Post Secondary Education Workforce Outcomes in Wyoming

Introduction

The Post Secondary Education Workforce Outcomes in Wyoming (PSEWOW) dashboard was produced through Wyoming's collaborative Statewide Longitudinal Education Data System (SLEDS) initiative, including researchers from Wyoming's community colleges, the Wyoming Community College Commission, University of Wyoming, and the Wyoming Department of Workforce Services.

The dashboard displays the Wyoming employment rate and annual salary information for Wyoming community college and University of Wyoming graduates. The annual salary and employment rates are calculated by matching student credential records with Wyoming unemployment insurance (UI) wage records, which represent employees who are visible in the Wyoming workforce.

This information supports the accurate use and interpretation of the dashboard. Questions or comments may be directed to https://wy-sleds.org/contact.

Employment

The employment information is limited to individuals whose employment is visible in the Wyoming workforce, who earned at least the annual federal minimum wage, and who worked three or more quarters in a calendar year in Wyoming. Therefore, the employment rate is likely underestimated due to part-time employment or being employed in one of the following categories, which are not covered by Wyoming's unemployment insurance:

- Some agricultural employment
- Independent contracting
- Self-employed
- Military employment
- Federal civilian employment
- Railroad employment

- Out of state employment
- Some elected state/local government officials
- Postsecondary work-study students

Additionally, graduates sometimes earn more than one degree or credential. In this situation, graduates are counted once for each degree or credential they earn.

Suppression

To protect personal identifiable information (PII), results were removed from the dashboard if the total number of students with degrees or credentials earned for a specific category was less than five. In addition, results were removed if the percentage of employees reported per employer was greater than eighty percent.

Timing

To provide more robust outcomes information, the dashboard provides multiple graduation year ranges and years after graduation options. While this design may appear unnecessarily complex at first glance, it protects graduates' privacy and provides more opportunity for obtaining workforce outcomes beyond the time frame immediately after graduation.

Here is an example:

Years After Graduation

Five Year ▼

Graduation Year Range
Select an option from each filter.

3-Year Range ▼

Fall 2013 - Summer 2016 ▼

These filtering options provide employment outcome information for any student who graduated in the "3-Year Range" between "Fall 2013 - Summer 2016" (inclusive). For smaller programs, this grouping may be critical to see outcomes for their graduates while still protecting student privacy. The "Years After Graduation" filter limits this group's outcomes to

employment information from the point in time five years after each student graduated. In the situation above where a "Five Year" range is chosen for the "Years After Graduation," the dashboard returns 2019 employment outcomes for fall 2013 - summer 2014 graduates, 2020 employment outcomes for fall 2014 - summer 2015 graduates, and 2021 employment outcomes for fall 2015 - summer 2016.

