Females are a clear majority in high-growth industries and associated educational pipelines.

Gender imbalance is unsustainable in the current and projected economic and workforce environment.
Data

US Census Bureau: Quarterly Workforce Indicators
https://www.census.gov/data/developers/data-sets/qwi.html

Indiana Data Hub: Occupation Projections 2026
https://hub.mph.in.gov/dataset/occupational-projections

Indiana Data Hub: CIP-SOC Crosswalk
https://hub.mph.in.gov/dataset/classification-of-instructional-programs-to-standard-occupation-codes-crosswalk


National Center for Education Statistics: Integrated Postsecondary Education Data System (IPEDS)
Which Indiana industries have experienced growth or decline over the last two decades?
Percent Difference in Total Jobs in Indiana by Industry (1999 vs 2016)

- Manufacturing: 526K
- Healthcare and Social Assistance: 425K
- Retail Trade: 337K
- Educational Services: 226K
- Administrative, Support, and Other Services: 191K
- Professional, Scientific, and Technical Services: 112K

Credit: Anurag Joshi | Data Source: QWI
Is there gender balance within these high-growth or high-decline industries?

No
Percent Female within Industries (2016)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Female (%)</th>
<th>Male (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>28.83%</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>52.64%</td>
<td></td>
</tr>
<tr>
<td>Healthcare</td>
<td>81.92%</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>66.34%</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>41.8%</td>
<td></td>
</tr>
</tbody>
</table>

Credit: Vatsal Jatakia | Data Source: QWI
Is there a correlation between industry growth and the percent of females in each industry?

Yes
Correlation Between Industry Growth and Percent Female

Credit: David Lebhar | Data Source: QWI
Why is this significant?

At least three reasons...
Occupation Growth Projections (2016 – 2026)

Credit: Vatsal Jatakia | Data Source: SOC Projections 2026

- Business & Financial (+ 23%)
- Computer & Mathematical (+ 16%)
- Healthcare Practitioners (+ 14%)
- Healthcare Support (+ 10%)
- Production (+ 3%)
- Sales (+ 2%)
Civilian Labor Force Participation Rates by Sex
1950 - 2005 and Projected from 2010 - 2050

Credit: Livia Crim | Data Source: BLS
Employment by Sex in Indiana – All Industries (1999 – 2016)

<table>
<thead>
<tr>
<th>Year</th>
<th>Male Base Employment Count (millions)</th>
<th>Female Base Employment Count (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>7.4</td>
<td>7.0</td>
</tr>
<tr>
<td>2001</td>
<td>6.6</td>
<td>6.2</td>
</tr>
<tr>
<td>2003</td>
<td>6.2</td>
<td>5.8</td>
</tr>
<tr>
<td>2005</td>
<td>6.8</td>
<td>6.0</td>
</tr>
<tr>
<td>2007</td>
<td>6.4</td>
<td>5.8</td>
</tr>
<tr>
<td>2009</td>
<td>5.8</td>
<td>5.8</td>
</tr>
<tr>
<td>2011</td>
<td>6.0</td>
<td>6.2</td>
</tr>
<tr>
<td>2013</td>
<td>6.2</td>
<td>6.6</td>
</tr>
<tr>
<td>2015</td>
<td>6.8</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Credit: Vatsal Jatakia | Data Source: QWI
Is the education pipeline leading to better gender balance within high-growth industries?

No
Percent Female within Largest Fields of Study (Indiana 2016)

<table>
<thead>
<tr>
<th>Field</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Professions</td>
<td>86%</td>
<td>14%</td>
</tr>
<tr>
<td>Business &amp; Management</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>Education</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>Liberal Arts, Sciences, Humanities</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>Engineering Technologies</td>
<td>11%</td>
<td>89%</td>
</tr>
<tr>
<td>Computer Science</td>
<td>20%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Credit: Livia Crim | Data Source: IPEDS
Mapping Education to Occupation (Indiana 2016)

Office/Administration

Training/Library

Healthcare

Business & Management

Sales

Production Occupations

Credit: Roshith Raghavan | Data Source: IPEDS and CIP-SOC Crosswalk
Key Findings & Future Research

- Females are a clear majority in high-growth occupations.
- Females are a clear majority in the current education pipeline leading to high-growth occupations.
- Gender imbalance is a significant issue in current and projected economic and workforce environment.
- Adult education and worker training programs may provide additional avenues into high-growth occupations, leading to gender balance – an area for further research.