The Socioeconomic Benefits Generated by Laredo Community College

State of Texas

Executive Summary

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HIGHLIGHTS

- Laredo Community College pays $21.1 million in direct faculty and staff wages and salaries, and explains an additional $106 million in wages and salaries off campus.

- Taxpayers see a real money “book” return of 25.7% on their annual investments in Laredo Community College and recover all investments in 5.1 years.

- Students enjoy an attractive 37% annual return on their investment of time and money—for every $1 the student invests in LCC, he or she will receive a cumulative $12.61 in higher future earnings over the next 30 years.

- The State of Texas benefits from improved health and reduced welfare, unemployment, and crime, saving the public some $8.9 million per year.

INTRODUCTION

How do the Laredo Community College District economy and the State of Texas benefit from the presence of Laredo Community College (LCC)? An obvious question often asked, but rarely answered with more than anecdotes. In this study, CCbenefits, Inc. applied a comprehensive economic model they have developed to capture and quantify the economic and social benefits of community colleges (CCs). The model, which took over a year to develop with funding from the Association for Community College Trustees (ACCT), relies on data collected from individual CCs, and translates these into common sense benefit-cost and investment terms. It has been subjected to peer review, field tested on over 160 different CCs throughout the nation, and is now applied to LCC. 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 relief from the all-too-common “advocacy analyses” that inflate benefits, understate costs, and thus discredit the process of higher education impact assessment.

THE RESULTS

For a more in depth exploration of this topic, the reader is encouraged to consult the main report “The Socioeconomic Benefits Generated by Laredo Community College” containing the detailed assumptions, their context, and the computation procedures.
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Regional Perspective—the Laredo Community College Economy
The existence of LCC explains $127.4 million of all annual earnings in the Laredo Community College District economy (see map). The earnings explained by LCC are equal to that of roughly 4,594 jobs. The earnings and job effects break down as follows:

- **LCC Operations and Capital Spending**
  LCC pays wages and salaries, which generate additional incomes as they are spent. Likewise, LCC operating and capital expenditures generate still further earnings. Altogether, these earnings account for $29.0 million annually in the Laredo Community College District economy (equal to that of 1,048 jobs).

- **Higher Earnings due to Past Instruction**
  Each year students leave LCC and join or rejoin the local workforce. Their added skills translate to higher earnings and a more robust Laredo Community College District economy. Based on current enrollment, turnover, and the growth of instruction over time, the local region workforce embodies an estimated 2.5 million credits of past instruction (credit and non-credit hours). The accumulated contribution of past LCC instruction adds some $98.3 million in annual earnings to the Laredo Community College District economy (equal to that of 3,546 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 LCC students will, on average, earn $95 more per year every year they are in the workforce. Alternatively, for every full-time year they attend they will earn an additional $3,405 per year. In the aggregate (all exiting students), the higher earnings amount to some $17.4 million per year for each year they remain in the workforce.

From an investment standpoint, LCC students will enjoy a 37% rate of return on their investments of time and money, which compares favorably with the returns on other investments, e.g., the long-term return on US stocks and bonds. The corresponding B/C ratio (the sum of the discounted future benefits divided by the sum of the discounted costs) is 12.6, i.e., for every $1 the student invests in LCC education, he or she will receive a cumulative of $12.61 in higher future earnings over the next 30 years or so. The payback period (the time needed to recover all costs) is 4.2 years.
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➢ **Taxpayer Perspectives**
State and local government spent $20,323,727 in support of LCC 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 unemployment benefits, or commit crimes. This translates into associated dollar savings (avoided costs) amounting to some $49 per credit per year, counted as an indirect benefit of LCC education. When aggregated across all exiting students, the State of Texas will benefit from $8.9 million worth of avoided costs per year, broken down as follows:

- **Improved Health**
Laredo Community College District area employers will see health-related absenteeism decline by 12,348 days per year, with a corresponding annual dollar savings of $0.9 million. The state will benefit from the health-related savings of 337 fewer smokers and 80 fewer alcohol abusers. The corresponding dollar savings are $997,337 and $639,142 per year, now and into the future (these savings include insurance premiums, co-payments and deductibles, and withholding for Medicare and Medicaid).