Additionally, employment results are only provided if the entire calendar year of economic data are available. In the example above, employment outcomes are not available "Ten Years" after graduation because outcome data would be required through the end of calendar year 2026 to return any results (as of this document's publication in 2024). Employment outcomes are available "Ten Years" after the "Fall 2010 - Summer 2013" selection because entire calendar years of economic data are available for ten years after Summer 2013.
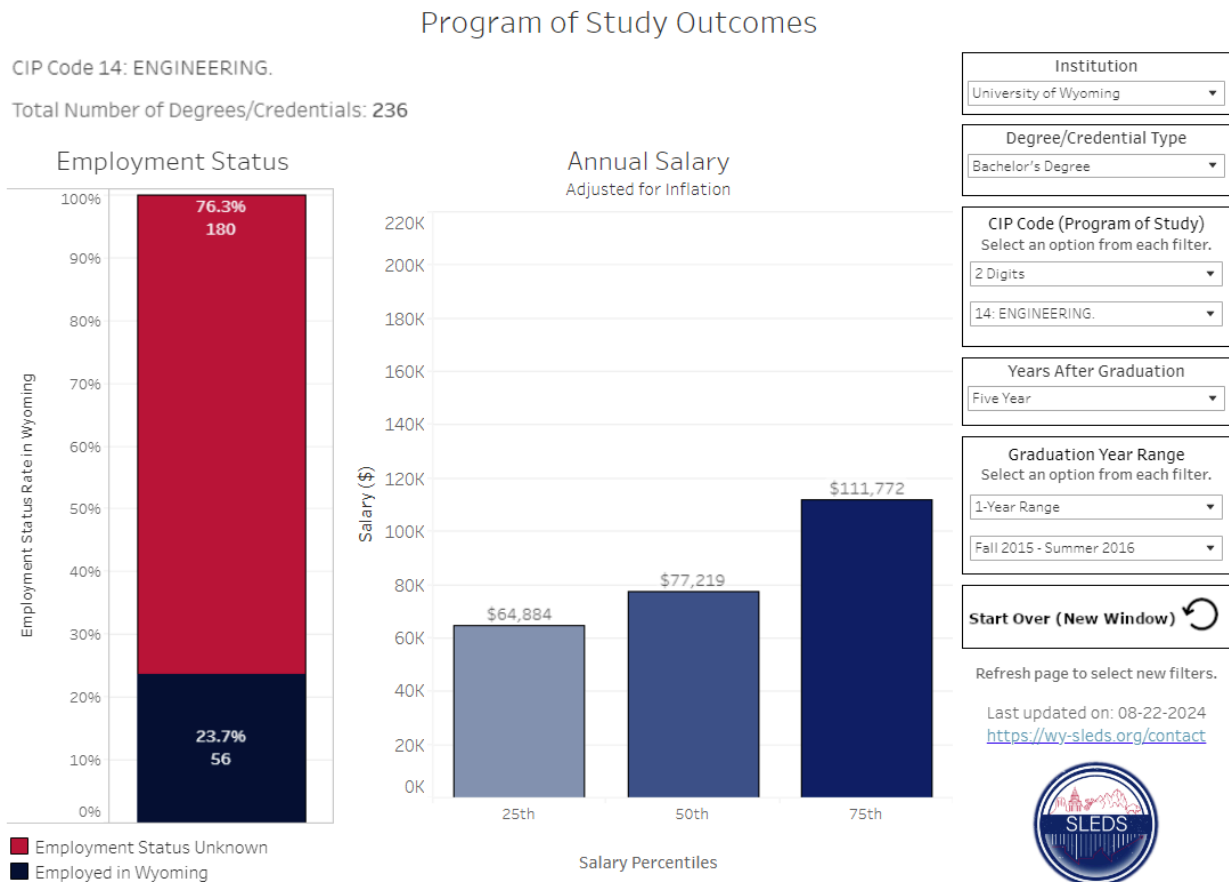
Dashboard Interpretation

