



Oregon

Kate Brown, Governor

Higher Education Coordinating Commission

Ben Cannon, Executive Director
255 Capitol Street NE, Third Floor
Salem, OR 97310
www.oregon.gov/HigherEd

Co-Chair, Senator Rod Monroe
Co-Chair, Representative Barbara Smith Warner
Joint Committee on Ways and Means, Subcommittee on Education

March 27, 2017

Dear Co-Chairs Monroe and Smith Warner,

Thank you for the opportunity to answer questions that arose during the March 27 Higher Education Coordinating Commission's presentation to the Ways and Means Subcommittee on Education.

Senator Roblan requested the Commission detail the population represented by each line in the recession/recovery chart on slide 23, which shows how many more or fewer jobs are available for individuals based on educational attainment. Incorporating the information requested by Senator Roblan, since the beginning of the recession:

- 8.6 million more jobs are available for individuals with a Bachelor's degree (10% of the US population age 25 and older)
- 1.3 million more jobs are available for individuals with a minimum of some college or an Associate degree (46% of the US population age 25 and older)
- 5.5 million *fewer* jobs are available for individuals with a high school diploma (or its equivalent) or lesser attainment (44% of the us population age 25 and older)

Representative Parrish requested information on whether degree holders are employed in positions that are appropriate for their level of education. While labor economists continue to debate this question, we offer another version of slide 24 to shed light (see Appendix A). This additional version shows the same occupational projections shown in the March 27 presentation, but with the competitive level of education for each occupation, rather than with the minimal required education. Shown by competitive education level, more occupations are in the associate degree or certificate group (shown with blue circles), and fewer occupations are in the high school equivalency group (shown with yellow circles). The same is true at higher levels of education, though to lesser extent. This suggests that workers in jobs for which they have more than the minimum required level of education may be more competitive than those workers who have only the minimum level required.

Representative Parrish also requested information on how the federal Bureau of Labor Statistics (BLS) labor projections factor in potential automation of job functions. BLS and the Oregon Employment Department use a complex model for projecting labor demand; this model takes into account labor force participation rates for different groups, the aggregate economy, industry output and employment, occupational employment, and economic demand. BLS methods explicitly take technological innovation into account when making their occupational projections. They analyze new trends that can affect the demand for occupations, such as how "expanding use of new manufacturing techniques like 3D printing might change

the productivity of particular manufacturing occupations.”¹ If the technology currently exists and is in utilization in industry, it is accounted in the projection methodology. If the technology is not yet deployed in the field, it is not accounted for in the methodology.

Finally, Senator Roblan requested a year-to-year comparison of progress toward the State’s 40-40-20 educational attainment goal. The chart shown in Appendix B shows modest but positive progress toward the goal from 2011-2015, showing each category of student attainment—with the exception of non-high school graduates—trending in the direction supporting the state goal. Specifically, the percentage of Oregonians with a Bachelor’s degree or higher attainment, and the percentage with Associate degree or certificate attainment increased. The percentage of Oregonians with some college experience but no degree, and the percentage holding a high school diploma or its equivalent with no collegiate experience, both decreased. The percentage of non-high school graduates remained constant.

If you have any further questions, please do not hesitate to contact Kyle Thomas, Director of Legislative and Policy Affairs, at kyle.thomas@hecc.oregon.gov or at 503-480-9596.

Sincerely,

A handwritten signature in black ink that reads "Ben Cannon". The signature is written in a cursive, flowing style.

