



Leverage Labor Market Information in Strategic Planning Analysis for IR

**Prepared for the AIR 2025 conference
8:00 am – Assessment & Evaluation Session**

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**Orlando, FL
May 22nd, 2025**

Overview and Highlights



- **Why is labor market data important to IR?**
 - An existing issue in achievement assessment – grading inflation
 - Strengths and limitations of labor market data
 - Key proxies and measurement strategy
- **Let's go beyond IPEDS: the U.S. population and the labor market**
 - Young adults, college populations, and college graduates
 - Census data and national longitudinal surveys
 - Labor market data from consulting firms
- **Case Study Examples**
 - Case Study 1: Graduate Student Stipend Competitiveness Analysis
 - Case Study 2: Single-Parent Students in STEM Fields
- **Special Topic: State Labor Market Data**

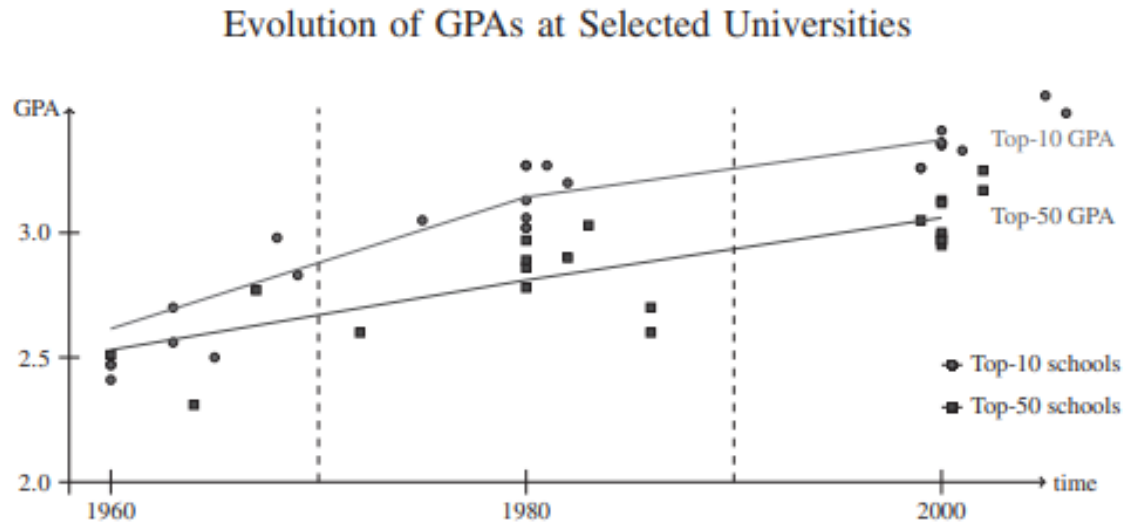
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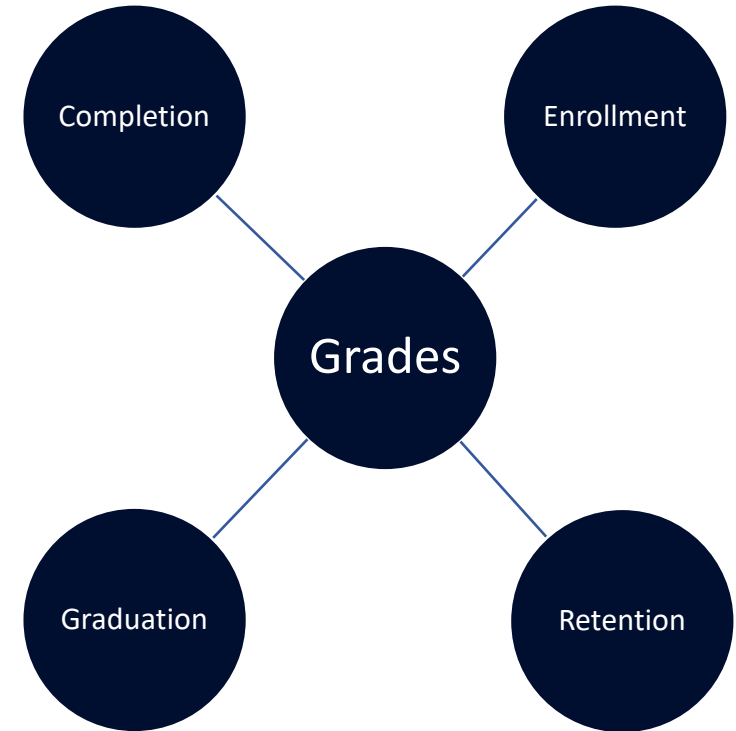
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An Existing Issue in Course Grading - Inflation

- Documented trends in grading inflation across American Universities since 1960.
- The mechanisms (causal factors) of grading inflation
 - Student evaluation
 - Maximize graduation and employability
 - Student selection
- Negative impacts of grading inflation



Resources: Popov, S. V., & Bernhardt, D. (2013). University competition, grading standards, and grade inflation. *Economic inquiry*, 51(3), 1764-1778.



