Consistently High Demand for Degreed Professional in the Commonwealth Workforce

# Associate’s Degrees

Table 5. States with the largest shares of employment in occupations that typically require an associate’s degree, May 2013

<table>
<thead>
<tr>
<th>State</th>
<th>Employment share (percent)</th>
<th>Number of jobs</th>
<th>Median annual wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States, total</td>
<td>4.3%</td>
<td>5,719,860</td>
<td>$58,240</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>5.2</td>
<td>169,010</td>
<td>66,460</td>
</tr>
<tr>
<td>Vermont</td>
<td>5.1</td>
<td>15,360</td>
<td>55,320</td>
</tr>
<tr>
<td>South Dakota</td>
<td>5.1</td>
<td>20,490</td>
<td>46,560</td>
</tr>
<tr>
<td>West Virginia</td>
<td>5.0</td>
<td>35,580</td>
<td>49,080</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>4.9</td>
<td>22,450</td>
<td>66,060</td>
</tr>
<tr>
<td>Delaware</td>
<td>4.9</td>
<td>20,220</td>
<td>62,970</td>
</tr>
<tr>
<td>Michigan</td>
<td>4.9</td>
<td>194,970</td>
<td>56,770</td>
</tr>
<tr>
<td>Ohio</td>
<td>4.8</td>
<td>245,980</td>
<td>55,730</td>
</tr>
<tr>
<td>Montana</td>
<td>4.7</td>
<td>20,560</td>
<td>52,210</td>
</tr>
<tr>
<td>Maine</td>
<td>4.7</td>
<td>27,170</td>
<td>56,090</td>
</tr>
</tbody>
</table>

**Bachelor’s Degrees**

Table 6. States with the largest shares of employment in occupations that typically require a bachelor’s degree, May 2013

<table>
<thead>
<tr>
<th>State</th>
<th>Employment share (percent)</th>
<th>Number of jobs</th>
<th>Median annual wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States, total</td>
<td>18.0%</td>
<td>23,829,150</td>
<td>$68,190</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>32.2</td>
<td>214,640</td>
<td>92,340</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>22.7</td>
<td>740,620</td>
<td>79,470</td>
</tr>
<tr>
<td>Virginia</td>
<td>22.3</td>
<td>808,730</td>
<td>76,360</td>
</tr>
<tr>
<td>Maryland</td>
<td>22.0</td>
<td>557,570</td>
<td>77,710</td>
</tr>
<tr>
<td>Connecticut</td>
<td>21.7</td>
<td>354,330</td>
<td>78,880</td>
</tr>
<tr>
<td>Washington</td>
<td>21.0</td>
<td>593,320</td>
<td>75,190</td>
</tr>
<tr>
<td>California</td>
<td>20.3</td>
<td>2,989,710</td>
<td>79,680</td>
</tr>
<tr>
<td>Colorado</td>
<td>20.2</td>
<td>463,740</td>
<td>69,400</td>
</tr>
<tr>
<td>New York</td>
<td>19.6</td>
<td>1,688,300</td>
<td>78,900</td>
</tr>
<tr>
<td>Delaware</td>
<td>19.4</td>
<td>79,820</td>
<td>72,930</td>
</tr>
</tbody>
</table>

Estimated Shortfall in Public Higher Education Degreed Workers Compared with Estimated Need: 2015–2020

Source: “Job Growth and Education Requirements Through 2020”, Georgetown Center on Education and the Workforce
“The Perfect Storm”

- High Percentages of jobs requiring a college education
- Growth in jobs that require a college-educated workforce
- Declines in college-age population
- Persistent low college completion rates
- Persistent gaps in college enrollment and completion among growing underserved populations.

Public Higher Education in Massachusetts has been grappling with relatively flat student outcomes at a time in which the demand for college degrees is perpetually increasing.
72% of jobs will require postsecondary education.