- **Reduced Crime**
Studies show that incarceration drops with each year of higher education. In the Laredo Community College District, 256 fewer individuals will be incarcerated per year, resulting in annual savings of $3,001,012 (combined savings from reduced arrest, prosecution, jail, and reform costs). Reductions in victim costs (e.g., property damage, legal expenses, lost workdays, etc.) result in savings of $630,244 per year. Finally, that people are employed rather than incarcerated adds $790,394 of earnings per year to the economy.

- **Reduced Welfare/Unemployment**
There will be 184 fewer people on welfare, and 150 fewer drawing unemployment benefits per year, respectively, saving some $724,523 and $1,224,857 per year in the state.

➢ **Taxpayer Return on Investment**
The return on a year’s worth of state and local government investment in LCC is obtained by projecting the associated educational benefits into the future, discounting them back to the present, and weighing these against the $20,323,727 state and local taxpayers spent during the analysis year to support the college. The analysis assumes that without the state and local government support (71% of the budget) LCC would have to shut its doors. Two investment perspectives are possible, one broad and one narrow.

- **Broad Perspective**
Taxpayers expect their annual investment in LCC to result in higher lifetime earnings for students and social savings from lifestyle changes (reduced crime, welfare and 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 state and local taxpayer support that made the benefits possible. Following
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this procedure, it is estimated that LCC provides a B/C ratio of 19.7, i.e., every dollar of state or local tax money invested in LCC today returns a cumulative of $20 over the next 30 years.

- **Narrow Perspective**
  The narrow perspective limits the benefit stream to state and local 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 state and local 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 state and local government expenditures.

  Note here that it is normal for the state 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 B/C ratio equal to 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 LCC, the narrow perspective results greatly exceed the minimum expectations. The results indicate strong and positive returns: a RR of 25.7%, a B/C ratio of 3.9 (every dollar of state or local tax money invested in LCC today returns $3.87), and a short payback period of only 5.1 years.

**CONCLUSION**

The results of this study demonstrate that LCC is a sound investment from a multiple of perspectives. It enriches the lives of students while reducing the demand for taxpayer-supported social services. Finally, it contributes to the vitality of both the local and state economies.
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Benefits at a Glance

<table>
<thead>
<tr>
<th>Regional Analysis</th>
<th>Regional Impact</th>
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<tbody>
<tr>
<td><strong>Regional Economic Development</strong></td>
<td></td>
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<tr>
<td>Increment from college operations</td>
<td>$29,045,000</td>
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<tr>
<td>Increment from past student productivity</td>
<td>$98,314,000</td>
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<tr>
<td>Total</td>
<td>$127,359,000</td>
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<tr>
<td>Job equivalent</td>
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<tr>
<td><strong>Annual Benefits</strong></td>
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<tr>
<td>Higher earnings</td>
<td></td>
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<tr>
<td>Aggregate (all student)</td>
<td>$17,430,679</td>
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<tr>
<td>Per Credit</td>
<td>$95</td>
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<tr>
<td>Per year full time equivalent student</td>
<td>$3,405</td>
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<tr>
<td><strong>Social savings</strong></td>
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<tr>
<td>Aggregate (all students)</td>
<td>$8,879,171</td>
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<tr>
<td>Per Credit</td>
<td>$49</td>
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<tr>
<td>Per year full time equivalent student</td>
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<tr>
<td><strong>Investment Analysis</strong></td>
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<tr>
<td>RR</td>
<td>B/C Ratio</td>
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<td>Students</td>
<td>37.2%</td>
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<tr>
<td>Taxpayers: Broad Perspective</td>
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<tr>
<td>Taxpayers: Narrow Perspective</td>
<td>25.7%</td>
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In sum, the graph shows that the college explains a total of 4.8% of all earnings ($2.67 billion) generated from all sources in the economic region.

This short summary report is one of four products generated for this impact study. In addition, one long report intended for economists and CC institutional researchers (65 pp) lays out the detailed assumptions and analysis. Another report (10 pp) provides detailed tabular results by gender, ethnicity, and entry levels of education. Lastly, a PowerPoint presentation is developed showing the main results for CC Presidents to adapt and use in speeches before state legislators and other education stakeholders.