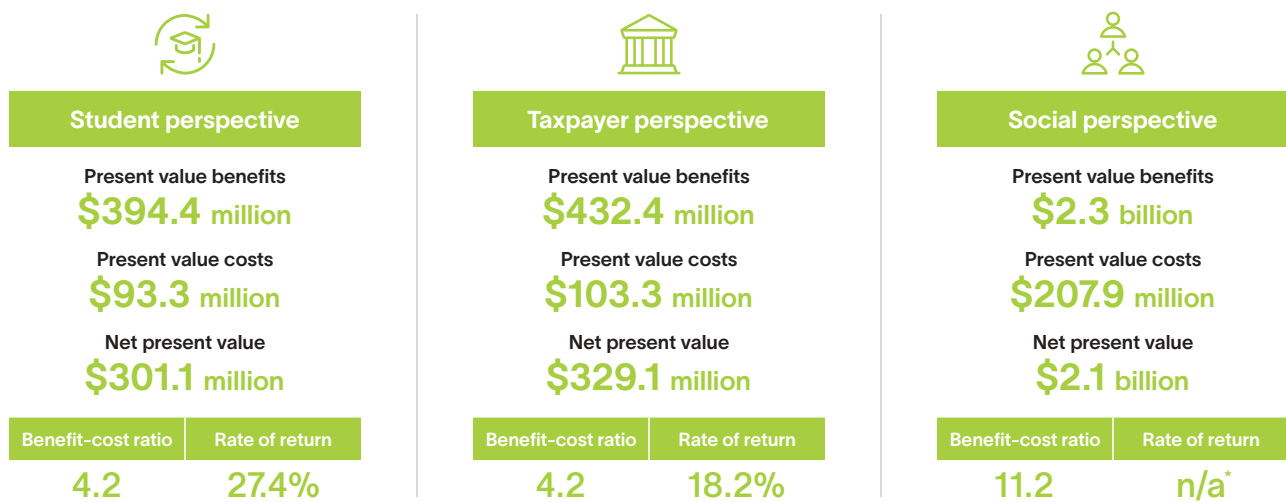
### Social benefits in Newfoundland & Labrador from CNA



Source: Lightcast impact model.

## Summary of investment analysis results

The results of the analysis demonstrate that CNA 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 CNA education. At the same time, taxpayers' investment in CNA returns more to government budgets than it costs and creates a wide range of social benefits throughout Newfoundland & Labrador.



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

# Conclusion

The results of this study demonstrate that CNA creates value from multiple perspectives. The college benefits provincial businesses by increasing consumer spending in the province and supplying a steady flow of qualified, trained workers to the workforce. CNA enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The college benefits provincial taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, CNA benefits society as a whole in Newfoundland & Labrador 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 2020-21 academic and financial reports from CNA, industry and employment data from Statistics Canada, outputs of Lightcast's Canadian Provincial 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 recognized indicators of investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact CNA for a copy of the main report.

The results of this study demonstrate that CNA creates value from **multiple perspectives.**



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