Why Population and Labor Market Data?

- A relatively fair judgment of student competitiveness across different institutions, states, and the United States
- Short-term and long-term outcomes
- Very flexible to customize the scope



Why Population and Labor Market Data?

- Application Area:



Enrollment Projection

Academic Program Optimization



Salary & Employment Negotiation

Student Career Services



Yes! We Can Do It!



- Many consulting products rely on nothing but these public data resources.
- Pinpoint real demands from the national and regional labor market.

An okay tool, but not a “one-size-fits-all” tool

- Not optimal for specific disciplines
- High-learning curves for IR professionals
- Time-delays
- Sampling biases



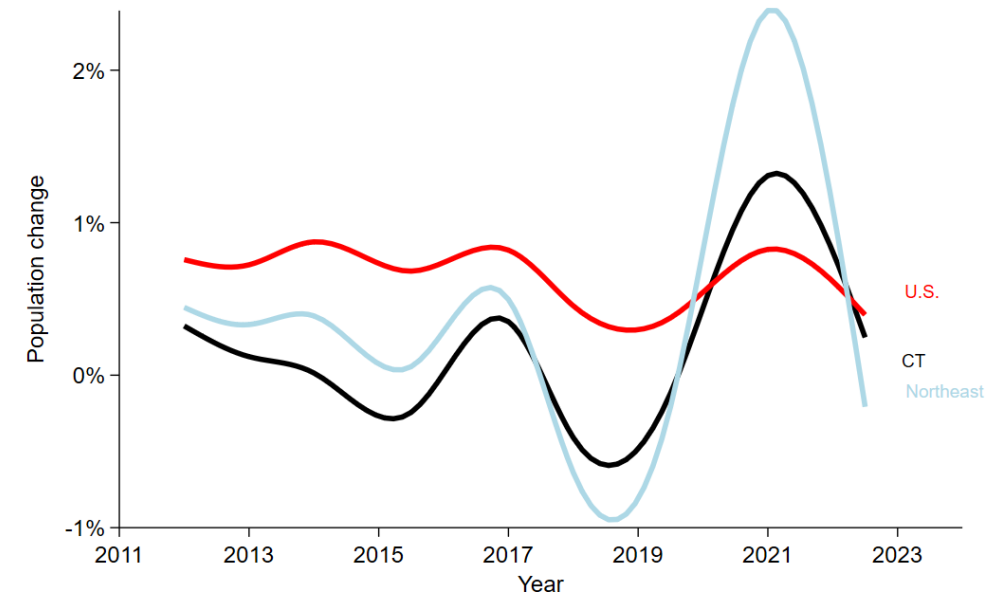
What does the labor market tell us? And what does it proxy?

- Population change
- Employment rate
- Average salary
- Salary distribution
- Entry salary and career progress
- Job–matching
- Occupation demand-supply for strategic planning