Program of Study Outcomes

To illustrate how the 'Program of Study Outcomes' tab of the dashboard is interpreted, here is a screenshot of the dashboard.
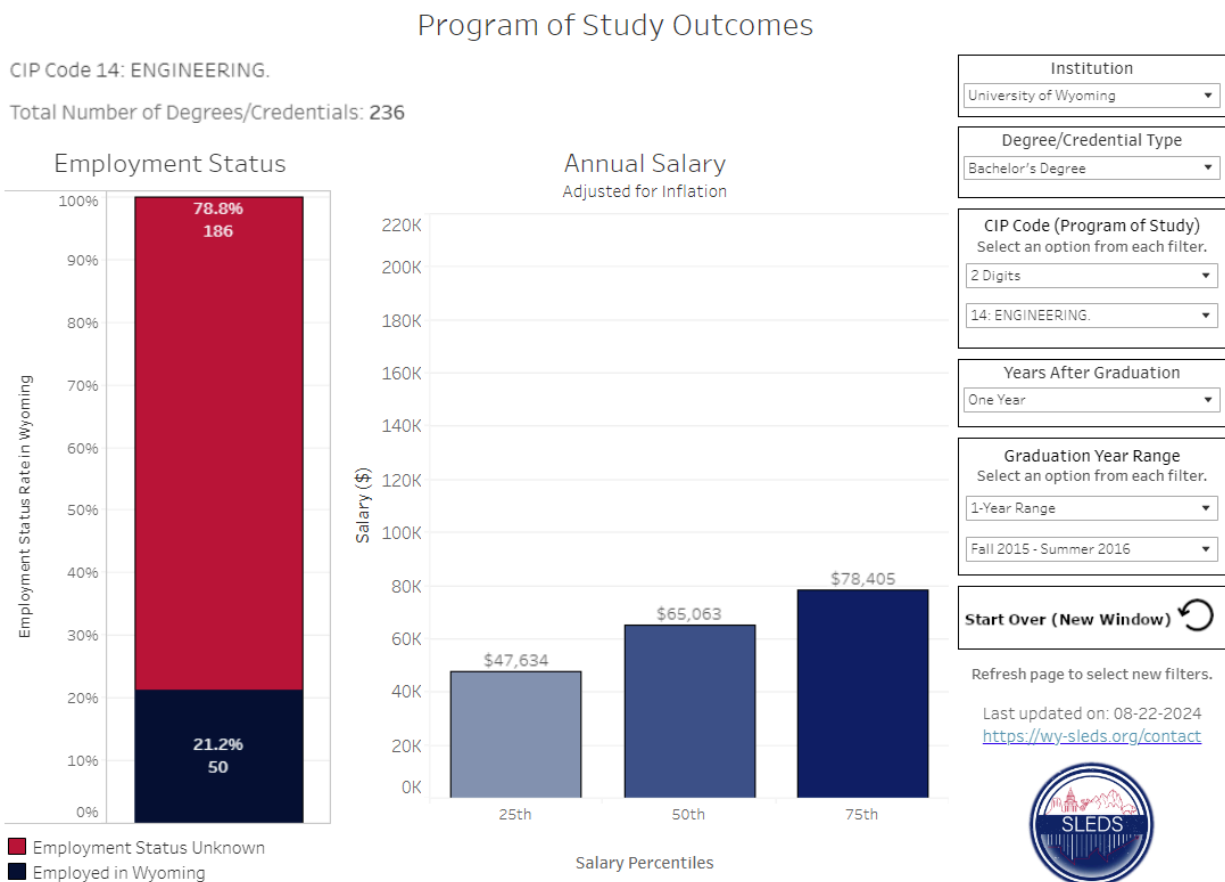
Out of all the University of Wyoming students who graduated with a bachelor's degree in an engineering program between fall 2015 - summer 2016 (a total of 236 graduates), 21.2% (50 graduates) were employed full-time in Wyoming's visible workforce one full calendar year after graduation (calendar year 2017). These 50 graduates earned a median (50th percentile) annual salary of $65,063 during 2017 (adjusted for inflation).

If this information is changed to look at the same graduation group five years after graduation (instead of one year after graduation), the dashboard would look like this:

Program of Study Outcomes

CIP Code 14: ENGINEERING.

Total Number of Degrees/Credentials: 236

Employment Status

76.3%
180

23.7%
56

Employment Status Rate in Wyoming

■ Employment Status Unknown
■ Employed in Wyoming

Annual Salary
Adjusted for Inflation

$111,772

$77,219

$64,884

Salary ($)

25th   50th   75th

Salary Percentiles

Institution
University of Wyoming

Degree/Credential Type
Bachelor's Degree

CIP Code (Program of Study)
Select an option from each filter.

2 Digits

14: ENGINEERING.

Years After Graduation
Five Year

Graduation Year Range
Select an option from each filter.

1-Year Range

Fall 2015 - Summer 2016

Start Over (New Window) ↻

Refresh page to select new filters.

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https://wy-sleds.org/contact

SLEDS

Out of all the University of Wyoming students who graduated with a bachelor's degree in an engineering program between fall 2015 - summer 2016 (a total of 236 graduates), 23.7% (56 graduates) were employed full-time in Wyoming's visible workforce the calendar year five years after graduation (calendar year 2021). These 56 graduates earned a median (50th percentile) annual salary of $77,219 during 2021 (adjusted for inflation).