Source: “Job Growth and Education Requirements Through 2020”, Georgetown Center on Education and the Workforce
Declines in Enrollment

Fall Undergraduate Enrollment: System Total

Peak Year: 196,847
Decline from Peak: -10,744
Peak Year: Fall-2006
Decline from Peak: Fall-2015

- 163,993
- Fall-2006
- Fall-2007
- Fall-2008
- Fall-2009
- Fall-2010
- Fall-2011
- Fall-2012
- Fall-2013
- Fall-2014
- Fall-2015

Declines in Enrollment
Consensus Among Multiple Projections

NCES: 2010-2023 Change in Public High School Graduates

- Decline 5% or more
- Decline up to 5%
- Grow up to 5%
- Grow 5% or more

WICHE: High School Graduates

- Number of High School Graduates

Donahue: Public Higher Ed Enrollments

- Fall Headcount

Фішін Google IMAGES
Latinos are the Only HS Graduates Expected Significantly to Increase

Gaps in Educational Attainment for Latino Public High School Graduates in Massachusetts

- Graduating High School in Four Years: 72.20% (Latino), 91.60% (White)
- Enrolling in Postsecondary Education After HS Graduation: 53% (Latino), 73% (White)
- Earning an Award within 6 Years of Initial Postsecondary Enrollment: 44% (Latino), 69% (White)
Degrees Conferred in High Need and High Earning Fields

Share of Degrees and Certificates in STEM, FY13-FY15

- Latino: 88% Non STEM, 12% STEM
- White: 85% Non STEM, 15% STEM

Share of Degrees and Certificates in Healthcare, FY13-FY15

- Latino: 85% Non Health, 15% Healthcare
- White: 85% Non Health, 15% Healthcare

Sources: MA DHE
Strategies to Address Declines

“The Big Three”

1. Boost College Completion Rates

2. Close Achievement Gaps

3. Attract & Graduate More Students from Underserved Populations
Strategies to Address Declines

“The Big Three”

1. Boost College Completion Rates
   - Dev’l Math Experiment Launched
   - System-wide Transfer Pathways Developed for Six Majors
   - Guided Pathways to Success

2. Close Achievement Gaps
   - Low-Income Males / Males of Color
     - Cross-agency work w/ EEC and ESE
     - Pilot in Gateway Cities

3. Attract & Graduate More Students from Underserved Populations
   - Study of Enrollment Potential Among Underserved Groups
   - Financial Aid Review and Redesign
GPSTEM - Comprehensive Data Integration System (CDIS)

**Types of Data Used:**

**LABOR MARKET INFORMATION**
- Compilation of data regarding academic programs and their linkages to specific occupations and careers.

**STUDENT ACADEMIC GUIDANCE**
- Real-time inventory of participating college program offerings, organized regionally, by industry, career, and occupation opportunities.

**STUDENT WORKFORCE OUTCOMES**
- Longitudinal data tracking student academic activity and overall occupation outcomes.

**AGGREGATE ACADEMIC OUTCOMES**
- Correlating and analyzing individual and aggregate outcomes to enhance reporting capabilities.

**FEDERAL LEVEL**
- Federal agencies provide longitudinal data and standardized definitions for data and standardized definitions for occupations. Longitudinal data can be shaped by future outlook, industry, career cluster, and job family.

**STATE LEVEL**
- State workforce boards and state workforce agencies create statewide plans, share labor market information, develop performance reports, and maintain lists of eligible training providers.

**LOCAL LEVEL**
- Real-time feeds from online employment sites will allow validation against longitudinal data and add detailed context to real opportunities.

**STUDENT DATA ANONYMIZER**
- Occupation can be correlated to educational program data regarding finance, enrollment, human resources, completions, graduation rates, and more.

**CDIS DATA WAREHOUSE**
- The consortium acts as a governing body over the system. Its charge is to establish initial system requirements and act as data stewards during the grant period.

**Who Uses the Data?**

**ADMINISTRATORS/ INSTITUTIONAL RESEARCH**
- Allocate resources to most effective programs
- Adjust program design to improve results

**PROGRAM MANAGERS/ JOB COUNSELORS/EDUCATORS**
- Customize services for individual needs
- Ensure quality services for target populations
- Replicate success; identify areas for improvement

**STUDENTS AND WORKERS**
- Choose training/education providers with record of success
- Select careers supported by employment outcome information

**BUSINESSES**
- Source proficient motivated and capable candidates
- Build confidence in program accountability
- Enhance willingness to partner with colleges

**Which Data Is Collected?**
- Demographics
- Program eligibility
- Services received
- Employment and earnings outcomes
- Postsecondary educational attainment
- Skills gaps
- Program costs