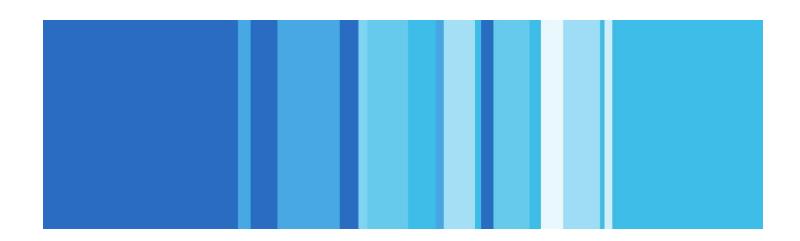


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Employment
Outcomes of
Minnesota Graduates
2010 and 2011

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### **About the Minnesota Office of Higher Education**

The Minnesota Office of Higher Education is a cabinet-level state agency providing students with financial aid programs and information to help them gain access to postsecondary education. The agency also serves as the state's clearinghouse for data, research and analysis on postsecondary enrollment, financial aid, finance and trends.

The Minnesota State Grant Program is the largest financial aid program administered by the Office of Higher Education, awarding up to \$180 million in need-based grants to Minnesota residents attending accredited institutions in Minnesota. The agency oversees tuition reciprocity programs, a student loan program, Minnesota's 529 College Savings Plan, licensing and early college awareness programs for youth.

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# **Table of Contents**

Table of Contents	2
Executive Summary	
Highlights for the Minnesota Postsecondary Graduate Class of 2011	
Introduction	6
What is Available to Search in "Graduate Employment Outcomes" Tool	6
Full-Time, Year-Round Work Results: Why So Low?	10
Data and Definitions Available in the "Graduate Employment Outcomes" Tool	14

### **Executive Summary**

A new "Graduate Employment Outcomes" tool shows the employment outcomes of recent Minnesota postsecondary graduates. Matching graduate data from the Minnesota Office of Higher Education with wage data from the Minnesota Department of Employment and Economic Development enabled the development of this web-based searchable tool.

### Highlights for the Minnesota Postsecondary Graduate Class of 2011

• Overall, college graduates working full-time during each quarter of the second year after graduation earned more with each increase in level of award (certificate, associate degree, bachelor's degree or graduate degree) than those with lower levels of education.

# ANNUAL MEDIAN WAGE OF MINNESOTA COLLEGE GRADUATES INCREASES WITH EACH LEVEL OF EDUCATION

Employed full-time, year-round in Minnesota during second year after graduation



Percent of graduates working full-time, year-round during second year after graduation shown at bottom of each bar.

- 75 percent of all graduates were employed in Minnesota at any time (worked in any one of the four quarters) during the second year after graduation.
- Of employed graduates, 59 percent were employed year-round (worked in each of the four quarters) during the second year after graduation.

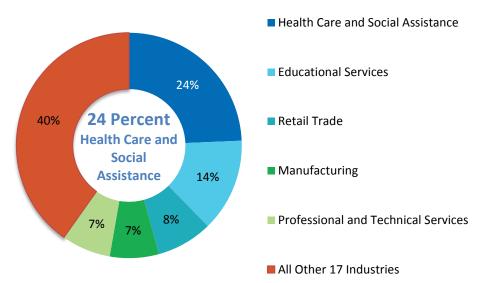
- Of employed graduates, 31 percent were employed full-time, year-round during the second year after graduation.
- Hourly median wage for all graduates was \$16.51 in the first quarter 12 months after graduation and \$18.41 in the first quarter 24 months after graduation.
- Annual median wage was \$28,518 for all employed graduates (regardless of number of hours worked) and \$41,485 for graduates working full-time year-round during the second year after graduation.
- The program of study or major along with the level of award earned showed the greatest effect on wages earned by graduates.
- Graduates who majored in engineering and engineering technologies, health science and computer sciences earned the most at every level of award. These are the same occupations that are high-wage, high-demand occupations in Minnesota and in the nation.

### Introduction

# What is Available to Search in "Graduate Employment Outcomes" Tool

- Employment outcomes of college graduate class of 2010 and 2011 working in Minnesota
- Hourly wages of graduates either 12 months or 24 months after graduation
- Annual wages of full-time, year-round graduates during second year after graduation
- Type of Minnesota postsecondary institution conferring award
- Level of award received, either certificates below bachelor's degree, associate degree, bachelor's degree and awards earned above bachelor's degree
- Program and major of graduates at the 2-digit and 4-digit CIP level
- Top 5 industries where college graduates found employment 24 months after graduation

# 60 PERCENT OF GRADUATES ARE EMPLOYED IN TOP 5 INDUSTRIES Class of 2011 Employed 24 Months After Graduation



### Caution in Using the "Graduate Employment Outcomes" Tool

The tool allows for broad generalizations in analyzing the employment outcomes of Minnesota postsecondary graduates. Individual graduate records from the Minnesota Office of Higher Education were linked to Unemployment Insurance (UI) data from the Minnesota Department of Employment and Economic Development.