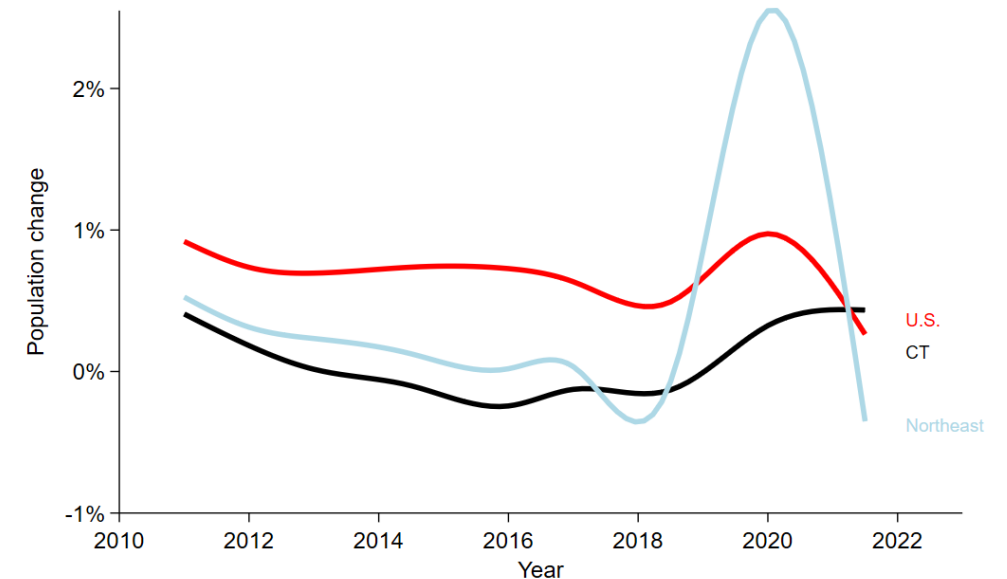


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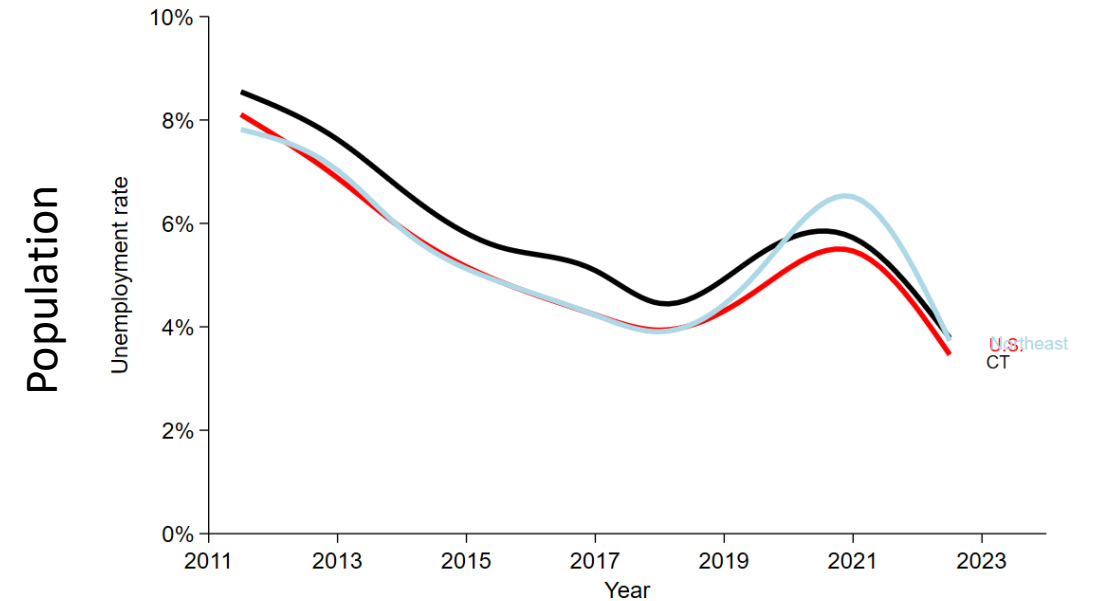
* Population data is based on the population estimation by ACS.



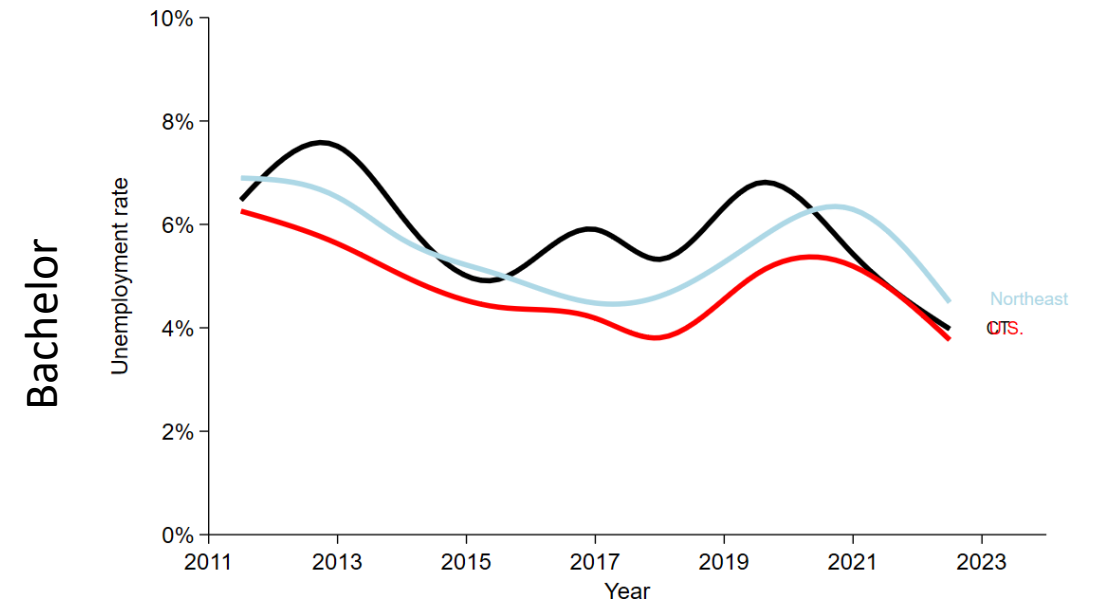
* Population data is based on the population estimation by U.S. Census Bureau.
** Resource: <https://www.census.gov/programs-surveys/popest/data/tables.html>