Employment Status Rankings

To illustrate how the 'Employment Status Rankings' tab of the dashboard is interpreted, here is a screenshot of the dashboard.
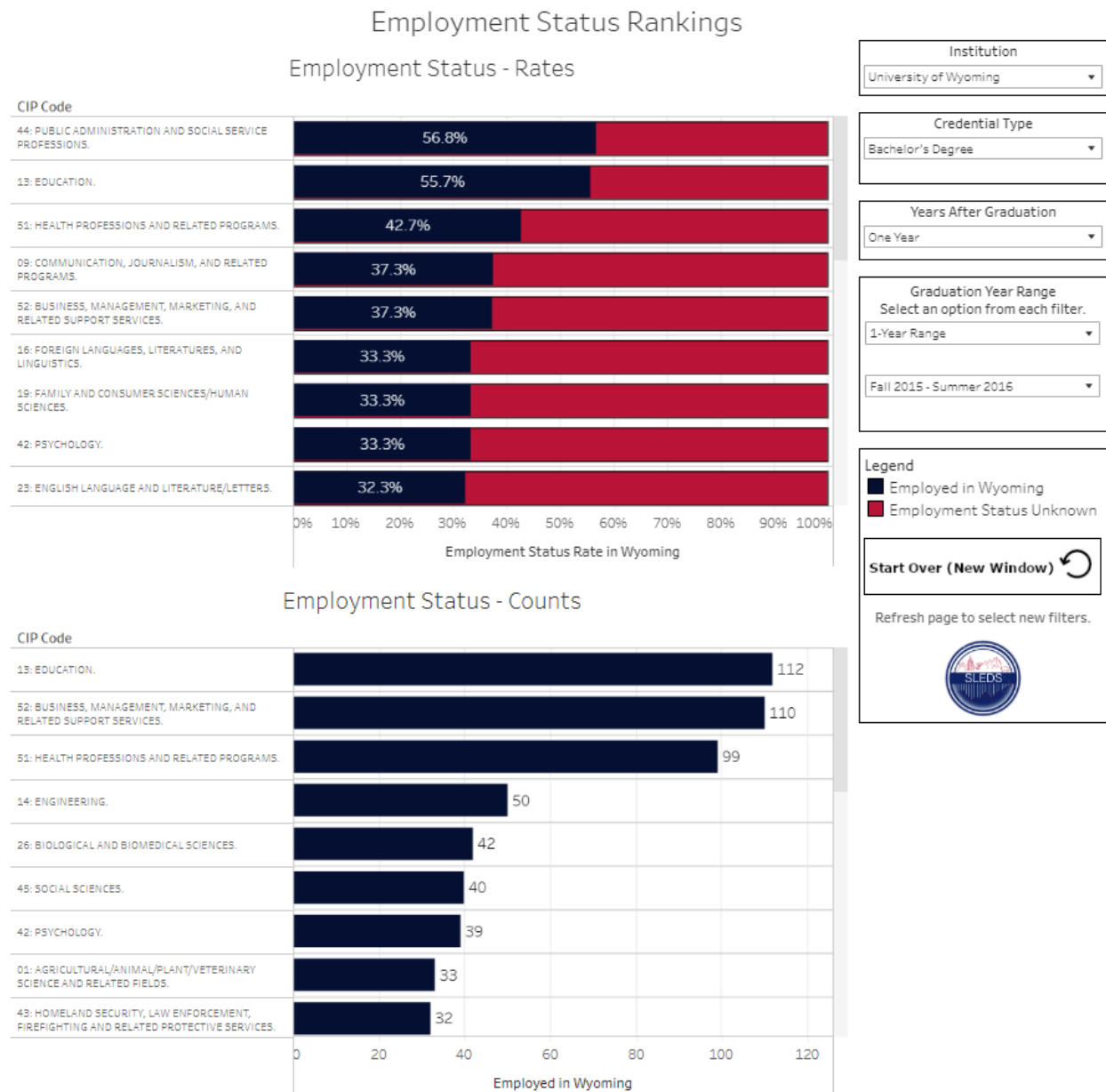
Out of all the University of Wyoming students who graduated with a bachelor's degree between fall 2015 - summer 2016, programs related to 'Public Administration and Social Service Professions'

had the greatest percentage of graduates employed full-time in Wyoming's visible workforce one full calendar year after graduation (calendar year 2017, 56.8% employment) when compared to other University of Wyoming bachelor's degree programs of study in the same time period. Programs related to 'Education' had the greatest total number of graduates employed full-time in Wyoming's visible workforce one full calendar year after graduation (112 graduates) when compared to other University of Wyoming bachelor's degree programs of study during the same time period.

