# Getting Started with the PSEO Explorer

Navigating Postsecondary Employment Outcomes Data

June 26, 2025

# Presenters



**Christopher Peña, PhD**
Assistant Professor of the Practice, University of Denver
Intern Supervisor, PSEO Coalition



**Gina Johnson, PhD**
Principal & Cofounder, Data EmpowerED Consulting
Director, PSEO Coalition

# Introduction

# PSEO Coalition Summer Webinar Series

## June 26

**Getting Started with the PSEO Explorer:
Navigating Postsecondary Employment Outcomes**

## July 29

**Using PSEO Data in Practice:
Tools, Insights, and Key Considerations**

## August 28

**Advanced PSEO Data Use:
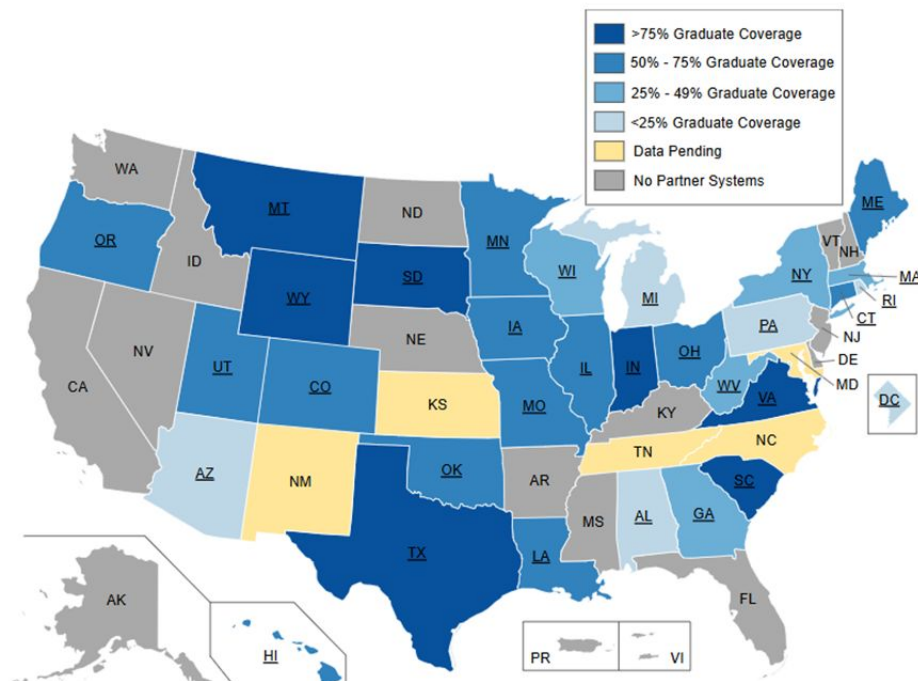APIs and Data Integration for Deeper Analysis**

# Learning Objectives

**By the end of this webinar, participants will be able to:**

- Understand the PSEO Coalition and its purpose
- Identify the value of the PSEO Explorer
- Navigate the PSEO Explorer tool
- Evaluate key data sources and limitations
- Apply insights to institutional and student decision-making

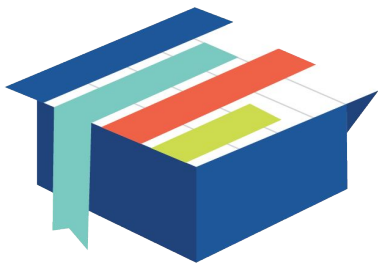# Origins of the PSEO and PSEO Coalition

PSEO Coverage as of June 2025

- **Texas & Census Partnership:** Initial collaboration with the U.S. Census Bureau to link Texas educational workforce data, providing insights into graduate employment outcomes
- **State Expansion:** Grew from Texas to a national coalition, engaging multiple states in adopting PSEO frameworks and expanding access to employment data
  - From one institutional system (13 institutions) to over 37 states (more than 1000 institutions)
  - Current states exploring expansion of institutions sharing data
  - Additional states and entities currently exploring participation

