

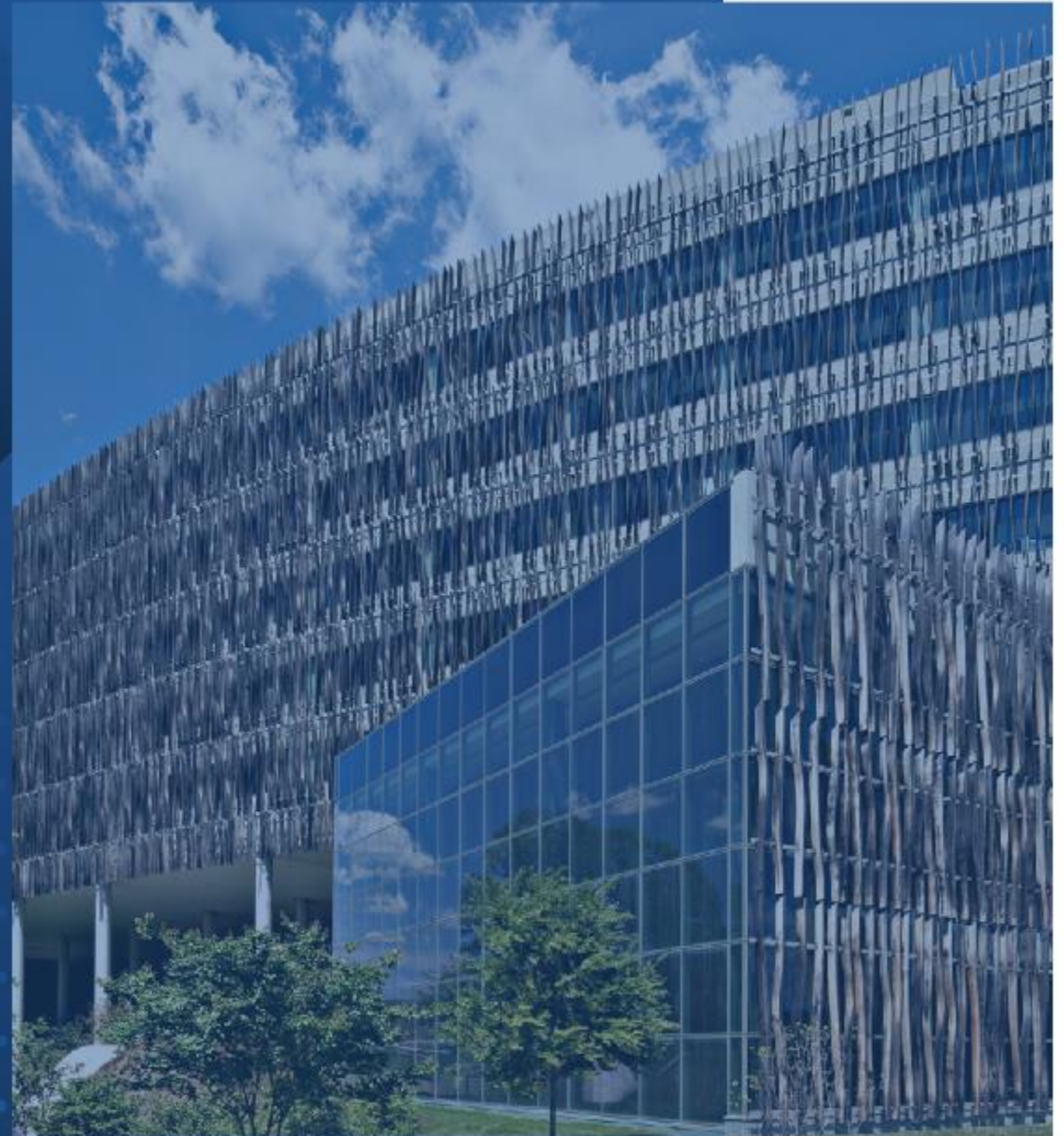
# Quarterly Workforce Indicators from the Longitudinal Employer-Household Dynamics

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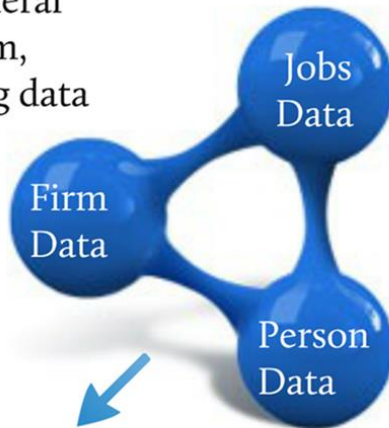




