Education Corridor Expansion

by

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Background

- DeArmond Mill site closed
- Land vacancy created (17 acres)
Development options for land

- Retail/commercial only
- Higher education expansion
Methodology

Step 1 • Measure current impact of institutions

Step 2 • Measure impact of institutions with expansion

Step 3 • Measure impact of exclusive retail/commercial development

Step 4 • Compare results
Methodology

Step 1. Current impact of institutions

Institutions provide data on…
  • Payroll and expenditures
  • Student enrollment and credit production

Model calculates…
  • College operations effect
  • Credit accumulation in workforce
Methodology

Input-output modeling

• Predicts effect of institutions on other industry sectors
• Generates indirect “multiplier” effects
Methodology

Credit accumulation in workforce

Credits 0

Individual Student

Annual Income $20,000
Methodology

Credit accumulation in workforce

Credits 60

Higher Education

Individual Student

Annual Income

$35,000
Methodology

Annual earnings over lifetime

Source: Derived from national data supplied by US Census Bureau and Jacob Mincer, *Schooling, Experience and Earnings* (New York: National Bureau of Economic Research, 1974)
## Results

### Current impact of institutions

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College operations effect</strong></td>
<td></td>
</tr>
<tr>
<td>Jobs impact</td>
<td>1,092</td>
</tr>
<tr>
<td><em>Earnings impact (in millions)</em></td>
<td>$37.7</td>
</tr>
<tr>
<td><strong>Student productivity effect</strong></td>
<td></td>
</tr>
<tr>
<td><em>Earnings impact (in millions)</em></td>
<td>$90.4</td>
</tr>
<tr>
<td><strong>Total effect</strong></td>
<td></td>
</tr>
<tr>
<td><em>Earnings impact (in millions)</em></td>
<td>$128.1</td>
</tr>
</tbody>
</table>
Methodology

Step 2. Impact of institutions with expansion

Assumptions include…
  • Costs of development
  • Increases in college spending
  • 2% annual growth in student enrollment

Model calculates…
  • Temporary construction impacts
  • College spending effects
  • Student productivity effects
# Results

**Impact of institutions with expansion**

*Temporary construction impacts*

<table>
<thead>
<tr>
<th>Construction Cost</th>
<th>FTEs</th>
<th>Hdcnt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 1 (years 1-4)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$11,250,000</td>
<td>450</td>
<td>1,600</td>
</tr>
<tr>
<td><strong>Phase 2 (years 5-9)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$12,750,000</td>
<td>510</td>
<td>1,820</td>
</tr>
<tr>
<td><strong>Phase 3 (years 10-13)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$14,499,999</td>
<td>580</td>
<td>2,010</td>
</tr>
<tr>
<td><strong>Phase 4 (years 14-17)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$15,500,001</td>
<td>620</td>
<td>2,150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,160</strong></td>
<td><strong>7,580</strong></td>
</tr>
</tbody>
</table>
Results

Impact of institutions with expansion

*Temporary construction impacts*

<table>
<thead>
<tr>
<th>Phases One &amp; Two</th>
<th>Phases Three &amp; Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs impact</td>
<td>62</td>
</tr>
<tr>
<td>Earnings impact (in millions)</td>
<td>$2.5</td>
</tr>
<tr>
<td>Jobs impact</td>
<td>77</td>
</tr>
<tr>
<td>Earnings impact (in millions)</td>
<td>$3.1</td>
</tr>
</tbody>
</table>
Results

Impact of institutions with expansion

*College operations effect*

- **453** new jobs by 2018
- **889** new jobs by 2028
- **$15.3 million** added earnings by 2018
- **$30.8 million** added earnings by 2028
## Results

### Impact of institutions with expansion

**Addition to economic base**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 current non-local revenue</td>
<td>$24.1 million</td>
</tr>
<tr>
<td>2018 estimated non-local revenue</td>
<td>$35.6 million</td>
</tr>
<tr>
<td>Addition to economic base by 2018</td>
<td>$11.5 million</td>
</tr>
</tbody>
</table>
Results

Impact of institutions with expansion

Accumulation of credits in workforce
Results

Impact of institutions with expansion

New growth in regional earnings

![Graph showing total earnings increase from 2007 to 2027. The y-axis represents millions of dollars, ranging from $- to $8. The x-axis represents years from 2007 to 2027.]
Results

Impact of institutions with expansion

College operations plus educational attainment

- 2018: $17.9 Million
- 2028: $38.1 Million
Methodology

Step 3. Impact of exclusive retail/commercial development

Data and assumptions include…

• Size of land and structure
• Value of land and structure
• Tax rates

Model calculates…

• Property taxes collected
• Sales taxes collected
## Results

### Retail/commercial development

**Value of Land and Structure**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land size</td>
<td>17 acres</td>
</tr>
<tr>
<td>Max value of land</td>
<td>$14.8 million</td>
</tr>
<tr>
<td>Structure size (no. of levels)</td>
<td>2 levels</td>
</tr>
<tr>
<td>Max value of structure</td>
<td>$122.0 million</td>
</tr>
<tr>
<td><strong>Total value</strong></td>
<td><strong>$136.8 million</strong></td>
</tr>
</tbody>
</table>
Results

Retail/commercial development

Fiscal impacts

- Current levy rate = 0.008328144

- Total property taxes collected by...
  2018 = $8.9 million
  2028 = $20.2 million
Methodology

Step 4. Comparison of results

Expand education corridor

Vacant Land

Build retail/commercial space

Which is greater?
Results

Comparison of results

Annual tax revenue vs. regional growth

- Annual tax revenue: $1.1 million
- Average annual growth in regional benefits: $1.9 million
Results

Comparison of results

*Cumulative tax revenue vs. regional growth*

$9.0 million difference by 2018
$17.9 million difference by 2028
Implications

Educational institutions operate at peak capability when they…
• Pool resources
• Develop synergy and cohesion

Separating campuses…
• Interrupts synergy and cohesion
• Creates logistical concerns
• Divides resources
• Lessens value of educational system

Higher education research and development…
• Recruits businesses
• Contributes to technology transfer
• Enhances workforce development
• Promotes economic growth