| Members sharing data (or with data pending) | Kansas Independent College Association | The Pennsylvania State University |
|---|---|---|
| University of Alabama System | Louisiana Board of Regents | Bryant University (RI) |
| Arizona Board of Regents | Maine Community College System | Providence College (RI) |
| Colorado Department of Higher Education | University of Maine System | South Carolina Commission on Higher Education |
| Connecticut State Colleges and Universities | Maryland Higher Education Commission | South Dakota Board of Technical Education |
| University of Connecticut | Maryland Longitudinal Data System | South Dakota Board of Regents |
| Connecticut Conference of Independent Colleges | Massachusetts Department of Higher Education | Tennessee Higher Education Commission |
| University of the District of Columbia | University of Michigan - Ann Arbor | University of Texas System |
| Georgia Independent College Association | Minnesota Office of Higher Education | Texas Higher Education Coordinating Board |
| University System of Georgia | Missouri Dept of Higher Ed & Workforce Development | Utah System of Higher Education |
| University of Hawai'i System | Montana University System | Ensign College (UT) |
| Brigham Young University-Idaho | The State University of New York | State Council of Higher Education for Virginia |
| Illinois Board of Higher Education | The City University of New York | West Virginia Higher Education Policy Commission |
| Illinois Community College Board | University of North Carolina System | University of Wisconsin System |
| Indiana Commission for Higher Education | Ohio Department of Higher Education | Wyoming Community Colleges |
| Iowa Board of Regents | Oklahoma State Regents of Higher Education | University of Wyoming |
| Iowa Department of Education | Oregon HIgher Education Coordinating Commission | Western Governors University |

# About the Coalition

The PSEO Coalition is a network of representatives from the institutions, college and university systems, and state agencies that partner with the U.S. Census to provide data for the PSEO project. Coalition members engage virtually and in-person to network and share ideas about methods to measure and share the outcomes of postsecondary education with decision makers of all types.

**PSEO COALITION**

**37+** Participating States

**1000+** Institutions Represented

# PSEO Coalition Vision and Mission

**VISION**

The PSEO Coalition supports the growth, sustainability, and use of data to demonstrate how higher education can positively impact a person's life.

**MISSION**

The PSEO Coalition empowers informed decisions through comprehensive, collaborative, and sustainable integration of nationwide postsecondary graduate outcomes data, driving strategic enhancements across educational and employment landscapes.

# Why the PSEO Explorer is Needed

# Transparency in Higher Education

- Allows students, families, educators, and policymakers to see real-world earnings and employment data after graduation.

- Helps answer the question: *"What can students expect to earn with this degree from this school?"*

# Supports Informed Decision-Making

- Students can compare institutions, majors, and degree levels to better understand the return on investment (ROI) of their educational choices.

- Useful for career planning, especially for those deciding between different fields of study.

# Fills Gaps Not Covered by Other Tools

- Unlike many college scorecards or ranking systems, the PSEO Explorer uses actual earnings data linked to employment records, not self-reported surveys or estimates.

- Offers state-by-state and institution-level granularity, which is rare.

# Enables Policy and Workforce Analysis

- Policymakers can identify which programs and institutions are most effective at preparing students for employment.

- Helps align higher education with workforce development needs and economic planning.

# Empowers Equity and Accountability

- Makes it easier to assess whether certain groups of students (by major or institution) are seeing equitable outcomes.

- Can be used to promote accountability in higher education funding and program design.

# Supports Institutional Improvement

- Colleges and universities can use the data to benchmark performance, improve advising, and design programs that lead to better employment outcomes.

- Facilitates peer analysis against competitors, comparators, and aspirational peers by location and program.
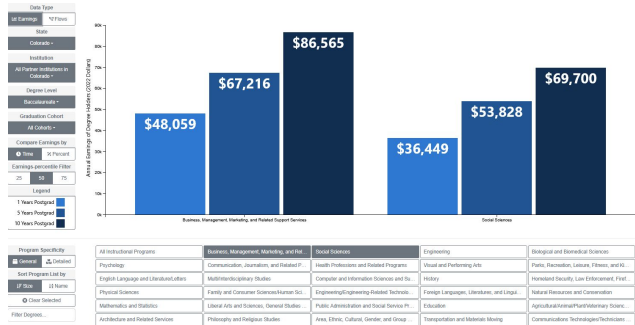
# Highlights Longitudinal Outcomes

- Tracks earnings one, five, and 10 years after graduation, giving a better picture of how earnings grow over time, not just immediately after graduation.

- Helps address the challenge of attrition in self-reporting to institutions several years after graduation.

# Available Data

## EARNINGS

Show 25th, 50th, and 75th percentiles of earnings of postsecondary graduates one, five, and 10 years after completion.



## FLOWS

Shows movement of postsecondary graduates by geography and industry one, five, and 10 years after completion.

# Understanding PSEO Data Sources

# How the U.S. Census Creates PSEO Data

- Census enters into legal agreements with state departments of higher education (or similar entities) and receives records of graduates from all covered institutions.

- Using a masked version of the social security number (SSN), Census matches these data with the unemployment insurance (UI) wage records, which Census obtains from state employment security agencies.