# Program and Partnership

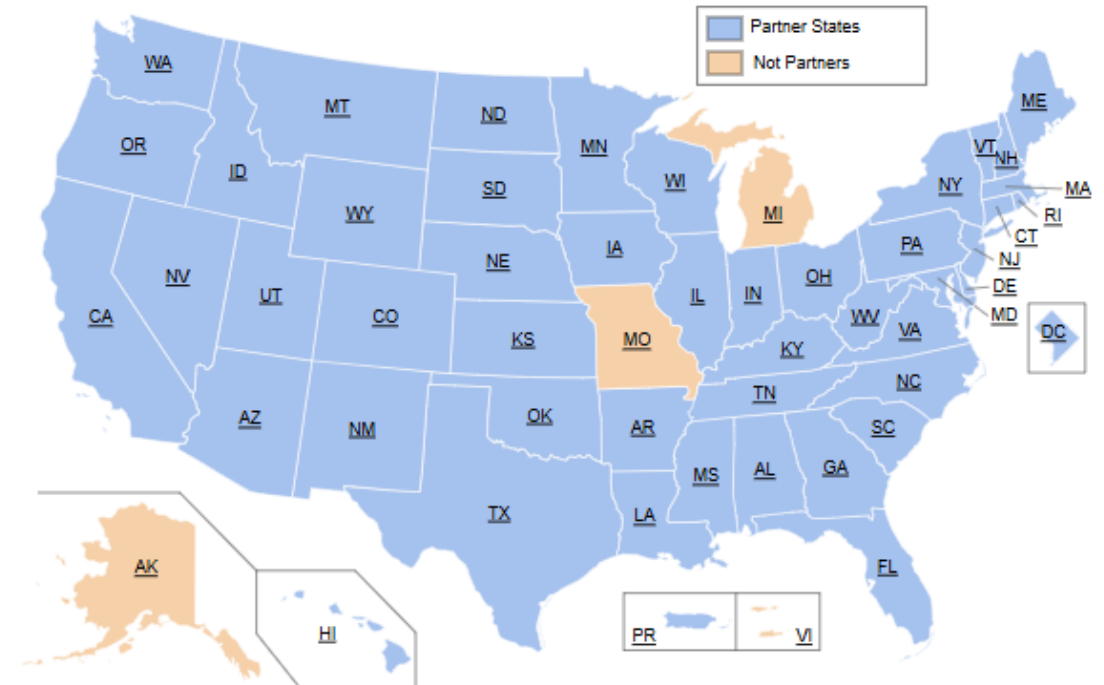
## LEHD Program

An innovative federal  
statistical program,  
collecting existing data  
and ...



New linked national jobs  
data for the U.S.

..linking it together  
to provide new  
information sources  
at low cost





# Longitudinal Employer-Household Dynamics (LEHD)

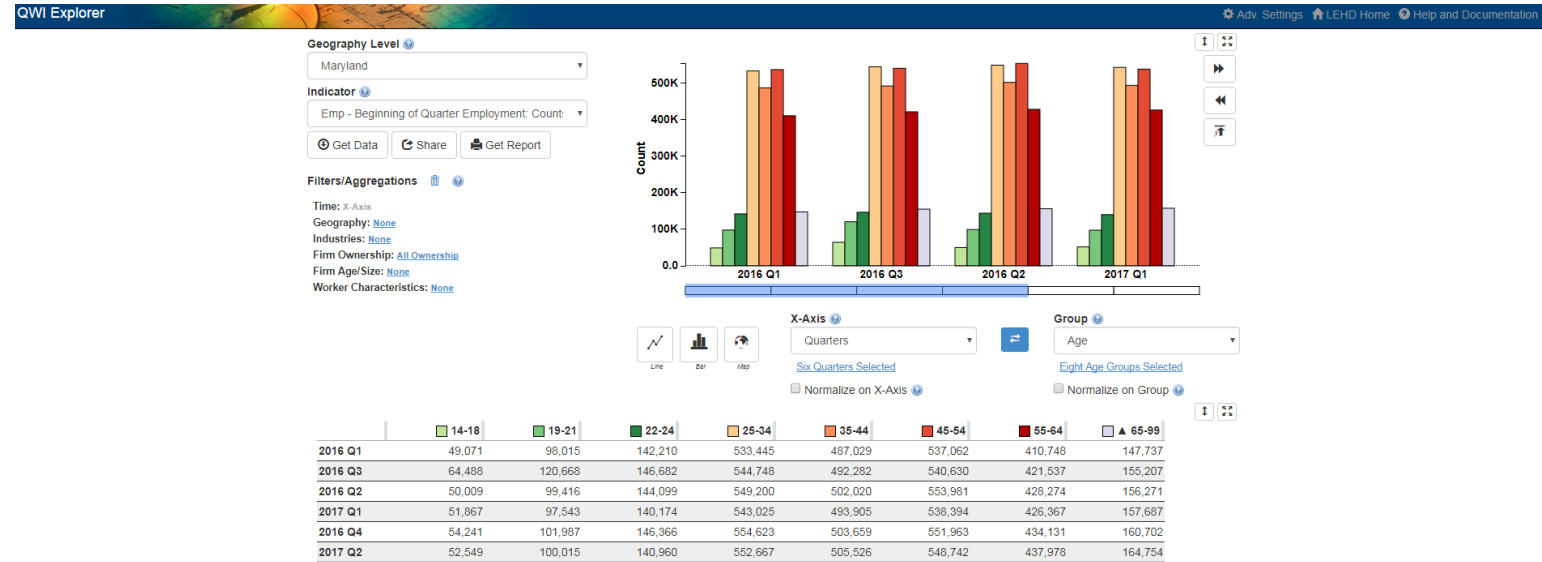
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Online Tool	Data/Availability	Description
<a href="#">J2J Explorer</a>	J2J: Quarterly, 2000- <a href="#">Latest</a>	A web-based tool for analyzing new statistics on job flows. Multiple interactive visualizations trace worker movements through industries, geographic labor markets, and to/from employment.
<a href="#">QWI Explorer</a>	QWI: Quarterly, 1990- <a href="#">Latest</a>	Provides charts, maps, and interactive tables for users to compare, rank, and aggregate QWIs across firm and worker characteristics.
<a href="#">OnTheMap</a>	LODES: Annual, 2002- <a href="#">Latest</a>	Maps, charts, and reports on demographic characteristics and commute patterns of workers/jobs covering 50 states plus D.C.
<a href="#">OnTheMap for Emergency management</a>	LODES: Annual, <a href="#">Latest</a>	Shows potential impact on jobs/workers and population for hurricanes, fires, floods, winter storms, and disaster declaration areas. Real-time disaster events are automatically updated. Selected variables from ACS and Decennial data are also available.
<a href="#">PSEO Explorer</a>	PSEO: Annual, 2001- <a href="#">Latest</a>	Interactive tool allows for comparisons of earnings and employment outcomes for recent graduates.
<a href="#">VEO Explorer</a>	VEO: Annual, 2001- <a href="#">Latest</a>	Interactive tool allows for comparisons of earnings and employment outcomes for military veterans.
<a href="#">LED Extraction Tool</a>	QWI: 1990- <a href="#">Latest</a> J2J: 2000- <a href="#">Latest</a> LODES: 2002- <a href="#">Latest</a>	Easy access to raw data extracts from the QWI, J2J, and LODES datasets through a simple query-building interface.



