



# PSEO Coalition

**Postsecondary Employment Outcomes Coalition Toolkit**

## **Chapter 1**

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## **Acknowledgments**

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## Postsecondary Employment Outcomes Coalition Toolkit

Welcome to the toolkit of the Postsecondary Employment Outcomes (PSEO) Coalition, aimed at empowering and equipping you with a comprehensive understanding of the power of creating a collaboration between higher education institutions and the U.S. Census Bureau to create invaluable national earnings data used by our coalition to highlight the impact higher education has on the economic and non-economic benefits of graduates. Within this toolkit, we will explore the origins of the coalition, its purpose, and the key individuals and organizations involved. By delving into the history of how, when, why, and whom the coalition was established, we can gain a deeper appreciation for the significance of our work and the transformative potential of our collective efforts. The toolkit will also provide you with the following:

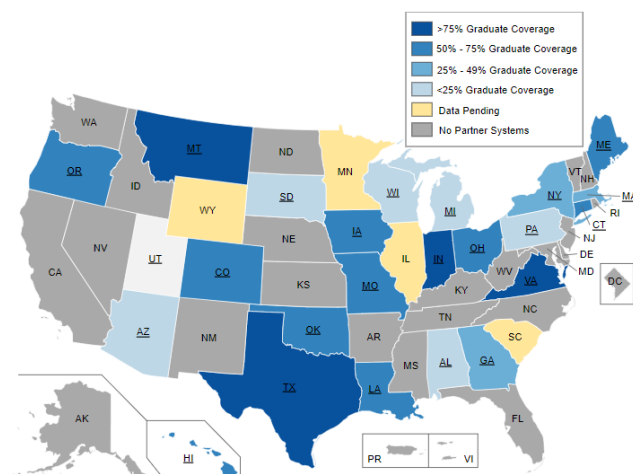
- **PSEO Glossary of Terms and Concepts (Chapter 2):** a list of commonly used terms and concepts when exploring and examining earnings outcomes data.
- **PSEO Data Explorer Step-by-step Guide (Chapter 3):** an easy-to-read document guiding individuals when using the dashboard.
- **PSEO Data Narratives (Chapter 4):** narratives that institutional researchers and other higher education professionals can use to communicate with the following stakeholders: students and parents, chancellors, faculty, student affairs and career advisors, elected officials, employers, and media.
- **Case Studies (Chapters 5 – 7):** Three papers demonstrating the use of both the PSEO Data Explorer and the downloadable data to highlight student earnings outcomes (Chapter 5: Arizona Case Study on Graduate Employment Outcomes, Chapter 6: Postsecondary Employment Outcomes Data Shines Light on Which College Majors Pay the Most, and Chapter 7: Transforming LEHD Data in Action).

Through the support of Strada Education Network funding to establish the PSEO Summit, we will highlight the power of convening the PSEO Coalition members by summarizing the themes generated from the 2022 PSEO Summit.

### What is the Post-Secondary Employment Outcomes Coalition?

The PSEO Coalition is a collection of state and institutional representatives from 27 states (please refer to the PSEO Coverage Map produced by the U.S. Census Bureau and Appendix A) who are--or are planning to be--partners with the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) program. To date, more than 823 U.S. higher education institutions are represented in the PSEO.

**The PSEO Coalition charter establishes a collaborative group of higher education professionals with a common goal to demonstrate the economic and non-economic value of higher education by linking educational data with federal, state, and local data.**



During voluntary monthly meetings, the group discusses various challenges and obstacles in sharing data with and getting data from the Census and then analyzing and communicating that data to multiple stakeholders effectively. The Coalition works together to create an agreed-upon list of priorities and requests for LEHD, including ways that LEHD can expand the PSEO program to make the data even more useful. As part of that program, the Post-Secondary Employment Outcomes (PSEO) data provide earnings and employment outcomes for college graduates by degree level, major, and institution. The group values and strives toward enhancing data agency and literacy. Members benefit by discussing various PSEO topics (e.g., the value of higher education, missing data, business intelligence tools) and sharing best practices related to data literacy (e.g., reading, writing, and communicating data in context). Once a quarter, PSEO Coalition members meet team members from the U.S. Census to discuss data updates and potential research projects and answer any questions that Coalition members have for them.

### **What is in the PSEO data and PSEO Explorer?**

In 1999, the U.S. Census Bureau established the Local Employment Dynamics (LED) Partnership with state partners to collect labor market statistics (i.e., Quarterly Workforce Indicators) on employment, earnings (e.g., unemployment insurance earnings data), and job creation (<https://lehd.ces.census.gov/data/#qwi>). Currently, 47 states voluntarily submit data to LED. In 2002, the U.S. Census Bureau's Center for Economic Studies launched the Longitudinal Employer-Household Dynamics (LEHD) program (<https://lehd.ces.census.gov/>). LEHD program creates public-use information and tools by combining LED data with other administrative data from federal, state, and Census Bureau data on employers and employees.