- These longitudinal job histories allow Census to measure earnings for graduates over a long time horizon.

# Jobs Data Accessible to the U.S. Census

- Census maintains a national database of jobs data, which includes information about employers (establishments, industry, location) and employees (demographics).

- This database enables Census to measure earnings (from quarterly wages) and employer characteristics (industry sector and employment location).

- Longer term, there is a broad effort at Census to create an integrated jobs frame using unemployment insurance (UI), W2, and Schedule SE (self-employment) records.

# Publicly Available PSEO Data

**PSEO Explorer Tool**

https://lehd.ces.census.gov/applications/pseo

**Downloadable Datasets**

https://lehd.ces.census.gov/data/pseo_experimental.html

# Establishing the Cohorts

To ensure appropriate cell sizes that allow for disclosable data, it was necessary to create cohorts of years of graduates.

**Postsecondary Graduate Cohorts**
- Bachelor's degree level: three-year cohorts
- All other degree levels: five-year cohorts

# Key Limitations to Keep in Mind

# Institutional Participation

Data shown in the PSEO Explorer only represent institutions that participate in the PSEO Coalition and that submit their data voluntarily.

**Caveat**

Interpret results as representative of participating institutions, not the full higher education landscape in the United States.

# Timeframe of Outcomes

Earnings and employment outcomes are shown at one, five, and 10 years after graduation.

**Caveat**

Consider these points as milestone snapshots rather than continuous or personalized career trajectories.

# Lag in Reporting

There is a built-in lag in reporting, as collecting, preparing, and publishing outcomes data can take time.

**Caveat**

The most recent data in the PSEO Explorer may appear to be out-of-date or less useful for analysis, despite being current.

# Program Granularity

Academic programs are grouped using Classification of Instructional Programs (CIP) codes at higher aggregation levels (2-digit and 4-digit levels).

**Caveat**

Use caution when making inferences about specific majors, as similar fields may be aggregated together.

# Data Privacy Protections

Data for smaller populations and intersections is excluded to ensure privacy and confidentiality.

**Caveat**

Recognize that gaps may appear for certain programs or less common combinations of filters.

# Geographic Detail

The tool shows where graduates live at the state level, not city or county. Postsecondary outcomes may vary depending on the location of the student after graduation.

**Caveat**
Interpret geographic mobility and workforce trends in broad regional terms rather than local ones.

# Industry Variability

Student outcomes can vary significantly depending on the position and industry they enter after graduation.

**Caveat**

Recognize that flows data do not necessarily reflect specific job titles or position levels of postsecondary graduates.

# Earnings Interpretation

Reported earnings represent wage and salary income before taxes and benefits and do not include non-monetary forms of compensation.

**Caveat**

Use earnings as a baseline measure, not a complete picture of financial outcomes or compensation.

# Interpreting Findings

The PSEO Explorer provides **descriptive** data, not causal analysis.

**Caveat**

Patterns observed in the data should not be interpreted as evidence that one factor causes another. Supplemental analysis may be needed to explore the potential for causal relationships.

# PSEO Explorer Demonstration

# Forthcoming Plans for the PSEO

PSEO data are now available in the Federal Statistical Research Data Centers: www.census.gov/about/adrm/fsrdc.html

In PSEO 2.0, Census is developing three major updates to the data they release:

- Enhanced wage records (using new jobs frame, which includes W2 and 1099 records)
- Earnings outcomes by sex and race/ethnicity
- Release of state-by-industry flows, which would be particularly helpful in workforce analysis and planning

# Next up in our webinar series...

## Using PSEO Data in Practice: Tools, Insights, and Key Considerations

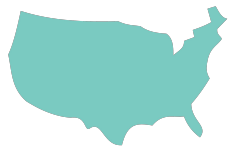**Tuesday, July 29, 2025 | 3 – 4 p.m. ET**

Take the next step with the Postsecondary Employment Outcomes (PSEO) data by exploring how to apply it in real-world analysis. This webinar will cover how to begin working with PSEO data in tools like Python, Tableau, and Power BI to answer common research questions. We'll also discuss important data nuances – such as the cohort model and how PSEO differs from other federal datasets – to help you work with the data effectively and responsibly.

Register

PSEO
Resources

# PSEO Resources

**PSEO Coalition**
pseocoalition.org

**Resource Library**
pseocoalition.org/resource-library/

**PSEO Explorer**
lehd.ces.census.gov/applications/pseo

**PSEO Datasets**
lehd.ces.census.gov/data/pseo_experimental.html