# QWI Explorer

- ✓ 32 Quarterly Workforce Indicators
- ✓ Flexible Pivot Table and Map/Chart interface
- ✓ Data on detailed interactions between firms and workers include employment, employment change (individual and firm), and earnings
- ✓ Analyze/report by worker demographics: age, earnings, race, ethnicity, educational attainment, and sex




- ✓ Analyze/report by firm characteristics: NAICS classification (sector, 3, 4), firm age, and firm size
- ✓ Quarterly data very current (9-12 months old)
- ✓ National and 50 states available (plus DC)





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# QCEW VS QWI

QCEW vs. QWI		
Feature	QCEW (Quarterly Census of Employment & Wages)	QWI (Quarterly Workforce Indicators) 
Agency	Bureau of Labor Statistics (BLS)	U.S. Census Bureau (LEHD program)
Data Source	State unemployment insurance (UI) tax records + BLS surveys	State UI wage records + Census demographic & business data
Coverage	~95% of U.S. jobs (UI-covered)	States participating in LEHD (nearly all)
Focus	Jobs, establishments, and wages	Workforce dynamics: hiring, separations, job flows
Demographics	✗ None	✓ Yes (age, sex, race/ethnicity, education)
Employer Details	Industry, size, location	Industry, size, location
Measures Provided	Employment counts, establishments, total wages, average weekly wages	Employment, earnings, job creation, separations, turnover
Geographic Detail	Nation → state → county → metro	Nation → state → county → metro → workforce areas
Strengths	Benchmark census of employment and wages; highly detailed geography and industry	Rich detail on <i>who</i> is working where; tracks workforce dynamics over time
Limitations	No demographic detail; 5–6 month lag in release	More complex, sometimes less timely; may not perfectly match QCEW totals



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## LED in Action

### Leveraging Quarterly Workforce Indicators to Analyze Teacher Labor Market Dynamics: Inequitable Trends in Educator Turnover



Annenberg Institute  
BROWN UNIVERSITY

EdWorkingPaper No. 25-1135

#### Leveraging Quarterly Workforce Indicators to Analyze Teacher Labor Market Dynamics: Inequitable Trends in Educator Turnover

Joshua Bleiberg  
University of Pittsburgh

Tuan D. Nguyen  
University of Missouri

Educator labor markets vary considerably across the country and can change quickly during recessions. We use data from the Quality Workforce Indicators (QWI) on educators in Elementary and Secondary Schools from 2000-01 to 2022-23. We demonstrate how to transform the quarter-level data in the QWI to construct valid educator labor market measures. The strengths of the QWI address the limitations of other sources of labor market data, including (1) non-standardized definitions, (2) sampling that is useful for describing local and regional trends, (3) contemporaneous availability, and (4) lack of data for sub-groups. We demonstrate how the QWI addresses each of these data gaps and describe how educator labor markets vary across time, region, and educator characteristics.