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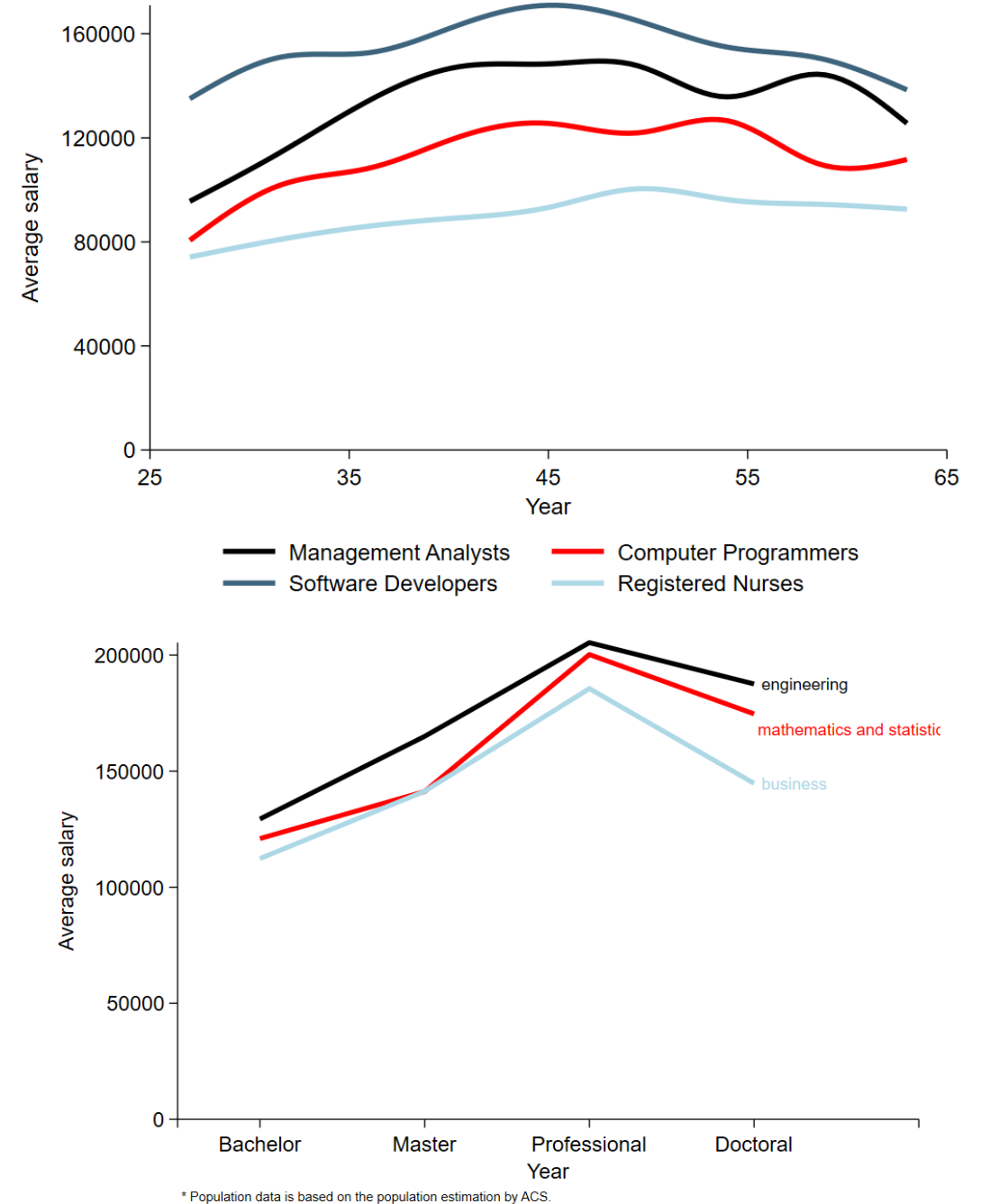
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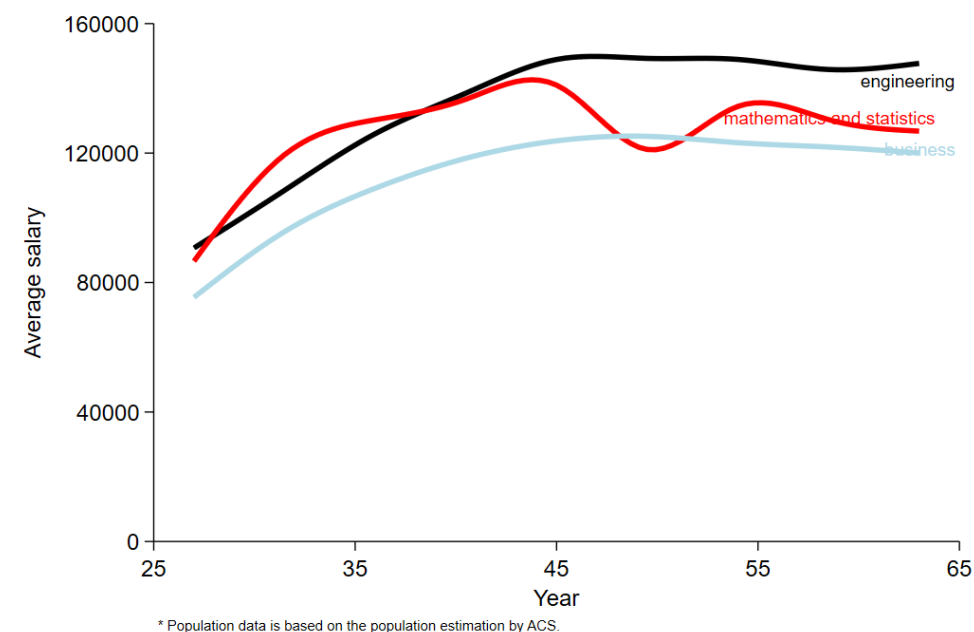
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American Community Survey

What is American Community Survey (ACS)?