Inflation Adjustment

The inflation adjustment was adapted from the methodology used by Wyoming Department of Workforce Services Research & Planning department and uses data from the Bureau of Labor Statistics. The average Consumer Price Index for each calendar year is divided by the average Consumer Price Index of the most recent complete calendar year to develop a cost index ratio. This cost index ratio estimates how many dollars are needed in each year in the dataset to reach one dollar in the most recent complete calendar year. The dataset is joined to the raw wage data used in the dashboard by year, and the wages in each year are divided by the cost index ratio for that year. The result is a wage adjusted to the most recently completed calendar year. For example, a dashboard published in August 2024 will present wages adjusted to the 2023 calendar year.

Data Source Timeframes

Credential Updates
The current version of the dashboard displays credential information through Summer 2022.

Unemployment Insurance (UI) Updates
The current version of the dashboard displays wage and employment data through the end of the 2023 calendar year.

Inflation Adjustment Cost Index Updates
The current version of the dashboard displays wages adjusted to the cost index of the 2023 calendar year.

CIP Code Updates
The current version of the dashboard uses the 2020 CIP Code definitions.

Definitions

Term	Quick Definition	Full Definition
Annual Salary	Annual total wages (full-time)	The total wages earned in a full calendar year, where at least three quarters of wage data are available in Wyoming's visible workforce. Wages are adjusted for inflation to the most recently completed calendar year. The annual wages for someone working three quarters is not adjusted to an expected annual wage for four quarters.
CIP Code (Program of Study)	Standard code used to classify programs of study	CIP code, or "Classification of Instructional Programs" code, is a standard code used by the higher education industry to classify programs of study by content areas. These codes are chosen by each institution when a program is established and may be approved by external governing bodies. To learn more about CIP codes, go to the following website: https://nces.ed.gov/ipeds/cipcode/default.aspx?y=55.
CIP Code Length	Length of the CIP code; the longer the CIP, the more specific the content area	Longer CIP code lengths reflect more specificity in the content area. CIP codes are typically reported at a 2-digit, 4-digit, or 6-digit level. In this tool, 2-digit and 4-digit options are available.
Degree/Credential Type	The degree or credential that the graduate was awarded	The type of credential that the student was awarded, categorized into seven values: • Credential (less than two years): includes credit diplomas and certificates of completion • Workforce Associate's Degree: associate of applied science degrees, associate of applied arts degrees, and associate degrees in nursing • Transfer Associate's Degree: associate of science and associate of arts degrees

		- Bachelor's Degree: all types of bachelor degrees, including the bachelor of applied science degrees - Graduate Certificate: certificates that require prior bachelor's degree attainment and graduate-level coursework for completion. - Master's or Doctoral Degree: all types of master's degrees, as well as PhDs and Ed.D. degrees. - First-Professional Degree: doctor of nursing practice, doctor of pharmacy degrees and juris doctorate (law) Students who earn multiple credentials are included under each credential that they earned.
Employment Status	Whether the student was employed full-time in Wyoming in the given time frame	The employment status categories indicate whether a degree/credential holder is working full-time in Wyoming's visible workforce, per Wyoming's Unemployment Insurance (UI) data. Categories include: - Employed in Wyoming - Employment Status Unknown Since the UI data does not contain information about all employment options available to degree/credential holders, the employment rates are likely underestimated. See the employment section above for more.
Graduation Year Range	Time frame in which the student was awarded a degree or credential	The graduation year range includes all degrees or credentials awarded within the time frame, starting with the first fall term and ending with the last summer term. The graduation year ranges are combined into one-year, three-year, and five-year groupings to create more robust group sizes for small programs. See the timing section above for more.

Institution	Wyoming community colleges and university	Higher education public community colleges and the university in Wyoming. The results can be filtered to a specific institution for exploration.
Total Number of Degrees/Credentials	Number of graduates within the CIP code, duplicated	The employment outcomes of the graduate are counted for each degree or credential, even if the graduate earned multiple awards within the same CIP code. This methodology may cause some slight skewing within specific categories, but it also ensures that every possible employment outcome is included in the dashboard.
Years After Graduation	Designates a single year of employment outcomes at a chosen point in time after graduation	A point in time after graduation (one year, five years, or ten years after graduation) from which employment outcome data are calculated. The results are not cumulative; rather, they provide a snapshot for the given year. For example, for a student who graduates in May 2012, year one begins in January 2013, year five in January 2017, and year ten in January 2022 and only includes that single calendar year's employment information. For more details about how the timing of results work, see the "timing" section above.

Supplemental information last reviewed on: 9/13/2024