# Education Employment Count by State

United States  
Census Bureau  
QWI Explorer

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Geography Level

United States

Indicator

Emp - Beginning of Quarter Employment: Coun

Get Data Share Get Report

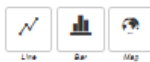
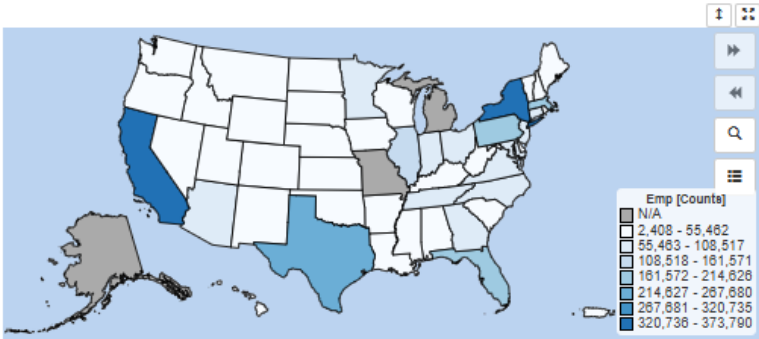
Filters/Aggregations

Quarters: [2024 Q3](#)  
Geography: [X-Axis](#)  
NAICS Sectors: [Educational Services](#)  
Firm Ownership: [All Private Ownership](#)  
Firm Age/Size: [None](#)  
Worker Characteristics: [None](#)

QWI Status Flags

- ☐ No data available in this category for this quarter.
- ☐ Value suppressed because it does not meet U.S. Census Bureau publication standards.

	▲ All
Wyoming	2,408
North Dakota	3,521
South Dakota	3,883
Delaware	4,965
Montana	5,880
West Virginia	6,544
Vermont	10,827
New Mexico	11,123
Idaho	11,507
Nebraska	12,193
Mississippi	13,008
Alaska	14,155



X-Axis

States

[52 States Selected](#)

☐ Normalize on X-Axis

Group

No Group

[No group selected.](#)

☐ Normalize on Group



## LEHD Program

# Regional Turnovers for Education

Geography Level

United States

Indicator

TurnOvrS - Turnover (Stable)

Get Data Share Get Report

### Filters/Aggregations

Quarters: [2024 Q2](#)

Geography: [X-Axis](#)

NAICS Sector: [Educational Services](#)

Firm Ownership: [All Private Ownership](#)

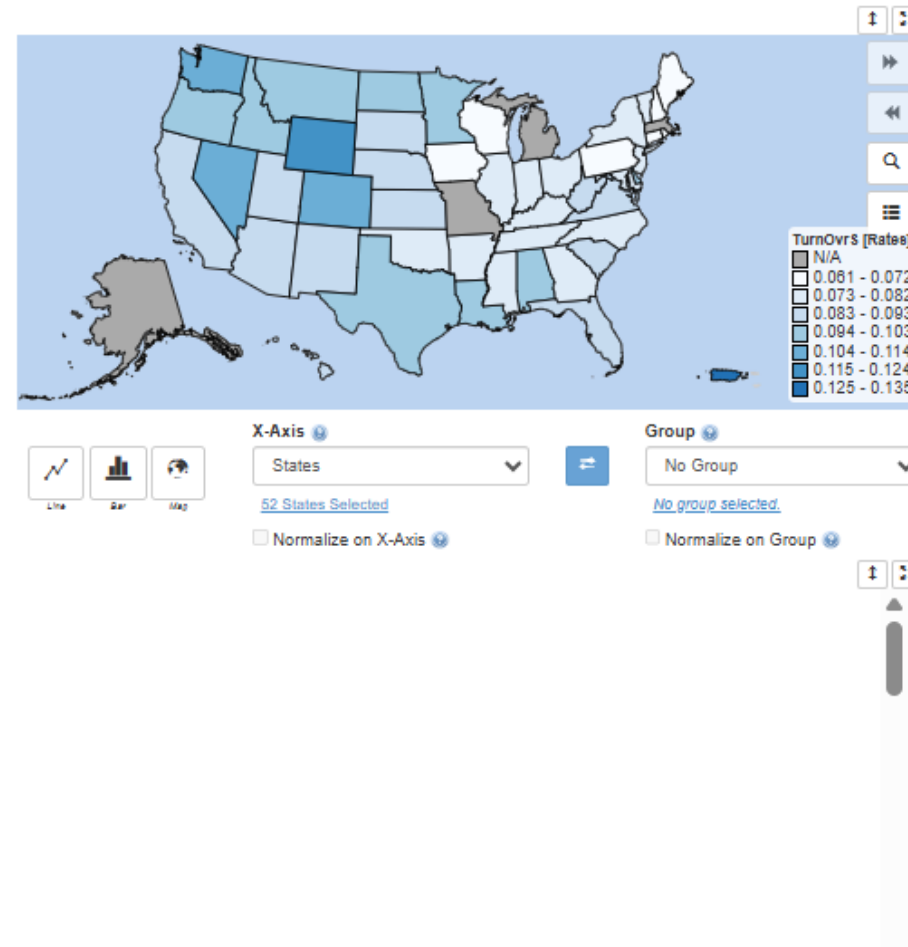
Firm Age/Size: [None](#)

Worker Characteristics: [None](#)

### QWI Status Flags

- ☐ No data available in this category for this quarter.
- ☐ Data not available to compute this estimate.
- ☐ Value suppressed because it does not meet U.S. Census Bureau publication standards.

