





#### A Skilled and Educated Workforce

# House Higher Education Committee January 22, 2013

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#### Purpose of this report

The report is required under 28B.77.080 to assess "the number of forecasted net job openings at each level of higher education and training and the number of credentials needed to match the forecast of net job openings."

The report addresses this mandate using the long range occupational forecast and estimates of program graduates who would likely be entering the workforce. It should be noted that:

- The report does not fully address the impact of new and emerging occupations and industries (due to limitations of the forecast).
- The report looks at the post-recessionary period expected during 2014 2019.
- The report assumes no net in-migration into Washington of certificate and degree holders.

#### The report addresses two major issues

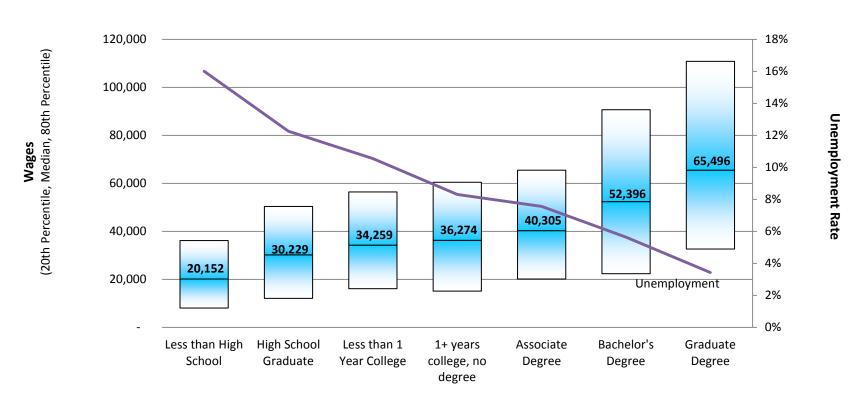
1) Identification of High Employer Demand Occupations

2) Aggregate Demand for higher education degrees and certificates

#### **Education Level**

- Workers with higher levels of education tend to earn more and experience lower rates of unemployment.
- At each level there is a range of earnings that varies by field of study and occupation.

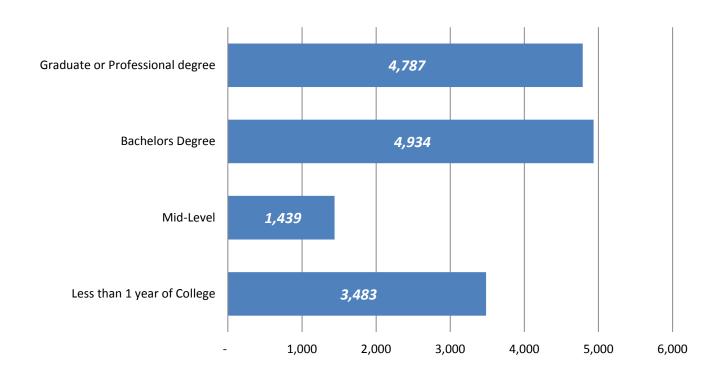
#### **2010 Wages and Unemployment by Education Level**



Source: 2010 American Community Survey. Wages Include civilian employed WA residents age 25-64. Unemployed rate reflects civilian labor force for WA residents age 25-64.

#### **Net In-Migration Helps Meet Demand**

## Annual Average Net In-Migration by Education Level 2005-09



Source: HECB Analysis of 2005-09 ACS

#### **Gap Analysis**

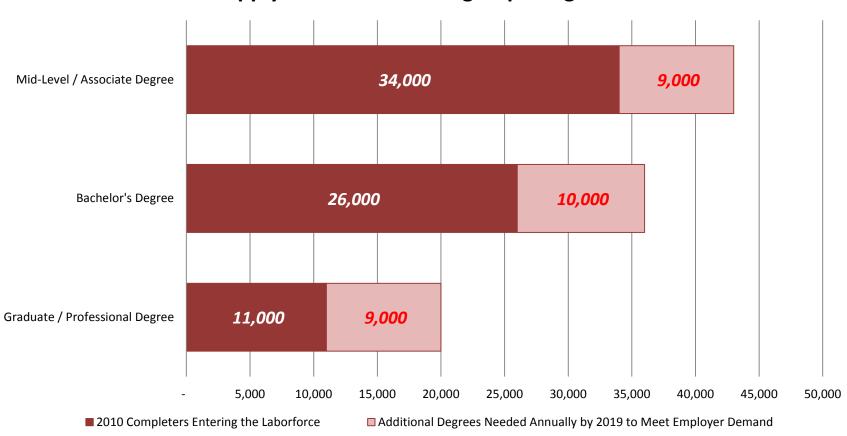
- Gaps are calculated based on current supply and anticipated annual demand by education level in 2014-2019.
- For occupations the analysis looks at the size of the gap and occupations with unique education and training requirements.
- The analysis recognizes that training at a variety of levels is required for some occupations.

