

ROI

RETURN ON INVESTMENT



COLLEGE
OF THE
NORTH
ATLANTIC



College of the North Atlantic pays \$69.5 million annually in direct faculty and staff wages, salaries, and benefits (i.e., earnings), and accounts for an additional \$598.8 million in earnings off campus.

Taxpayers see a real money “book” return of 13.1% on their annual investments in College of the North Atlantic and recover all investments in 9.5 years.

How does the economy of the Province of Newfoundland and Labrador benefit from the presence of College of the North Atlantic (CNA)?

An obvious question often asked, but rarely answered with more than anecdotes.

In this study, CCbenefits, Inc. applied a comprehensive economic model they developed with funding from the Association for Community College Trustees (ACCT). The model, which took over a year to develop, was designed to capture and quantify the economic and social benefits of community and technical colleges. It relies on data collected from individual colleges, and translates these into common sense benefit/cost and investment terms.

The model has been subjected to peer review and field-tested on over 350 different colleges throughout the US and Canada. Model results are based on solid economic theory, carefully drawn functional relationships, and a wealth of national and local education-related data. The model provides an analytical alternative from the all-too-common “advocacy analyses” that inflate benefits, understate costs, and thus discredit the process of higher education impact assessment.

Four types of benefits are tracked: (1) regional economic benefits (contributions to local job and income formation); (2) higher earnings captured by exiting students; (3) a broad collection of social benefits (improved health, reduced crime, lower welfare, and unemployment); and (4) the return to taxpayers for their college support.

THE RESULTS

Regional Perspective—the College of the North Atlantic Economy

CNA accounts for \$668.4 million of all annual earnings in the provincial economy. The earnings explained by CNA are equal to that

of roughly 18,000 jobs. The earnings and job effects break down as follows:

CNA Operations and Capital Spending

CNA faculty and staff earnings generate additional incomes as they are spent. Likewise, CNA operating and capital expenditures generate still further earnings. Altogether, these earnings account for \$81.0 million annually in the provincial economy (equal to that of around 1,500 jobs).

Higher Earnings due to Past Instruction

Each year students leave CNA and join or rejoin the local workforce. Their added skills translate to higher earnings and a more robust provincial economy. Based on current enrollment, turnover, and the growth of instruction over time, the local region workforce embodies an estimated 18.1 million credits of past and present instruction (funded and unfunded hours). The accumulated contribution of past and present CNA instruction adds some \$587.4 million in annual earnings to the provincial economy (equal to that of roughly 16,500 jobs).

Student Perspective

The student’s perspective on the benefits of higher education is the most obvious: he or she sacrifices tuition and current earnings for a lifetime of higher earnings. For every credit completed, CNA students will, on average, earn \$54 more per year each year they are in the workforce. Alternatively, for every full-time year they attend they will earn an additional \$1,934 per year. In the aggregate (all exiting students), the higher earnings amount to some \$36.9 million per year for each year they remain in the workforce.

From an investment standpoint, CNA students will enjoy a 9.7% rate of return

on their investments of time and money, which compares favorably with the returns on other investments, i.e., the long-term return on Canadian stocks and bonds. The corresponding benefit/cost ratio (the sum of the discounted future benefits divided by the sum of the discounted costs) is 2.3, i.e., for every \$1 the student invests in CNA education, he or she will receive a cumulative of \$2.29 in higher future earnings over the next 30 years or so. The payback period (the time needed to recover all costs) is 13.4 years.

Taxpayer Perspectives

The provincial government spent \$60.1 million in support of CNA during the analysis year. Is this a good use of taxpayer money? Our analysis indicates that the answer is a resounding yes: returns far outweigh the costs, particularly when a collection of social savings is included in the assessment. For example, persons with higher education are less likely to smoke or abuse alcohol, draw welfare or employment insurance benefits, or commit crimes. This translates into associated dollar savings (avoided costs) amounting to some \$21 per credit per year, counted as an indirect benefit of CNA education. When aggregated across all exiting students, the Province of Newfoundland and Labrador will benefit from \$14.4 million worth of avoided costs per year, broken down as follows:

Improved Health

Area employers in the province see health-related absenteeism reduced by 20,700 days per year, with a corresponding annual dollar savings of \$2.4 million. The province will benefit from the health-related savings of approximately 750 fewer smokers and 280 fewer alcohol abusers. The corresponding dollar savings are \$1.9 million and \$3.6 million per year, now and into the future

(these savings include insurance premiums, co-payments and deductibles).