The American Community Survey (ACS) is an ongoing survey that provides vital information on a yearly basis about our nation and its people. Information from the survey generates data that help inform how trillions of dollars in federal funds are distributed each year.



Survey Questions:



Occupation



Jobs and Employment



Education Attainment



Veterans



Family Members



Housing

* U.S. Census Bureau logo is for reference only; we do not represent this organization.

Current Population Survey

What is Current Population Survey (CPS)?

The Current Population Survey (CPS) is one of the oldest, largest, and most well-recognized surveys in the United States. It is immensely important, providing information on many of the things that define us as individuals and as a society – our work, our earnings, and our education.



Survey Methodology:



50 states + **D.C.**



Voluntary

Survey Questions:



Occupation



**Jobs and
Employment**



**Education
Attainment**



**Education
Details**



**Family
Members**



Housing

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American Community Survey vs. Current Population Survey

ACS

Entire Population: Social, Economic, Housing characteristics

Areas with over **65,000** populations

1,924,527 addresses in 2005

Household population and military

Continuously throughout the year*

CPS

Selected **Subpopulation** and Focus on **Timely** estimations for **Income, Health, Poverty...**

Nation, regions, and states for Selected Characteristics.

99,000 households in 2005

The universe excludes other military in households and in group quarters (barracks), and people living in institutions.

Monthly interviews conducted from **February** to **April** ask about income in the previous calendar year. The survey's 12-month estimates are centered on July 1.

* The reference period for select questions (like income and the number of weeks worked) is the 12-month period prior to the response month

Bureau of Labor Statistics Data Tool

The Bureau of Labor Statistics (BLS) of the U.S. Department of Labor is the principal federal agency responsible for measuring labor market activity, working conditions, and price changes in the economy. Its mission is to collect, analyze, and disseminate essential economic information to support public and private decision making.....