# Two-Thirds of Job Openings will require at least a year of postsecondary education

	Estimated Workforce 2009	Estimated Workforce 2019	Estimated Annual Avg. Openings due to Growth 2014-2019	Estimated Annual Avg. Openings due to Replacement 2014- 2019	Avg. Annual Total Openings 2014-2019
Less than a year of College	1,155,757	1,195,164	16,488	25,949	42,437
Mid-Level	897,736	1,065,635	14,701	23,137	37,838
Bachelor's	761,046	931,909	12,856	20,234	33,090
Graduate	421,189	538,148	7,424	11,684	19,108
Total	3,235,727	3,730,856	51,470	81,004	132,474

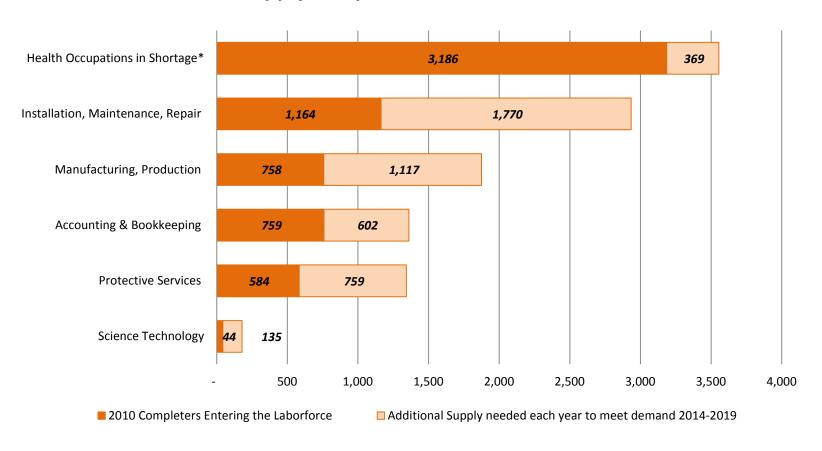
#### **Supply and Demand**

# Annual Supply and Demand of Workers by Education Level 2010 Supply and Annual Average Openings 2014-2019



#### Mid-Level Gap Analysis

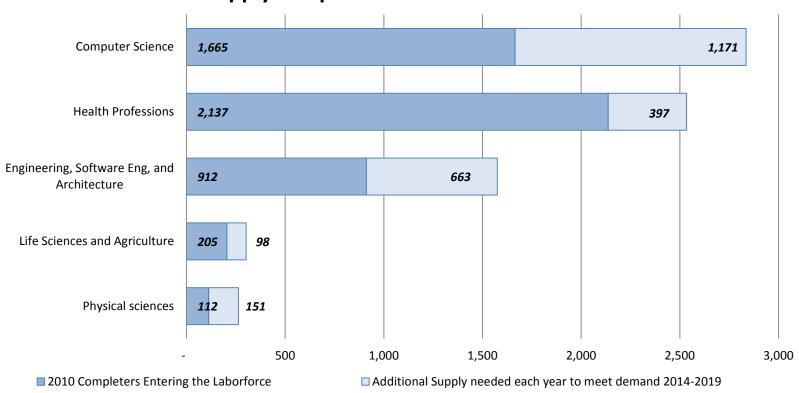
# High Employer Demand Occupations at the Mid-Level 2010 Supply compared to 2014-2019 Demand



<sup>\*</sup>includes only mid-level health occupations with projected shortages

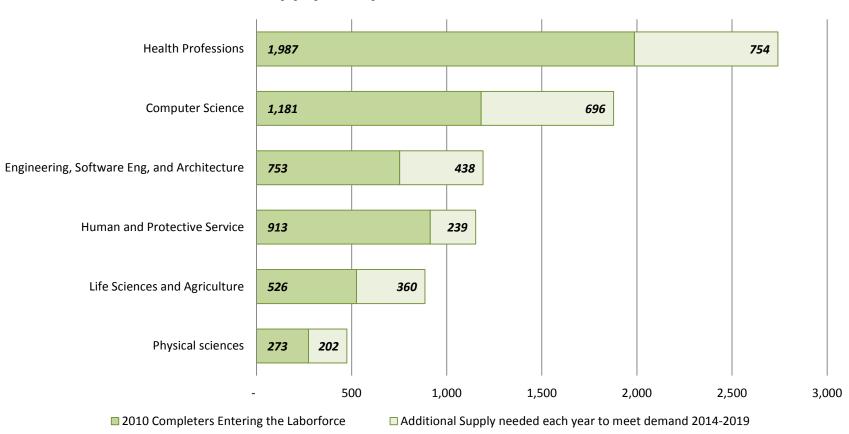
#### **Baccalaureate Gap Analysis**

# High Employer Demand Occupations at the Baccalaureate Level 2010 Supply compared to 2014-2019 Demand



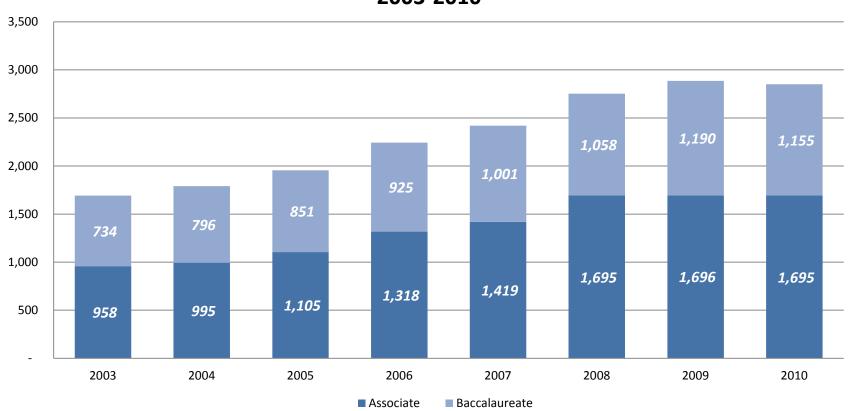
#### **Graduate Gap Analysis**

# High Employer Demand Occupations at the Graduate Level 2010 Supply compared to 2014-2019 Demand



### Where have we made progress?

### Annual Registered Nursing Program Completions 2003-2010



Source: Health Professions Education In Washington State: 2003—2010 Completion Statistics. Workforce Training and Education Coordinating Board, 2011

#### **Questions?**







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