Through a partnership with the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) program, during Dr. Troutman's tenure at the University of Texas (UT) System, linked student data with national unemployment insurance (UI) wage records for post-graduate earnings of UT degree recipients. For additional information, please refer to "A Roadmap to Better Data: Developing a Census Bureau Partnership to Measure National Postsecondary Earnings Outcomes (Bond Huie and Troutman, 2019). <https://www.ihep.org/publication/a-roadmap-to-better-data-developing-a-census-bureau-partnership-to-measure-national-postsecondary-earnings-outcomes/>

The collaboration between the U.S. Census Bureau and UT System was impactful in several ways: 1) creating a comprehensive national student employment outcomes data set; 2) providing a space for higher education professionals from UT System to work with U.S. Census economics to understand each other's worlds and language; and 3) establishing a standard methodology to report earnings outcomes to improve the data quality. UT System employees spent more than 12 months working with LEHD employees to develop a data framework that would provide national earnings data in aggregate by either the two-digit or four-digit Classification of Instructional Programs (CIP).

PSEO data is available by state, institution, major, degree level, and year of graduation

- Data includes earnings 1, 5, and 10 years post-graduation
- Earnings for the 25th, 50th, and 75th percentile
- Type of industry of employment post-graduation
- Geographic locations where students work post-graduation

As part of the PSEO collaboration, LEHD developed the PSEO Explorer (<https://lehd.ces.census.gov/applications/pseo>). This free online dashboard provides visualizations based on the earnings data for students who completed their credentials in the participating States

and higher education Systems. The toolkit will provide a detailed description of how to use the dashboard best to suit your needs.

### **Why is PSEO data important?**

PSEO data is critical to understanding the employment outcomes of university/community college graduates, demonstrating the value of a degree, and analyzing workforce and migration patterns. These LEHD partnerships have given higher education leadership within those states the data agency needed to begin crafting strategic messages (e.g., dashboards, infographics, data reports) to prospective college students and their parents as well as additional stakeholders (e.g., institutional leadership, academic faculty, alumni, donors, politicians, employers, etc.) on the value of a college degree. Even though the data agency has been established, there was a missed opportunity to convene members from each state or system.

In combination with other data sources, PSEO data can help various stakeholders answer the following types of key questions:

#### *For Students and Families:*

- How much will I earn after I graduate?
- Will I find work in my state, or do I need to consider moving?
- In which industries am I likely to find work?

#### *For States:*

- Are graduates staying or leaving the state?
- Are we receiving graduates from other states?
- Are there degrees that our state needs more of? Less of?
- What are the industries where our students are being employed?
- What are the state's workforce needs?

#### *For Postsecondary Institutions:*

- What are our students' employment outcomes?
- Are they finding work?
- How much are they earning?
- Are they better off with their degree?
- Are our students leaving with reasonable debt?
- How can we assist those entering lower-paying but socially impactful jobs (teachers, social workers, etc.)?
- Are our students having equitable outcomes?
- Are we producing graduates in programs that the industries in our state need from the workforce?

#### *For Business/Industry*

- What are new graduates being paid in other states or industries?
- What institutions or states may be a useful source of an educated workforce?

## Background: Why are we Doing This?

Despite a strong economy and low unemployment rate, much of the nation's growing population is left out or behind. The United States is strongest when all its citizens can earn a quality education, build productive, fulfilling careers, and lead healthy, prosperous lives. The compact (education leading to opportunity and prosperity) between higher education and individuals is in jeopardy because of the rising education costs and Americans' declining perceptions of the value of higher education.

Given that traditional revenue streams (i.e., state funding) in higher education are declining across the country, and the cost of getting an education is increasing, students and their families must make informed decisions about their academic careers. Even as the cost of earning a degree rises, having a college degree has become a minimum requirement for entry-level jobs in many fields. For these reasons, higher education leadership must better inform students and parents, elected officials and policymakers, and the media about the realities and perceptions of the cost and benefits of higher education credentials.

When examining the perceptions of cost, the National Center for Education Statistics reported that high school students and their parents often overestimate the cost of tuition and fees by \$8,000 to \$10,000 per year (NCES, 2018). Those misperceptions impact students' decisions to attend postsecondary institutions (NCES, 2022). It is not only the perceived costs that influence students' decisions to pursue higher education but also their perceptions of the value of a college credential. Gallup found that 51% of U.S. adults believe college is very important compared to 70% in 2013. More troubling is that only 41% of young adults (ages 18-29) believe a college education is very important, compared to 74% in 2013. In addition, these negative perceptions of cost and value can be exacerbated when receiving daily news feeds highlighting the student loan crisis (e.g., 45 million student loan borrowers with more than \$1.7 trillion of student loan debt). Based on these reasons, it was critical for the PSEO to convene to discuss how we can resolve the misinformation on the Value of Higher Education.