- Graduates must be working for an employer that is covered by UI law; which includes 97
  percent of employers in Minnesota. Wage data are not available for graduates who are selfemployed, working for a federal agency or in military service.
- UI data is a census of employment and wages. The UI data does not contain the occupation of employees; only the industry of the employer. Therefore, it cannot always be assumed that graduates are employed in their field of study if found in the UI data or when looking at industry of employment. For example, all employees at a hospital (accountants, maintenance, nurses, etc.) regardless of their job duties or occupation are included in the "Health Care and Social Assistance" industry classification.
- Some graduates work for employers that have more seasonal or part-time work availability
  than others. For example, school teachers are not categorized as working full-time, yearround if they work only during the school year. Employees working in the entertainment
  business such as music or theater are employed as needed and may work in higher
  percentages part time.
- Data could only be linked on a social security number match between graduate and UI data. Not all graduate data contains a social security number.
- Graduates may have moved out-of-state between time of graduation and employment 12
  months through the second year after graduation. They may also have re-enrolled in college
  to continue their education, or made other work/life decisions during this time frame
  decreasing the chances of finding the graduate in the UI data, or finding the graduate working
  full-time.
- Wage data are not shown if programs/majors had 10 or fewer graduates to protect confidentiality of graduates and individuals.
- This tool only shows employment outcome and wage data from 12 months through the second year after graduation. This is a short-term outcome for many occupations and does not indicate the potential long-term earnings of college graduates.

Nevertheless, the highlighted employment and wage patterns are in line with nationally reported trends: overall, annual median wages increase with each higher level of education attained. Graduates in engineering, science fields and health careers are paid premium starting wages. In other words earnings are a function not only of what level of education you have, but what type of degree you have. <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> U.S. Census Bureau. American Community Survey.

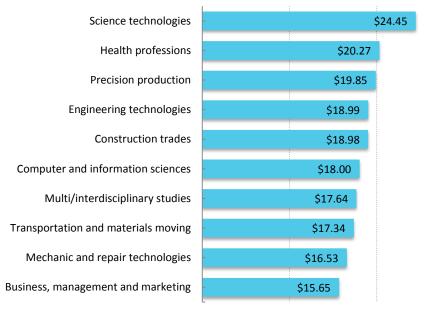
<sup>&</sup>lt;sup>2</sup> Carnevale, Anthony P., Strohl, J. and Melton, M. (2011). *What It's Worth: The Economic Value of College Majors*. Georgetown Center on Education and the Workforce. <a href="http://cew.georgetown.edu/whatsitworth">http://cew.georgetown.edu/whatsitworth</a>.

## HOURLY MEDIAN WAGES VARY BY PROGRAM/MAJOR OF GRADUATE WITHIN EACH LEVEL OF AWARD CLASS OF 2011

Employment outcomes for graduates working in Minnesota during the first quarter 24 months after graduation

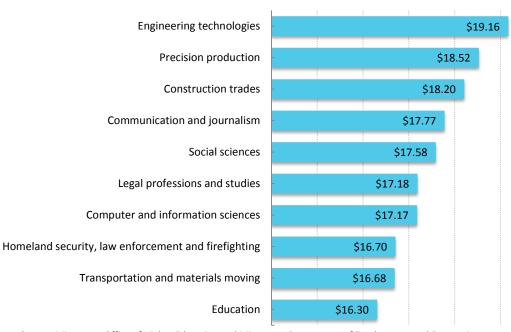
The top 10 highest median hourly wages earned by graduates in programs/majors at the 2-digit CIP code level

### **ASSOCIATE DEGREE GRADUATES**

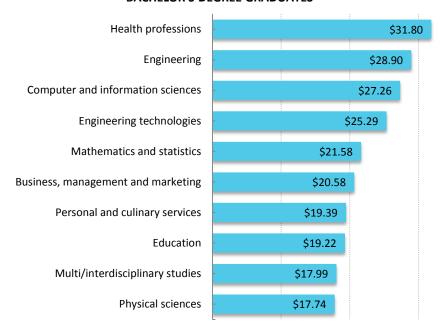


Source: Minnesota Office of Higher Education and Minnesota Department of Employment and Economic