▼ All	
Puerto Rico	0.135
Wyoming	0.122
Colorado	0.110
Washington	0.106
Nevada	0.105
Montana	0.102
Idaho	0.102
Texas	0.099
Louisiana	0.099
North Dakota	0.098
Minnesota	0.095

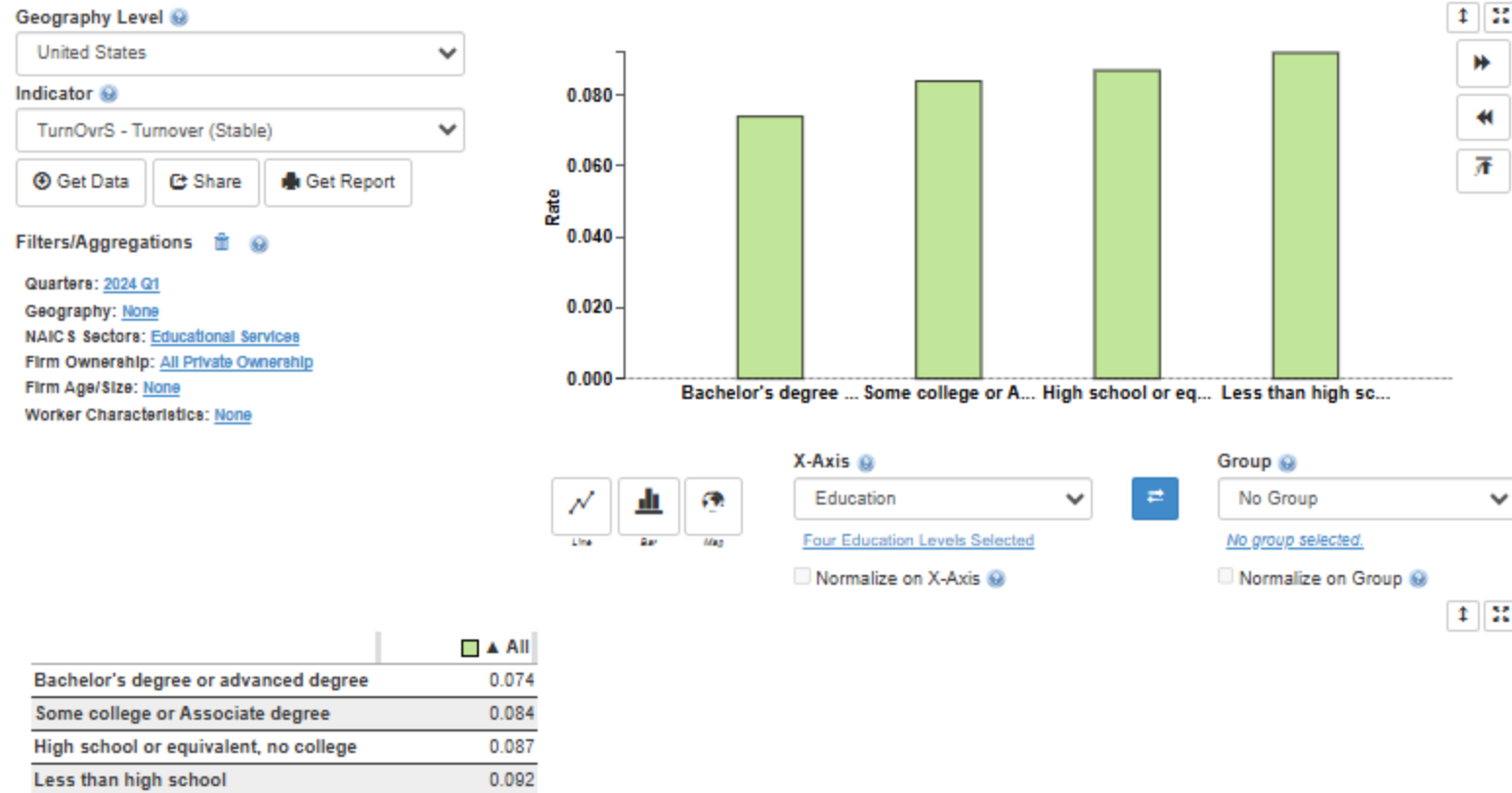


<https://qwexplorer.ces.census.gov/?s=1363d4&st=US&v=map&fc=true&t=dc1&x=0&g=0>





# Turnover by Education

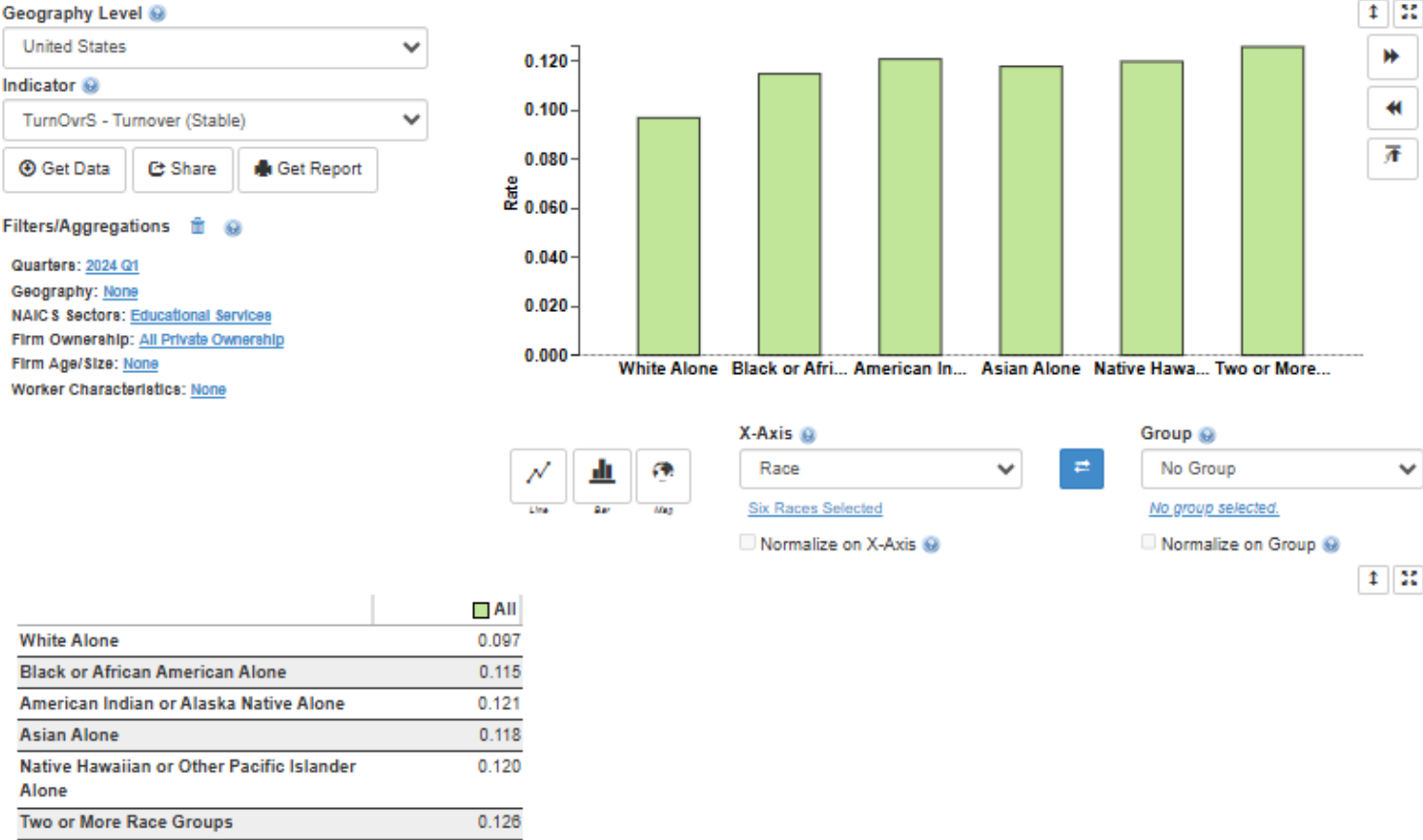


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# Turnover by Race

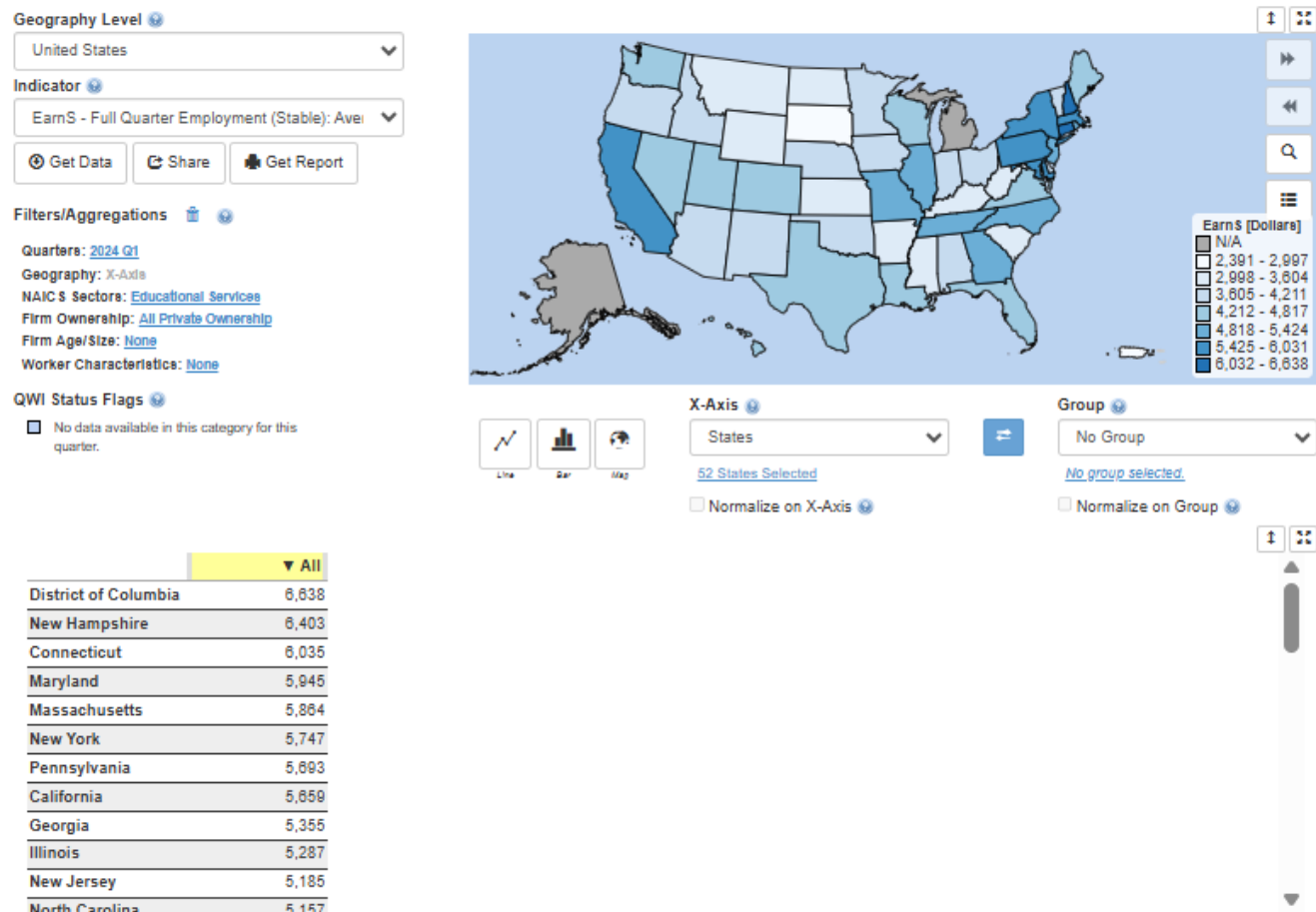


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## LEHD Program

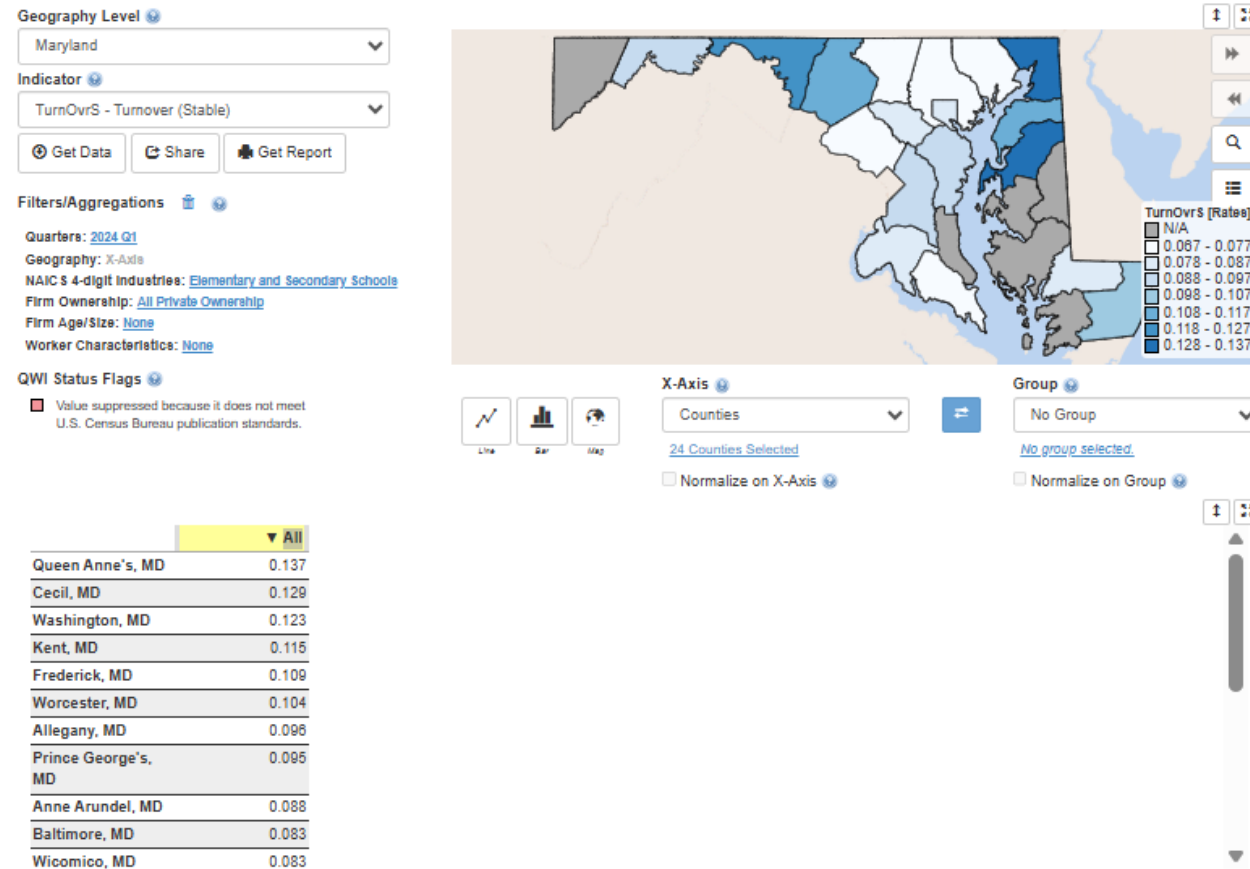