BLS 2019b



Measure the US Labor Market in Various Dimensions



List for All Survey Hosted by BLS



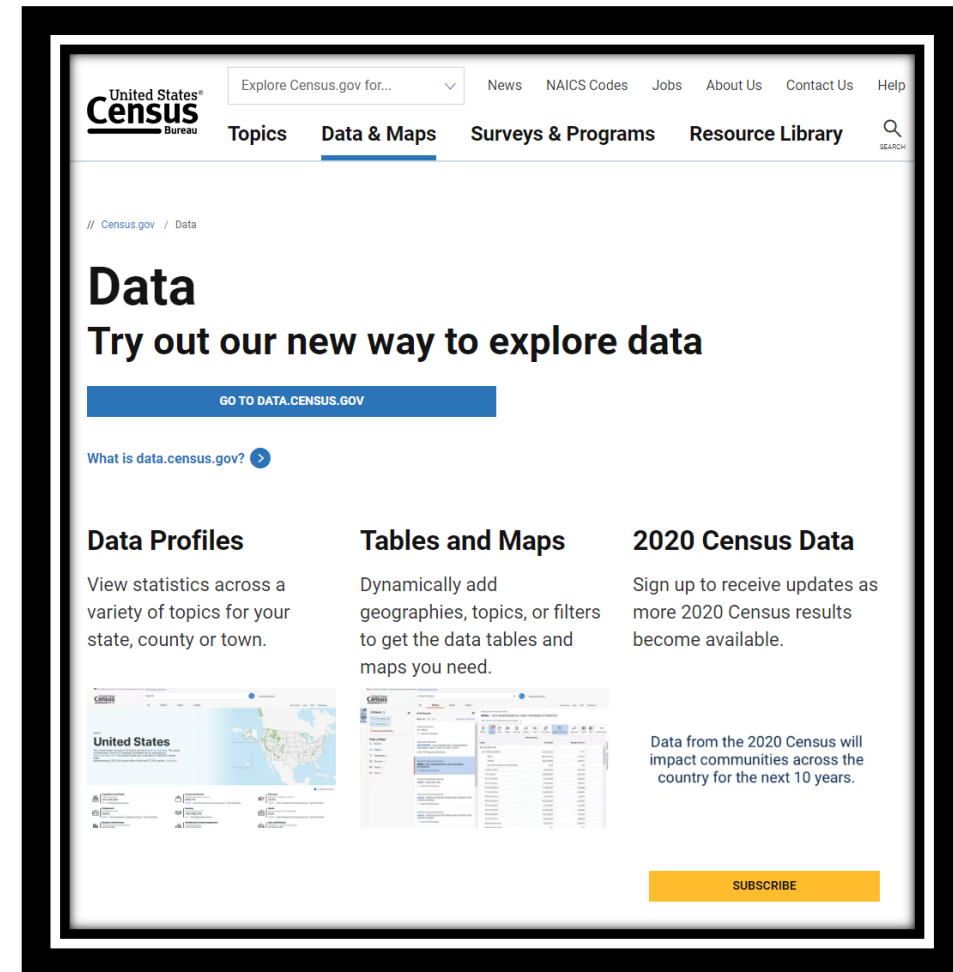
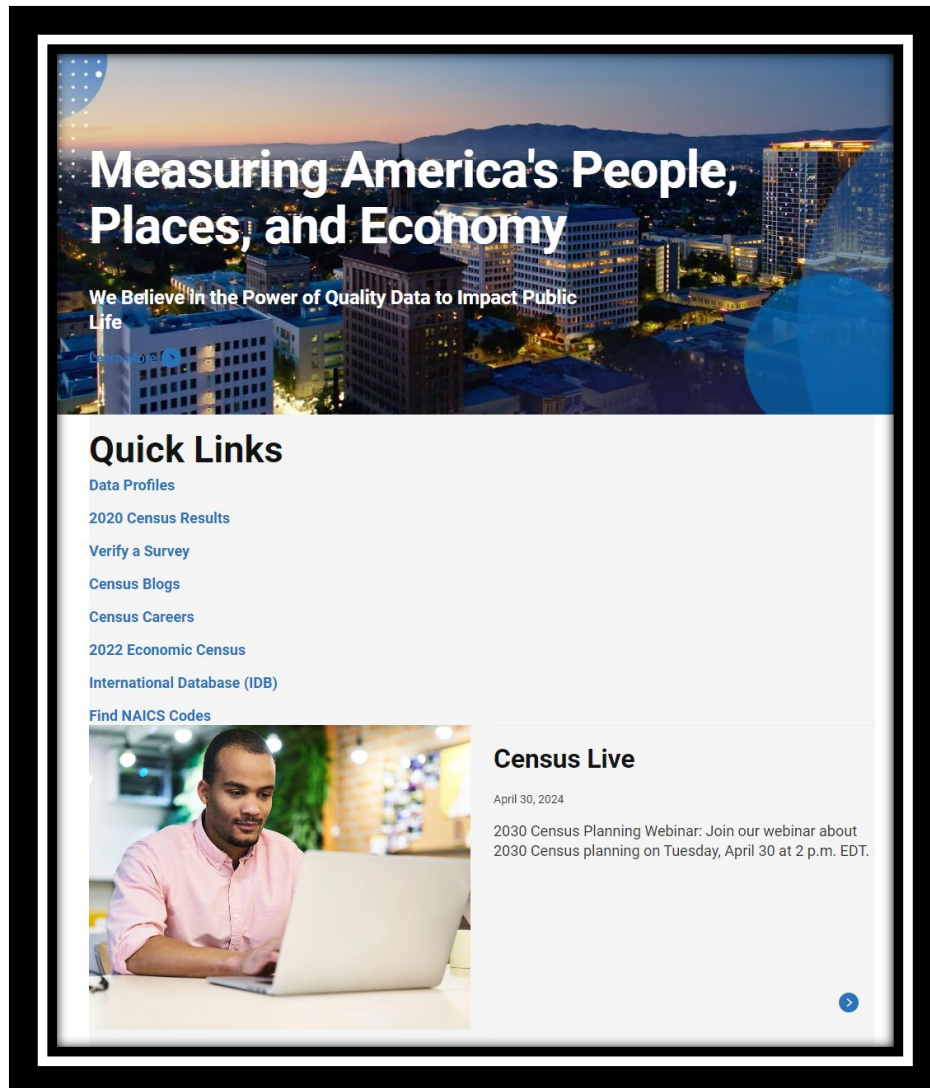
Occupational Employment and Wage Statistics

- *The OEWS survey draws its sample from state unemployment insurance (UI) files.*
- *The OEWS survey sample is stratified by metropolitan and nonmetropolitan area, industry, and size.*
- *To provide the most occupational coverage, larger employers are more likely to be selected than smaller employers.*


Resources: https://www.bls.gov/oes/current/oes_tec.htm

* The Bureau of Labor Statistics logo is for reference only; we do not represent this organization.

Two ways to download the ACS and the CPS data – Census Bureau




Two ways to download the ACS and the CPS data - IPUMS




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IPUMS provides census and survey data from around the world integrated across time and space. IPUMS integration and documentation makes it easy to study change, conduct comparative research, merge information across data types, and analyze individuals within family and community contexts. Data and services available free of charge.