#### **CERTIFICATE GRADUATES**

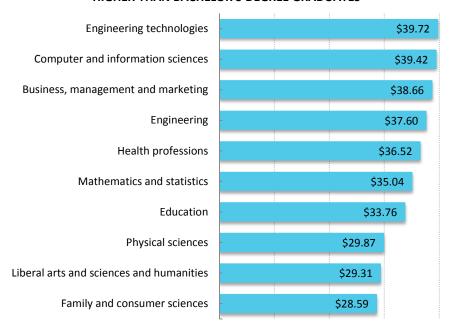


### **BACHELOR'S DEGREE GRADUATES**



Source: Minnesota Office of Higher Education and Minnesota Department of Employment and Economic Development

#### **HIGHER THAN BACHELOR'S DEGREE GRADUATES**



### Full-Time, Year-Round Work Results: Why So Low?

The "Graduate Employment Outcomes" tool reports annual median wages for employees working each quarter during a calendar year full time. While the tool captured 75 percent of all graduates working at any time during the second year after graduating; the percent working full-time, year-round during the second year was much lower; about 31 percent of all graduates.

According to the fall 2013 *Minnesota Job Vacancy Survey* only 55 percent of job openings were full-time and 16 percent were temporary or seasonal. Between 35 and 45 percent of all job openings over the last decade were part time. However, postsecondary education was required in 50 to 58 percent of full-time job openings compared to 21 to 24 percent for part-time job openings. This suggests that having a postsecondary education award increases the chance of finding full-time work.

The annual median wage and percent of graduates working full-time, year-round during the second year after graduation are shown below for the top five numerous programs at each level of award. This illustrates that while the percent of graduates working at any time after graduation is quite robust, the percent working full-time, year-round is lower and varies greatly by the graduate's program of study/major.

# ANNUAL MEDIAN WAGE AND PERCENT WORKING FULL-TIME YEAR-ROUND VARY BY PROGRAM/MAJOR WITHIN EACH LEVEL OF AWARD, CLASS OF 2011

Employment outcomes for graduates working in Minnesota during the second year after graduation The top 5 highest number of graduates in programs/majors at the 4-digit CIP code level

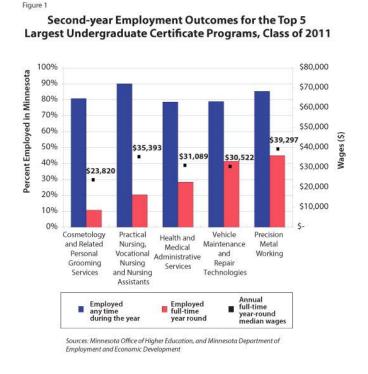


Figure 2

### Second-year Employment Outcomes for the Top 5 Largest Associate Degree Programs, Class of 2011

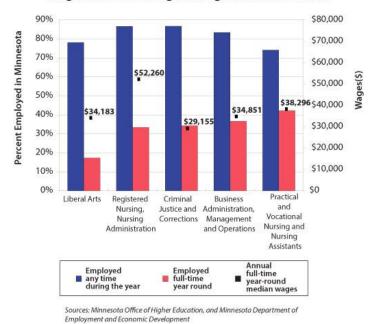
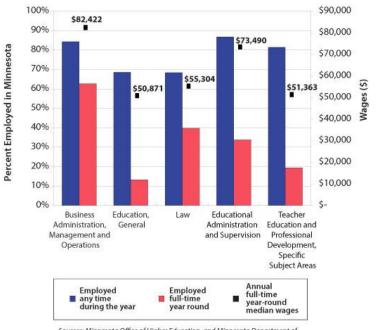


Figure 3

### Second-year Employment Outcomes for the Top 5 Largest Bachelor's Degree Programs, Class of 2011



Second-year Employment Outcomes for the Top 5 Largest Graduate Certificates and Degree Programs, Class of 2011



This table illustrates the wages for graduates by type of award and institution type conferring the award. Annual median wages are shown only for the Class of 2011working full-time year-round in Minnesota to illustrate the highest annual earning potential during the second year of graduation for that class if they were working full time. Most national wage data published by the U.S. Census Bureau, the Bureau of Labor Statistics or the U.S. Department of Education uses annual full-time employment data to show the educational attainment effect on wages.

Annual median wages during the second year for graduates working less than full-time and year-round is available in the "Graduate Employment Outcomes" tool.

