

# BEYOND THE HEADLINES

## At a Glance: Underemployment

NOVEMBER 2016

FOCUS: SEATTLE AND KING COUNTY

### To Avoid Underemployment Choose Associate's Degree Wisely

Seattle is one of the most educated cities in the country with 58 percent of adults at least 25 years old holding a bachelor's degree and nearly one-quarter with some college or an associate's degree.<sup>i</sup> Nationally, 29 percent of adults have at least a bachelor's degree and the same percentage have some college or an associate's degree.

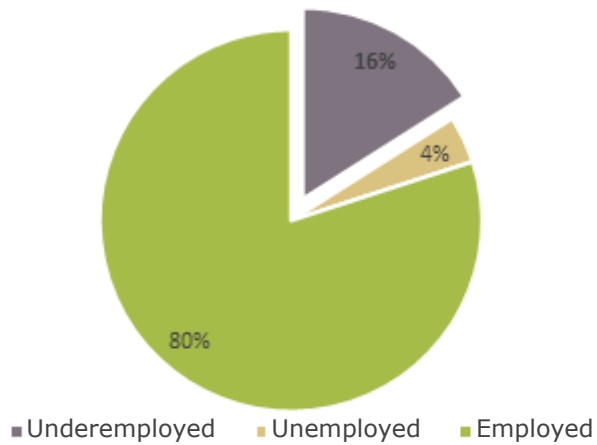
However, high educational attainment is not a panacea, as a significant portion of people are unable to find employment matching their skill level, making them "underemployed". These include workers with an associate's degree employed in jobs that do not typically require post-secondary education, and bachelor's recipients in occupations that do not require such a degree.

Overall, despite Seattle's booming economy and employment rate of 96 percent, about 16 percent of the labor force is underemployed. **The problem is particularly pronounced for associate's degree holders, who are underemployed at a rate of 37 percent.** To arrive at these estimates, we utilized the O\*NET Job Zone designation to determine the level of education needed for a particular occupation, and the American Community Survey to determine residents' educational attainment.<sup>ii</sup> Associate's degree holders were considered underemployed if they were employed in a job classified as Zones 1 or 2, jobs that generally require a high school diploma or less. By the same token, bachelor's degree holders were counted among the underemployed if they worked in a job classified as Job Zones 1 through 3.<sup>iii</sup>

### Educational Requirements, O\*NET's Job Zone Classification

| Job Zone | Education   |
|----------|---|
| 1        | May require high school diploma or GED  |
| 2        | Usually require a high school diploma   |
| 3        | Most require training at vocational school; on-the-job experience; or an associate's degree |
| 4        | Most require a four-year degree   |
| 5        | Most require graduate school  |

## Overall Underemployment Among Degree Holders in Seattle



Source: SJI analysis of 2014 5-Year American Community Survey Microdata and O\*NET Job Zones

The high rate of associate’s degree holders who are in positions that do not typically require post-secondary education should not lead one to conclude that without attaining a bachelor’s degree, a college education does not pay. Instead, it points to the need to stay abreast of the types of jobs that are in-demand. The table below shows some associate’s degrees that may be worth pursuing – these jobs have been identified as in-demand in King County by the Washington State Employment Security Department (ESD) based on job growth and total job openings, pay a median wage of at least \$23/hour, and typical workers have associate’s degrees.<sup>iv</sup>

Having access to accurate information about the job prospects associated with a particular field of study and degree is key to maximizing personal and public investment in education.

| In-Demand Jobs in King County for Associate’s Degree Holders       |                        |                                  |                                     |
|--|------------------------|----------------------------------|-------------------------------------|
| Occupation   | Median Hourly Earnings | Projected Job Growth (2016-2021) | Unique Job Postings (Jan-Sept 2016) |
| Architectural and Civil Drafters                                   | \$27.76                | 3.1%                             | 309                                 |
| Cardiovascular Technologists and Technicians                       | \$32.22                | 10.3%                            | 979                                 |
| Civil Engineering Technicians                                      | \$30.02                | 6.4%                             | 121                                 |
| Diagnostic Medical Sonographers                                    | \$42.67                | 11.3%                            | 601                                 |
| Environmental Science and Protection Technicians, Including Health | \$23.38                | 15.1%                            | 492                                 |
| Industrial Engineering Technicians                                 | \$35.33                | -0.2%                            | 566                                 |
| Medical Equipment Repairers  | \$26.94                | 4.7%                             | 751                                 |
| Occupational Therapy Assistants                                    | \$27.92                | 34.5%                            | 382                                 |
| Paralegals and Legal Assistants                                    | \$30.18                | 5.7%                             | 1,277                               |
| Radiologic Technologists   | \$33.52                | 5.3%                             | 1,013                               |
| Respiratory Therapists   | \$34.97                | 5.3%                             | 450                                 |

Source: WA State Economic Security Department (ESD) and Economic Modeling Specialists, Inc. (EMSI Q3 2016 Data Set).

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- i. U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates.
  - ii. SJI utilized a similar methodology to calculate underemployment as seen in Neeta P. Fogg and Paul E. Harrington, "Mal-Employment Problems Among College-Educated Immigrants in the United States," Drexel University Center for Labor Markets and Policy, October 2012, [http://lincs.ed.gov/publications/pdf/4\\_Mal-employment-paper.pdf](http://lincs.ed.gov/publications/pdf/4_Mal-employment-paper.pdf).
  - iii. This is by no means a flawless methodology, as workers may need higher levels of education than what the job strictly requires in order to be competitive, particularly in a city with a highly educated population, like Seattle. However, even in Seattle, more than one-third of workers with a high school diploma are employed in a job that typically requires some post-secondary education.
  - iv. Educational attainment reported at the national level by EMSI based on the most common level of education attained by workers in that occupation. To determine jobs in-demand in 2016, ESD uses two-year (second quarter 2015 through second quarter 2017), five-year (2014-2019) and ten-year (2014-2024) projections of average annual growth rates and total job openings. For a full description of the methodology, see <https://fortress.wa.gov/esd/employmentdata/reports-publications/occupational-reports/occupations-in-demand/determine-demand>.

**BEYOND THE HEADLINES:** Policy & Labor Market Updates for Those Working to Help Low-Income and Low-Skill Individuals Advance through Education, Training & Living-Wage Jobs

### **About Seattle Jobs Initiative**

Seattle Jobs Initiative creates opportunities for students, workers and business to succeed by helping education and job training programs meet the demands of a new economy. We find and apply solutions for people to gain the skills they need for good jobs that create prosperity for all in today's marketplace.

***Supported by the City of Seattle Office of Economic Development***

Chris Klaeyen made significant contributions to this analysis.

### **Contact Information**

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