# Earnings in Education by State





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# Turnover for Elementary and Secondary Schools – NAICS 4-Digit in Maryland



<https://qwiexplorer.ces.census.gov/?s=1363de&st=MD&v=map&fc=true&t=dc1&x=0&g=0>



# Earnings by County in the State of Maryland

Geography Level

Maryland

Indicator

EarnS - Full Quarter Employment (Stable): Ave

Get Data Share Get Report

Filters/Aggregations

Quarters: [2024 Q1](#)

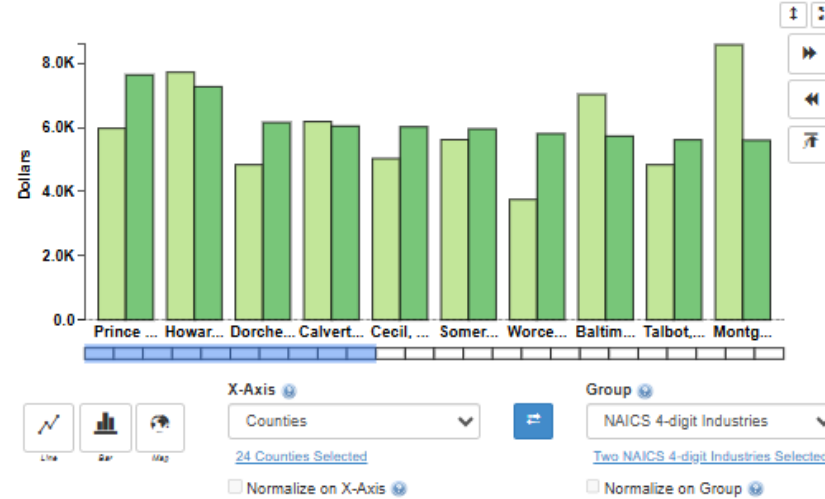
Geography: [X-Axis](#)

Industries: [Group](#)

Firm Ownership: [All Ownership](#)

Firm Age/Size: [None](#)

Worker Characteristics: [None](#)



	All NAICS	Elementary and Secondary Schools
Prince George's, MD	5,974	7,841
Howard, MD	7,722	7,271