Graduates employed full-time, year-rou	nd in Minnes	ota during	second yea	r after grad	uation										
	Non-Degree Occupational									Gradua	te Certificat	tes and			
Certificate			Associate Degree			Bachelor's Degree				Degrees		All Awards			
		Percent	Full-time		Percent	Full-time		Percent	Full-time		Percent	Full-time		Percent	Full-time
	Total Number of	Working Full-Time,	Year- round	Total Number	Working Full-Time,	Year- round	Total Number of	Working Full-Time,	Year- round	Total Number of	Working Full-Time,	Year- round	Total Number	Working Full-Time,	Year- round
Type of Institution	Graduates	Round	Wage	Graduates	Round	Wage	Graduates	Round	Wage	Graduates	Round	Wage	Graduates	Round	Wage
Public 2-Year	7,577	31%	\$ 35,330	15,031	28%	\$ 38,189							22,608	29%	\$ 36,933
Public State University	38*	53%	\$ 51,448	259	20%	\$ 36,301	10,471	32%	\$ 38,476	2,162	29%	\$ 57,097	12,930	32%	\$ 40,559
University of Minnesota	86*	31%	\$ 66,288			,	9,236	30%	\$ 40,803	5,480	33%	\$ 69,528	14,803	31%	\$ 49,659
Private 4-Year (not for profit)	590	21%	\$ 39,752	95	26%	\$ 46,124	8,683	28%	\$ 41,001	4,929	39%	\$ 65,249	14,298	32%	\$ 49,645
Private Career (for profit)	3,663	26%	\$ 30,357	4,308	33%	\$ 33,750	1,035	49%	\$ 42,385	449	38%	\$ 47,762	9,456	30%	\$ 34,744
Private Graduate and Professional School										633	27%	\$ 52,976	683	26%	\$ 52,710
All Institution Types	11,830	28%	\$ 34,696	19,693	29%	\$ 36,946	29,425	31%	\$ 40,207	13,653	35%	\$ 64,354	74,778	31%	\$ 41,485
*Graduates earning specialized technical	certificates a	t public sta	e universiti	es and Unive	rsity of Min	nesota.									
Full-time Year-round Median Wage:															
For someone graduating in Spring 2011, thi	s figure repre	sents media	n wages ear	ned from Spr	ing 2012 to	Spring 2013	B by individua	ls working e	ach quarter	of the year fo	or at least 1,	820 hours.			

# Data and Definitions Available in the "Graduate Employment Outcomes" Tool

### **Instructional Program:**

The <u>Classification of Instructional Programs</u> (CIP) codes were developed by the U.S. Department of Education as the national taxonomic standard of academic program titles. In Minnesota, there are over 800 programs available at postsecondary institutions. The CIP hierarchy is at a 2-digit, 4-digit and 6-digit level. We included only those 2-and 4-digit programs reported to the Minnesota Department of Higher Education which have at least 10 graduates.

#### **Graduates:**

Count of individuals who graduated in the given school year. Graduates who earned more than one degree in the same academic year were classified according to the highest degree obtained.

### **Graduates With Reported Wages:**

Count of graduates with reported wages in Minnesota Unemployment Insurance (UI) wage records for the quarter starting 12 months after graduation. For a person graduating in April, May, or June 2010, this would be the quarter April, May, or June 2011.

#### Median Hourly Wage 12 Months After Graduation:

Among all graduates with reported wages for the quarter starting 12 months after graduation, half earned more and half earned less than this median hourly wage.

#### Median Hourly Wage 24 Months After Graduation:

Among all graduates with reported wages for the quarter starting 24 months after graduation, half earned more and half earned less than this median hourly wage.

### **Top Industry of Employment 24 Months After Graduation:**

We show the top 5 industries in which program graduates have found employment. Industry is the best available indicator of alignment between a program of study and the types of business that employ graduates from that program. Data was suppressed for industries with fewer than 10 employed individuals.

# Percent Graduates Employed in Minnesota during the Year:

Share of graduates with reported wages in Minnesota during the second year after graduation. Individuals with reported earnings any time during the year are included in the count regardless of number of hours worked.

#### **Annual Median Wage:**

For someone graduating in Spring 2010, this figure represents median wages earned from Spring 2011 to Spring 2012. Individuals with reported earnings any time during the year are included regardless of number of hours worked.

### **Percent Employed Year-round:**

Percent of graduates who worked each quarter of the second year after graduation, regardless of hours and employer. This metric represents workforce attachment, not tenure with the same employer.

#### **Percent Employed Full-time Year-round:**

Percent of graduates who worked each quarter of the second year after graduation for at least 1,820 hours, representing an average of 35 hours a week for a full year.

### Full-time Year-round Median Wage:

For someone graduating in Spring 2010, this figure represents median wages earned from Spring 2011 to Spring 2012 by individuals working each quarter of the year for at least 1,820 hours.