## PSEO 2022 Summit

Through the Strada Education Network funding, the PSEO Coalition convened 58 attendees for a two-day summit in October 2022. The goal of the summit was to allocate time beyond our monthly one-hour PSEO Coalition conversations to take a deeper dive into 1) placing PSEO earnings outcomes into context, 2) cutting through the earnings outcomes noise, 3) highlighting the student voice, 4) building the future PSEO roadmap, and 5) enhancing the PSEO community.

## Theme One: Placing PSEO Earnings Outcomes into Context and Create Action

We heard from several outstanding speakers, which allowed us to go deeper into the meaning of PSEO Earnings Outcomes and the power of action behind the data. Dr. Andrew Foote (Senior Economist from the U.S. Census Bureau) presented various aspects of the PSEO efforts. He highlighted that the unemployment insurance wage records maintained by LEHD account for 96% of all employment in the United States. Dr. Foote also acknowledged that the PSEO effort is classified as an "experimental project" at the US Census. It is classified as such because it is relatively new to the US Census activities, and the program has limited funding associated with the effort (all activities provided to the PSEO Coalition members are free). However, President Biden has listed the PSEO effort in the White House 2023 budget request sent to Congress to consider when supporting the US Census LEHD activities.

Lastly, Dr. Foote emphasized the importance of maintaining security and privacy when reporting earnings using the most up-to-date privacy methodologies (e.g., differential privacy). For additional information, please refer to [https://lehd.ces.census.gov/doc/pseo\\_appendix\\_tech\\_doc.pdf](https://lehd.ces.census.gov/doc/pseo_appendix_tech_doc.pdf).

“Establishing a Common Framework” and “Dynamics of occupational segregation by Gender and Race: Implications for Post-secondary Employment Outcomes” were two sessions that allowed experts in the field to place PSEO earnings in context. Jamey Rorison from the BMGF explained the creation and use of the Postsecondary Value Commission Framework to examine the value of higher education for individuals and society (<https://postsecondaryvalue.org/>). Dr. Dave Clayton from Strada Education Network (<https://cci.stradaeducation.org/consumer-research/>) and Dr. Brianna Moore-Trieu from the University of California Office of the President (<https://www.universityofcalifornia.edu/about-us/information-center>) provided examples of the power of using surveys and other sources of data to highlight the power of college completion. Lydia Riley from the University of Texas System described how the UT System uses earnings data to identify programs of study that might need additional support to ensure students are more likely to obtain jobs offering livable wages. Specifically, she discussed the UT System collaboration with Grow with Google to embed micro-credentials (e.g., Data Analytics) in popular majors (e.g., Psychology and Sociology) that are associated with lower earnings outcomes to boost students’ earnings potential (<https://www.utsystem.edu/news/2022/12/09/ut-system-and-google-announce-google-career-certificates-10000-texas-university-students>).

Dr. Lois Joy presented her extensive research focusing on the segregation of women and people of color into lower-paying occupations, which is a persistent dynamic of the labor market. In this presentation, Dr. Joy drew from two research studies she had conducted at JFF on community college technology internships and short-term IT credentials as a pathway into technology careers, focusing on the challenges and strategies for understanding and identifying gender and racial structural barriers in training outcomes.

## **Theme Two: Cutting through the Earnings Outcomes Noise**

There were two PSEO Summit sessions, “Opening Address,” led by Dr. David Troutman, and “Creating Data Narratives,” by Dr. Brianna Moore-Trieu, that focused on how we can best create a space for stakeholders to receive information on the value of higher education. During Dr. Troutman’s address, he highlighted the tsunami of data initiatives and tools providing students with earnings data information. Based on federal and national efforts, there are products and initiatives produced by the US Department of Education’s College Scorecard, Value Data Collaborative (IHEP), Coleridge Initiative, Equity Value Explorer (Postsecondary Value Commission), Opportunity Insights (Raj Chetty), and Social and Economic Mobility Classification (ACE Carnegie Classification). There are regional initiatives through the National Association of State Workforce Agencies (Midwest Collaborative, Southern Regional Data Collaborative, and Eastern States Longitudinal Data Collaborative) (<https://www.naswa.org/partnerships/multi-state-data-collaboratives/about>). Within the private sector, some tools and data are either free or at a cost from the following locations: Lightcast (EMSI), Steppingblocks, Burning Glass Institute, LinkedIn, Glassdoor, Lexus Nexis, Salary.com, Indeed, and Payscale. Various rankings include earnings outcomes or mobility measures: US News and World Report ranking, Washington Monthly ranking, Forbes America’s Top Colleges, ROI ranking (Georgetown University Center on Education and the Workforce), and Economic Mobility Index (Third Way). With all this information on various websites, how it is

disseminated to higher education stakeholders is critical.