Reduced Crime

Studies show that incarceration drops with each year of higher education. In the Province of Newfoundland and Labrador, about three fewer individuals will be incarcerated per year, resulting in annual savings of \$30.3 thousand (combined savings from reduced arrest, prosecution, jail, and reform costs). Reductions in victim costs (i.e., property damage, legal expenses, lost workdays, etc.) result in savings of \$36.3 thousand per year. Finally, that people are employed rather than incarcerated adds \$14.5 thousand of earnings per year to the economy.

Reduced Welfare/Unemployment

There will be around 300 fewer people on welfare, and 700 fewer drawing employment insurance benefits per year, saving some \$1.2 million and \$5.2 million per year, respectively.

Taxpayer Return on Investment

The return on a year's worth of provincial government investment in CNA is obtained by projecting the associated educational benefits into the future, discounting them back to the present, and weighing these against the \$60.1 million provincial taxpayers spent during the analysis year to support the college. The analysis is based on the portion of CNA operations that is wholly dependent on provincial government support. Two investment perspectives are possible, one broad and one narrow.

Broad Perspective

Taxpayers expect their annual investment in CNA to result in higher lifetime earnings for students and social savings from lifestyle changes (reduced crime, welfare and

Students enjoy an attractive 9.7% annual return on their investment of time and money – for every \$1 the student invests in CNA, he or she will receive a cumulative \$2.29 in higher future earnings over the next 30 years or so.

The province benefits from improved health and reduced welfare, unemployment, and crime, saving the public some \$14.4 million per year.

unemployment, and improvements in health). From a broad investment perspective, the value of all future earnings and associated social savings is compared to the year's worth of provincial taxpayer support that made the benefits possible. Following this procedure, it is estimated that CNA provides a benefit/cost ratio of 11.5, i.e., every dollar of provincial tax money invested in CNA today returns a cumulative of \$11.5 over the next 30 years.

Narrow Perspective

The narrow perspective limits the benefit stream to provincial government budgets, namely increased tax collections and expenditure savings. For example, in place of total increased student earnings, the narrow perspective includes only the increased provincial tax receipts from those higher earnings. Similarly, in place of overall crime, welfare, unemployment and health savings, the narrow perspective includes only those portions that translate to actual reductions in provincial government expenditures.

Note here that it is normal for the provincial government to undertake activities wanted by the public, which are unprofitable in the marketplace. This means that positive economic returns are generally not expected from government investments. From the narrow taxpayer perspective, therefore, even a small positive return (a benefit/cost ratio equal to or just greater than 1, and/or a rate of return equal to or just greater than the 4.0% discount rate used in this analysis) would be a most favorable outcome, certainly one that justifies continued taxpayer support of the college. For CNA, the narrow perspective results greatly exceed the minimum expectations. The results indicate strong and positive returns: a rate of return of 13.1%, a benefit/cost ratio of 2.2 (every dollar of provincial tax money invested in CNA today returns \$2.24), and a short payback period of only 9.5 years.

CONCLUSION

The results of this study demonstrate that CNA is a sound investment from multiple perspectives. The college enriches the lives of students and increases their lifetime incomes. It benefits taxpayers by generating increased tax revenues from an enlarged economy and reducing the demand for taxpayer-supported social services. Finally, it contributes to the vitality of both the local and provincial economies.

In sum, the college accounts for a total of 7.8% of all earnings (\$8.5 billion) generated from all sources in Newfoundland and Labrador.

For more information on the details results of the Return on Investment study conducted by CCBenefits Inc. for College of the North Atlantic contact:

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