Dorchester, MD	4,838	6,156
Calvert, MD	6,183	6,044
Cecil, MD	5,030	6,019
Somerset, MD	5,619	5,954
Worcester, MD	3,755	5,805
Baltimore, MD	7,030	5,731
Talbot, MD	4,837	5,614

<https://qwiexplorer.ces.census.gov/?s=1363e0&st=MD&v=bar&fc=true&t=dc2&x=0&g=0>





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# Live Demo



## Resources

### QWI Explorer

<https://qwiexplorer.ces.census.gov>

### LED Extraction Tool

<https://ledextract.ces.census.gov/>

### Quarterly Workforce Indicators Explorer

[https://lehd.ces.census.gov/applications/help/qwi\\_explorer.html#!example\\_scenarios](https://lehd.ces.census.gov/applications/help/qwi_explorer.html#!example_scenarios)

### QWI 101

[https://lehd.ces.census.gov/doc/QWI\\_101.pdf](https://lehd.ces.census.gov/doc/QWI_101.pdf)

### QWI Data Loading Status

[https://lehd.ces.census.gov/applications/help/qwi\\_explorer.html#!loading\\_status](https://lehd.ces.census.gov/applications/help/qwi_explorer.html#!loading_status)

To review past LED Workshops and Webinars please visit the [Workshop/Webinars](#) tab for more information. Find stories on how LEHD data is being used on our [LED in Action](#) tab.



# Q & A and Thank You!

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For detailed questions concerning the 2020 Decennial, contact:

**301-763-INFO or 800-923-8282**