U.S. Census and American Community Survey microdata from 1850 to the present. [Learn More](#)

VISIT SITE



Current Population Survey microdata including basic monthly surveys and supplements from 1962 to the present. [Learn More](#)

VISIT SITE




World's largest collection of census microdata covering over 100 countries, contemporary and historical. [Learn More](#)

VISIT SITE

IPUMS RESEARCH AWARD WINNERS

The winners of the 2023 IPUMS Research Awards have been announced

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Health survey data from around the world, including harmonized data collections for DHS, MICS, and PMA. [Learn More](#)

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Tabular U.S. Census data and GIS boundary files from 1790 to the present. [Learn More](#)

VISIT SITE



Tabular and GIS data from population, housing, and agricultural censuses around the world. [Learn More](#)


VISIT SITE

— DATA-INTENSIVE RESEARCH —
CONFERENCE

July 31-August 1
Minneapolis, MN + Virtual

Conference program is now available and registration is open

LEARN MORE



HOME | SELECT DATA | MY DATA | SUPPORT

DATA CART
YOUR DATA EXTRACT
0 VARIABLES
0 SAMPLES

SELECT SAMPLES

SELECT HARMONIZED VARIABLES

HOUSEHOLD ▾ PERSON ▾ A-Z ▾ SEARCH

☒ HARMONIZED VARIABLES ¹
☐ SOURCE VARIABLES

DISPLAY OPTIONS ¹ [HELP](#)

AN "X" INDICATES THE VARIABLE IS AVAILABLE IN THAT DATASET.

[ECONOMIC CHARACTERISTIC VARIABLES -- HOUSEHOLD](#) [\[TOP\]](#)

Add to cart	Variable	Variable Label	Type	Codes	2022	2021	2016	2011	2006	2000	1990	1980	1970	1960	1950	1940	1930	1920	1910	1900	1880	1870
					acs	acs	acs	acs	acs	lpc	lpc	lpc	lpc	lpc	lpc	lpc	lpc	lpc	lpc	lpc	lpc	lpc
+	FARM	Farm status	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
+	FARMSCHD	Farm schedule	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
+	OWNERSHP	Ownership of dwelling (tenure)	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
+	LANDOWN	Own or rent the land, Puerto Rico	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
+	LANDRNPR	Amount paid for land rent, Puerto Rico	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
+	MORTGAG1	Mortgage status	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
+	MORTGAG2	Second mortgage status	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
+	COMMUSE	Commercial use	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
+	LANDRENT	Rent includes land used for farming	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
+	FARMPROD	Sales of farm products	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
+	GROWNPR	Produce fruits, vegetables, or livestock for home consumption, Puerto Rico	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
+	ACREPROP	Acreage of property	H	codes	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X
+	ACREHOUS	House acreage	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
+	ACRENONE	Acreage of nonfarm house	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
+	MORTOTAL	Total monthly mortgage payment	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
+	MORTAMT1	First mortgage monthly payment	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
+	MORTAMT2	Second mortgage monthly payment	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
+	TAXINCL	Mortgage payment includes property taxes	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
+	INSINCL	Mortgage payment includes property insurance	H	codes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
+	PROPTXIN	Annual property tax and insurance cost	H	codes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

IPUMS enables researchers to access the data with maximum flexibility and more....

- Time frames and timely publications of CPS
- **Specify focusing population groups**
- Multiple-year samples for time-series analysis

Bureau of Labor Statistics Data Tool

Applications in IR Professions:

- The Occupational Coding System
 - Standard Occupation Classification (SOC)
 - “Federal statistical standard” – just like CIP
 - All workers are classified into one of 867 detailed occupations
 - **CIP SOC Crosswalk** – developed by NCES
- The Industry Coding System
 - North American Industry Classification System (NAICS)
- Information regarding occupation profiles
 - Job description
 - Typical degree requirement
 - Median salary

Tables Created by BLS

May 2023

- [Occupation Profiles](#)
- National ([HTML](#)) ([XLS](#))
- State ([HTML](#)) ([XLS](#))
- Metropolitan and nonmetropolitan area ([HTML](#)) ([XLS](#))
- National industry-specific and by ownership ([HTML](#)) ([XLS](#))
- All data ([XLS](#)) ([TXT](#))
- [Research estimates by state and industry](#)
- [Additional OEWS data sets](#)
- [Featured Tables](#)

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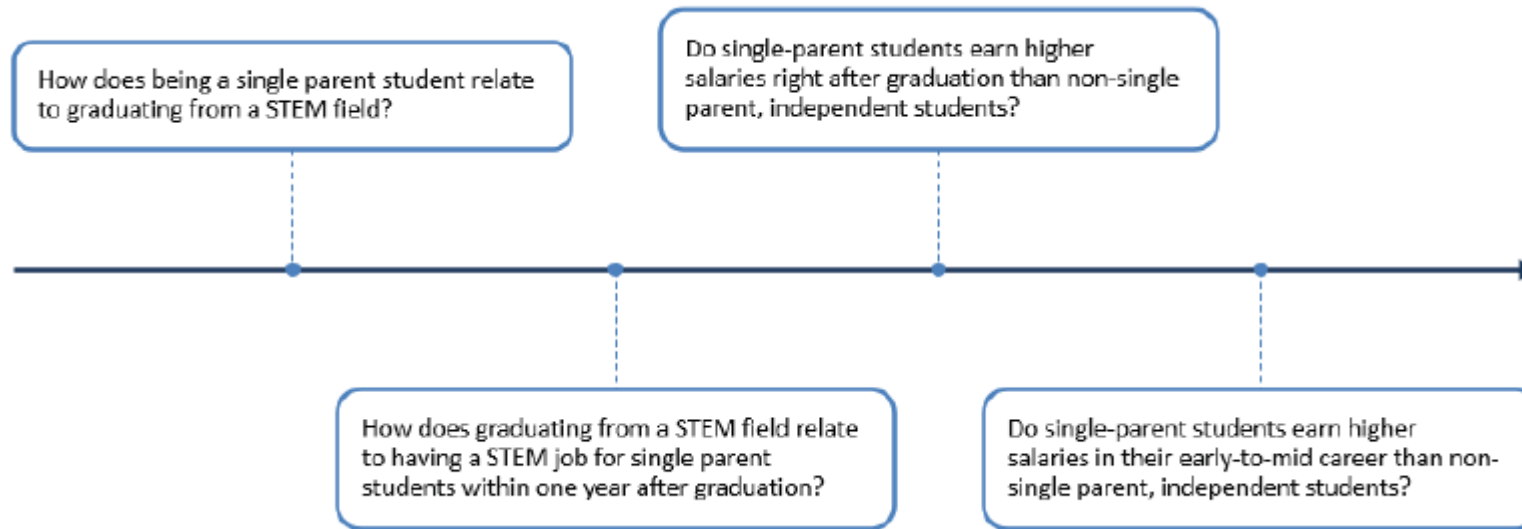
Case Study 1: Graduate Student Stipend Competitiveness Analysis