The PSEO Summit allocated time for the Coalition members to work together to identify the key PSEO earnings metrics that are important to inform various audiences when developing data narratives. Dr. Moore-Trieu led a group activity to establish an inventory of dissemination strategies when communicating the value of higher education using the PSEO data for students and parents, Chancellors/Presidents, university personnel, elected officials, employers, media/external relations, and faculty. Based on the information gathered during group discussions, Dr. Moore-Trieu developed a series of briefs to answer four questions: 1) What do students and parents want to know that the PSEO explorer tool can help answer? 2) How can students and parents use the PSEO tool to make decisions? and 3) What do students and parents want to know that the PSEO explorer tool cannot answer? Please refer to the Data Narratives for details.

### **Theme Three: Highlighting the Student Voice**

One of the most impactful sessions of the PSEO Summit was the “What Do Students Think?” panel. Dr. Rachel Boon facilitated a conversation with four students. The student panel was unique because each represented a different phase in a student’s lifecycle. One student was a senior in high school who was applying to colleges and was trying to determine the right major for her to pursue in college. One student was currently a community college student. One student was attending a 4-year institution and had recently changed his major. The last student was a graduate student in her first year of graduate school. All students highlighted the importance of having earnings data at their fingertips to help either reinforce their decisions or use it to manage their expectations regarding their educational investments in college and the short-term and long-term earnings outcomes.

### **Theme Four: Building the Future PSEO Roadmap**

The last session, “Building the Future PSEO Roadmap,” of the PSEO Summit, was a panel of US Census LEHD staff (Dr. Keith Bailey and Dr. Andrew Foote) and Dr. David Troutman (PSEO Director). The panel was moderated by Dr. Colin Chellman (City University of New York). Dr. Troutman’s goal for the PSEO Coalition is to have 40 states that have signed data agreements with the US Census by 2026. The Census staff highlighted that the PSEO earnings data will be enhanced in the near future by linking higher education data with IRS 1040 and 1099 tax returns. This will provide complete coverage for graduates not found in the unemployment insurance wage record. Another enhancement will be disaggregating the earnings data in the PSEO Explorer tool by race/ethnicity and gender. Lastly, the Census staff and PSEO Coalition are committed to identifying possible future collaborations with each other (states and systems) on research efforts to examine the benefits of receiving a college credential. An example of this type of effort is a recent paper released by the US Census on The Gender Pay Gap and its Determinants across the Human Capital Distribution written by Binder, Eng, Houghton, and Foote (June 2023).



## **Theme Five: Enhancing the PSEO Community**

The last theme from the PSEO Summit was the space and time that allowed the PSEO Coalition members to build stronger relationships with each other and the US Census staff. We were able to create a safe space to express our concerns with current and future efforts, ask each other questions that would not be generally asked with colleagues who are not familiar with each other, and share dissemination strategies that work but, more importantly, sharing strategies that did not work and explain why they did not. We all left the PSEO Summit with a shared commitment to ensure that all stakeholders have the information and data they need to make informed decisions in higher education.

**Appendix A: PSEO Coalition Membership****Alabama**

University of Alabama System

**Arizona**

Arizona Board of Regents

**Colorado**

Colorado Department of Higher Education

**Connecticut**

Connecticut State Colleges and Universities

**Georgia**

University System of Georgia

**Hawaii**

University of Hawaii System

**Illinois**

Illinois Board of Higher Education (Pending)

**Indiana**

Indiana Commission for Higher Education

**Iowa**

Iowa Board of Regents  
Iowa Community Colleges

**Louisiana**

Louisiana Board of Regents

**Maine**

Maine Community College System  
University of Maine System

**Massachusetts**

Massachusetts Department of Higher Education

**Michigan**

Institute for Research on Innovation and Science  
(University of Michigan - Ann Arbor)

**Minnesota**

Minnesota Office of Higher Education

**Missouri**

Missouri Department of Higher Education and  
Workforce Development

**Montana**

Montana University System

**New York**

The State University of New York  
The City University of New York

**Ohio**

Ohio Department of Higher Education

**Oklahoma**

Oklahoma State Regents of Higher Education

**Oregon**

Oregon Higher Education Coordinating  
Commission

**Pennsylvania**

The Pennsylvania State University

**South Carolina**

South Carolina Commission on Higher Education

**Texas**

University of Texas System  
Texas Higher Education Coordinating Board

**Utah**

Utah System of Higher Education

**Virginia**

State Council of Higher Education for Virginia

**Wisconsin**

Institute for Research on Innovation and Science  
(University of Wisconsin - Madison)

**Wyoming**

Wyoming Community Colleges