CULTIVATING INNOVATION

Is metro Milwaukee prepared for the new knowledge-based economy?
Update to 2010 report

10-year trends

20 indicators:

• Regional Talent
• Idea Development
• Capital Formation
• Business Dynamism
• Economic Outputs
## COMPARISON METRO AREAS

<table>
<thead>
<tr>
<th>City, State</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin, TX</td>
<td>2,056,405</td>
</tr>
<tr>
<td>Buffalo, NY</td>
<td>1,132,804</td>
</tr>
<tr>
<td>Cincinnati, OH</td>
<td>2,165,139</td>
</tr>
<tr>
<td>Cleveland, OH</td>
<td>2,055,612</td>
</tr>
<tr>
<td>Indianapolis, IN</td>
<td>2,004,230</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>2,104,509</td>
</tr>
<tr>
<td><strong>Milwaukee, WI</strong></td>
<td><strong>1,572,482</strong></td>
</tr>
<tr>
<td>Minneapolis, MN</td>
<td>3,551,036</td>
</tr>
<tr>
<td>Oklahoma City, OK</td>
<td>1,373,211</td>
</tr>
<tr>
<td>Pittsburgh, PA</td>
<td>2,342,299</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>2,434,955</td>
</tr>
</tbody>
</table>
### Scientists and Engineers

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>11,510</td>
</tr>
<tr>
<td>2016</td>
<td>12,910</td>
</tr>
</tbody>
</table>

### Tech Workers

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>20,340</td>
</tr>
<tr>
<td>2016</td>
<td>28,060</td>
</tr>
</tbody>
</table>
REGIONAL TALENT

Educational Attainment

Scientists and Engineers

Tech/IT Workers

Knowledge Workers

Skilled and Technical Workers

College-Educated, Foreign Born
UNIVERSITY R&D EXPENDITURES, 2015 (IN MILLIONS)

- Pittsburgh: $1,122
- Minneapolis: $890
- Austin: $660
- Cleveland: $461
- Cincinnati: $454
- Portland: $391
- Buffalo: $386
- Milwaukee: $293
- Oklahoma City: $258
- Kansas City: $28
SBIR & STTR AWARDS - METRO MILWAUKEE

Millions

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>2007</td>
<td>$3.50</td>
</tr>
<tr>
<td>2008</td>
<td>$7.50</td>
</tr>
<tr>
<td>2009</td>
<td>$6.00</td>
</tr>
<tr>
<td>2010</td>
<td>$3.50</td>
</tr>
<tr>
<td>2011</td>
<td>$2.00</td>
</tr>
<tr>
<td>2012</td>
<td>$1.50</td>
</tr>
<tr>
<td>2013</td>
<td>$3.00</td>
</tr>
<tr>
<td>2014</td>
<td>$0.50</td>
</tr>
<tr>
<td>2015</td>
<td>$5.00</td>
</tr>
<tr>
<td>2016</td>
<td>$1.00</td>
</tr>
</tbody>
</table>
SBA LOANS - METRO MILWAUKEE

Millions

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>$150</td>
<td>$150</td>
<td>$150</td>
<td>$150</td>
<td>$150</td>
<td>$150</td>
<td>$150</td>
</tr>
</tbody>
</table>
VENTURE CAPITAL INVESTMENTS PER CAPITA - 2016

- Austin: $474.2
- Minneapolis: $136.8
- Pittsburgh: $125.7
- Cleveland: $118.2
- Portland: $110.4
- Indianapolis: $64.2
- Cincinnati: $61.3
- Buffalo: $47.5
- Kansas City: $28.4
- Milwaukee: $28.3
- Oklahoma City: $6.8
CAPITAL FORMATION

SBIR & STTR Grants
SBA Loans
Venture Capital Funding
MICRO & SMALL BUSINESSES - METRO MILWAUKEE

2005:
- Micro Businesses: 27,289
- Small Businesses: 11,691

2010:
- Micro Businesses: 26,165
- Small Businesses: 11,070

2015:
- Micro Businesses: 25,530
- Small Businesses: 11,122

Legend:
- Blue: Micro Businesses
- Red: Small Businesses
SMALL BUSINESSES WITH <100 EMPLOYEES, 2005-2015

- Austin: 36.2%
- Oklahoma City: 11.3%
- Portland: 9.6%
- Indianapolis: 7.8%
- Minneapolis: 1.9%
- Kansas City: 0.3%
- Buffalo: -0.1%
- Pittsburgh: -2.7%
- Cincinnati: -5.1%
- Milwaukee: -6.0%
- Cleveland: -9.0%
- United States: 2.1%
STARTUPS PER 1,000 TOTAL FIRMS - METRO MILWAUKEE

- 2006: 73
- 2007: 79
- 2008: 79
- 2009: 74
- 2010: 68
- 2011: 60
- 2012: 55
- 2013: 57
- 2014: 58
- 2015: 60
- 2016: 61
MINORITY BUSINESS OWNERSHIP - METRO MILWAUKEE

<table>
<thead>
<tr>
<th>Year</th>
<th>Minority Share of Population</th>
<th>Minority Owned Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>28.2%</td>
<td>9.5%</td>
</tr>
<tr>
<td>2012</td>
<td>31.0%</td>
<td>11.2%</td>
</tr>
<tr>
<td>2014</td>
<td>31.7%</td>
<td>11.6%</td>
</tr>
<tr>
<td>2015</td>
<td>32.1%</td>
<td>10.7%</td>
</tr>
</tbody>
</table>
B U S I N E S S  D Y N A M I S M

Small Business Formation: 10
Startup Density: 7
Business Survival: 9
Minority Business Ownership: 10
Metro Milwaukee’s talent pool is strengthening and is competitive with peer regions.
Our region is underperforming in business development and survival.
Capital formation remains an area of concern for the region.
For more information, go to: publicpolicyforum.org