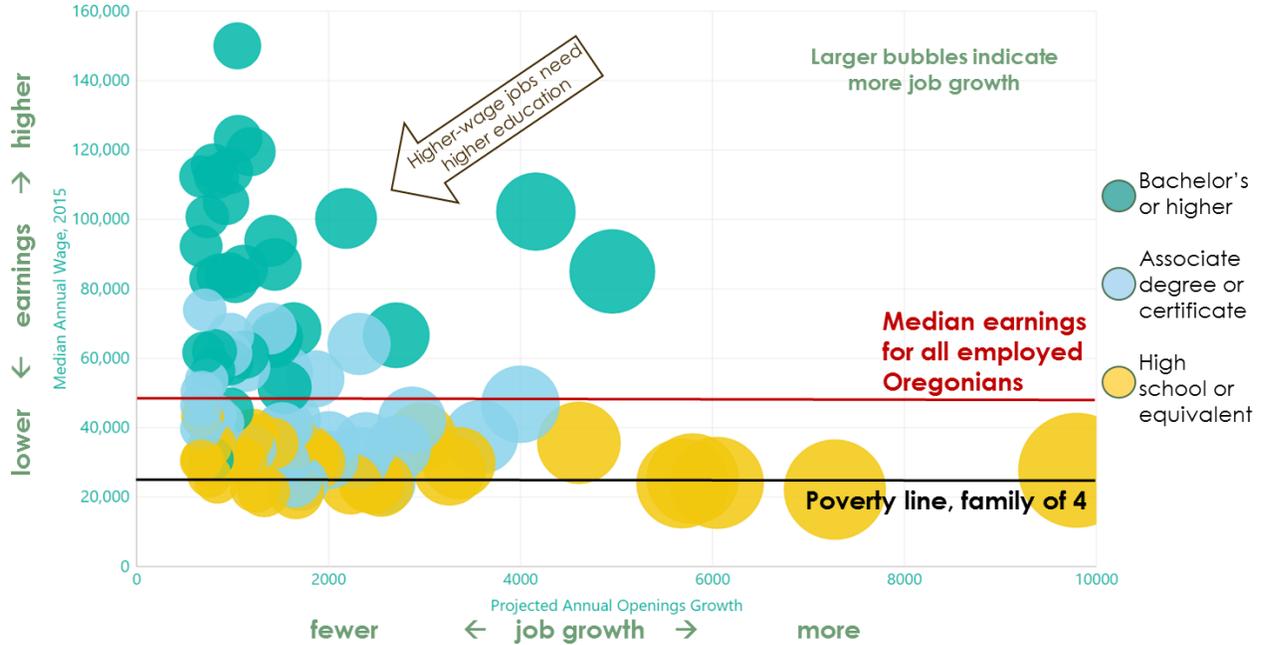
Ben Cannon
Executive Director

¹ Bureau of Labor Statistics, 2016. “Projections Methodology,” at https://www.bls.gov/emp/ep_projections_methods.htm

APPENDIX A.

Oregon projected job growth, by competitive education and median earnings

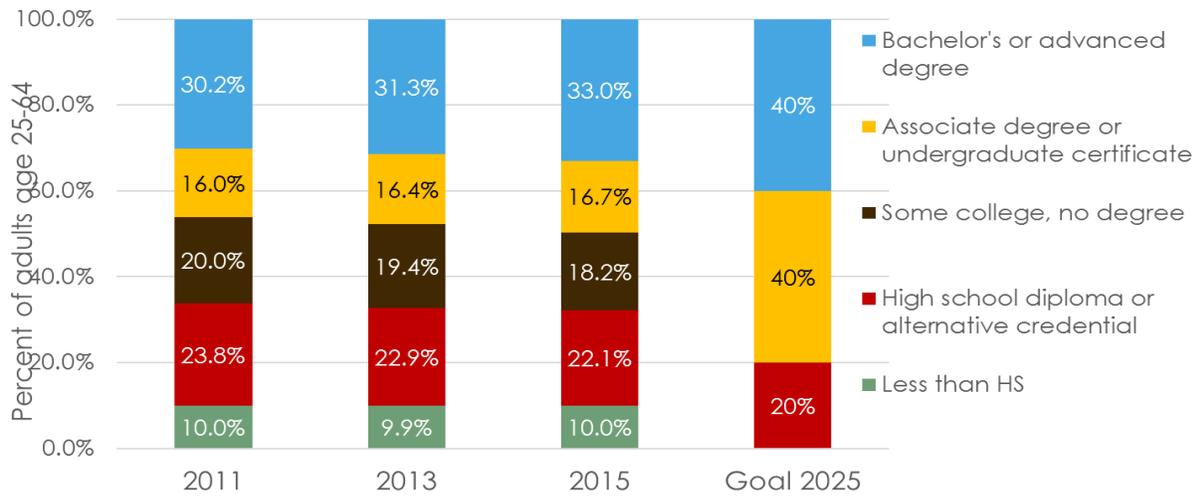
- 100 occupations projected to grow the most represent 70% of all job growth 2014-24



Source: Oregon Employment Department, <https://www.qualityinfo.org/-/long-term-job-openings-fueled-by-growth-retirements>;
 Bureau of Labor Statistics, Occupations with the most job growth projected 2014-2024, https://www.bls.gov/emp/ep_table_104.htm; Bureau
 of Labor Statistics, May 2015 State Occupational Employment and Wage Estimates Oregon, https://www.bls.gov/oes/current/oes_or.htm.
 Note: Wages for physicians and surgeons is capped at \$150,000 for slide formatting.

APPENDIX B.

**Educational Attainment Rates for Oregon Adults
Versus 40-40-20 Goal**



Source: American Community Survey data, 1-year estimates of population age 25 and older.