Question: are universities paying proper stipends for their graduate assistants?

- How to define “proper”?
Education, living expenses, work hours, etc.
- What parameters do I use?
Wage? ↔ **Income?**
- Select data resources
- Data adjustment

Institution	State	Adj. State Salary 2022 (ACS)	Adj. State Salary 2023 (CPS)	Typical Stipend	Stipend-Salary Ratio
Peer 1	NY	\$23,476	\$25,465	\$23,400	0.92
Peer 2	MA	\$23,099	\$25,582	\$24,822	0.97
Peer 3	NJ	\$22,870	\$24,379	\$31,802	1.30
Peer 4	FL	\$17,882	\$20,596	\$18,000	0.87
Peer 5	DE	\$19,879	\$21,585	\$22,660	1.05
Peer 6	CA	\$24,912	\$26,815	\$22,000	0.82
Peer 7	CA	\$24,912	\$26,815	\$29,125	1.09
Peer 8	NC	\$19,351	\$20,713	\$20,000 \$30,000 (PhD)	0.97
Peer 9	NY	\$23,476	\$25,465	\$22,500	0.88

Case Study 2: Single-Parent Students in STEM Fields



Data resources: Baccalaureate and Beyond (B&B)

Key findings:

- Single-parent students are less likely to enroll in STEM fields
- There is no difference between single-parent students and other student in finding a matching job after completing STEM programs
- There is no difference between single-parent students and other student in incomes after graduation

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The Preschool through 20 Workforce Information Network

P20 WIN is Connecticut's state longitudinal data system. Our work is a collaboration of 15 participating agencies that include state agencies, higher education institutions, and nonprofits to inform sound policy and practice to ensure that individuals can successfully navigate supportive services and education pathways into the workforce. The P20 WIN governance structure has two governing bodies, and utilizes two legal agreements (an [Enterprise Memorandum of Understanding](#) and Data Sharing Agreements), to securely share data across agencies. Please note that data are never used to identify specific individuals.

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Location: New Jersey (NJ)

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Impact Report 2024

Management

New Jersey Office of Innovation 2024 Impact Report

AI translation assistants for unemployment insurance benefits

No-code language resources for plain English & Spanish
Released: v1 December 5, 2024

Automation + AI

AI Translation Assistants for Unemployment Insurance Benefits

Data Access and Use Policy

Final: November 21, 2023

Section 1: Purpose

This policy establishes the rules for governing access, use, and re-disclosure of de-identified data collected, stored, and maintained by the State of New Jersey in the Statewide Data System (NJSDS).

Section 2: Authority

This data access and use policy is authorized under an agreement memorialized in the Memorandum of Understanding between the New Jersey (NJ) Department of Education, the New Jersey Department of Labor and Workforce Development, the New Jersey Office of the Secretary of Higher Education, and the New Jersey Higher Education Student Assistance Authority dated June of 2017 and revised November of 2018.

Section 3: Background

The NJ Department of Education, NJ Department of Labor and Workforce Development, NJ Office of the Secretary of Higher Education, and the NJ Higher Education Student Assistance Authority have partnered together, to develop a common platform of K through 12 education data, higher education data and labor/workforce data within a secure, common data



An official website of New York State. [Here's how you know](#) ▾

Department of Labor

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If you are a federal employee who has been recently separated from your employment, NYSDOL is here to help.

[Unemployment Eligibility For Fed](#)[< Labor Data](#)

Unemployment Insurance (UI) Data Sharing

Data sharing agreements in Massachusetts

Find out more about the Massachusetts data sharing framework



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- ✓ Overview of the data sharing framework
- ✓ How to complete the data sharing process
- ✓ Contact



Thanks for Joining

Q & A

*More questions:
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