Analysis of the Return on Investment and Economic Impact of Education

The economic value of North Dakota State University

FY 2015-16
WHAT IS AN ECONOMIC IMPACT ANALYSIS?
Measures how an event or institution affects the local economy.

WHAT IS AN INVESTMENT ANALYSIS?
A comparison of the costs and benefits to determine the return on investment.
About NDSU Service Area

$70.1 billion
TOTAL GROSS REGIONAL PRODUCT

811,377
TOTAL JOBS

HIGHER EARNINGS BY EDUCATION LEVEL AT CAREER MIDPOINT

- < HS: $22,400
- HS: $30,700
- Associate: $40,400
- Bachelor's: $46,500
- Master's: $67,200
- Doctoral or professional: $96,300
NDSU IN FY 2015-16

~14,500
STUDENTS SERVED IN FALL OF 2015

<table>
<thead>
<tr>
<th>2,717</th>
<th>$278.9 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMPLOYEES</td>
<td>TOTAL PAYROLL/BENEFITS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>38%</th>
<th>59%</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENTS FROM OUTSIDE THE REGION</td>
<td>STUDENTS REMAINING IN THE REGION AFTER LEAVING THE UNIVERSITY</td>
</tr>
</tbody>
</table>
OVERVIEW OF RESULTS

$927.3 million
TOTAL INCOME SUPPORTED IN THE REGION

11,886
JOBS SUPPORTED IN THE REGION

11%
RATE OF RETURN TO STUDENTS

3%
RATE OF RETURN TO TAXPAYERS

1.3%
OF REGION'S GRP
<table>
<thead>
<tr>
<th>Category</th>
<th>Added Regional Income</th>
<th>Jobs Supported in the Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations Spending Impact</td>
<td>$210.2 million</td>
<td>2,139</td>
</tr>
<tr>
<td>Research Spending Impact</td>
<td>$103.1 million</td>
<td>1,206</td>
</tr>
<tr>
<td>Start-up and Spin-off Company Impact</td>
<td>$9.3 million</td>
<td>121</td>
</tr>
</tbody>
</table>

All results measured in income, not sales
Results are net of counterfactual scenarios
Student Spending Impact

Relocated/Retained student spending + ripple effects

$39.9 million

533 jobs supported in the region

or

$4.4 million

114 jobs supported in the region

Visitor Spending Impact

Out-of-region visitor spending + ripple effects

$560.4 million

7,773 jobs supported in the region

Alumni Impact

Higher alumni earnings and increased business profit + ripple effects

$560.4 million

7,773 jobs supported in the region

All results measured in income, not sales
Results are net of counterfactual scenarios
Total Impact

1.3% of Gross Regional Product (GRP)

$927.3 million Total Added Regional Income or

11,886 Total Added Regional Jobs
<table>
<thead>
<tr>
<th>Perspective</th>
<th>Benefit</th>
<th>Cost</th>
<th>Benefit/Cost Ratio</th>
<th>Rate of Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>Higher future earnings</td>
<td>Tuition, supplies, opportunity cost</td>
<td>2.4</td>
<td>10.7%</td>
</tr>
<tr>
<td></td>
<td>$898.7 million</td>
<td>$374.8 million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxpayer</td>
<td>Future tax revenue, government savings</td>
<td>State and local funding</td>
<td>1.2</td>
<td>2.6%</td>
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<tr>
<td></td>
<td>$200.4 million</td>
<td>$165.3 million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Future earnings, tax revenue, private savings</td>
<td>Student and all university costs</td>
<td>3.3</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>$2.2 million</td>
<td>$674.5 million</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Future benefits are discounted to the present.
ADDING INCOME TO YOUR REGION/STATE

• Add value to your alumni.

• Push workforce training and dual-credit.

• Increase enrollment.

• Keep your graduates in-region.

• Attract outside funding.

Note that external factors heavily influence a university's impact.
Next Steps

• Send the executive summary to local legislators
• Use social media to broadcast student returns to prospective students and parents
• Share industry impacts with local business partners
• Leverage impacts for proposals, grant writing, & strategic planning
• Publish results in campus fliers, newsletters, & websites
• Share results with local media

How can Emsi help?

• Emsi’s Press Packet
• Ongoing presentations from your Emsi economist
• Email/call us anytime
The results of this study were prepared by

Emsi

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