An Overview of the Job Openings & Labor Turnover Survey (JOLTS): The Bureau of Labor Statistic's sole source of monthly job vacancy time series data

### Maryland State Data & Analysis Center Annual Meeting — Nov 2024

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#### **Job Openings and Labor Turnover (JOLTS)**

#### **Goals for this presentation:**

- **SUMMARIZE:** JOLTS Role & History
- **DISCUSS:** Concepts & Analysis
- **OUTLINE:** Methodological Approach
- **HIGHLIGHT:** Latest National Estimates
- INTRODUCE: State Estimates
- **SHARE:** JOLTS Products & Resources



#### **JOLTS Role & History**

#### What does the Jolts Program Measure?

- The Job Openings and Labor Turnover Survey (JOLTS) program produces monthly estimates by data element:
  - ► Job Openings, Hires, and Separations including Quits, Layoffs & Discharges, and Other Separations.
- ■These measures are provided for the:
  - ► Nation and Region
  - ► Industry super-sector levels
  - ► Establishment size classes
  - ▶ 50 States and the District of Columbia



#### **JOLTS Role & History**

#### **Unique Role in Labor Force Statistics**

The Job Openings and Labor Turnover Survey (JOLTS) program produces monthly estimates for Job Openings, Hires, and Separations (including Quits, Layoffs & Discharges, and Other Separations.)



CES Employment: matched labor supply/demand

Triad
of Labor Force
Statistics

CPS Unemployment: excess supply of labor

JOLTS Job Openings: excess demand for labor and labor dynamics, including hires & separations



### JOLTS Role & History Program History

- 2000: JOLTS began producing estimates in December
- 2002: First experimental national estimates
- 2004: JOLTS national estimates became official BLS series
- 2005: Experimental size class estimates created
- 2019: First experimental state estimates released
- 2020: Establishment size class estimates officially published
- 2021: State estimates officially published in October
- 2023: Introduced annual average rates for all data elements for series through 2022



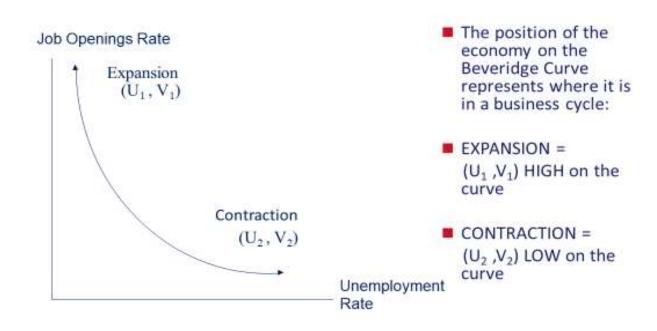
### **Concepts and Analysis**

Data Elements	Definitions	Reference Period	Measure Type
Job Openings	A job is open if it meets all three conditions:  •A specific position exists  •Work could start within 30 days  •Employer actively seeking workers from outside location	Last business day of the month	Stock
Hires	A hire is an addition to payroll and:  •May be a new hire or previously separated rehire  •May be permanent, short-term, or seasonal  •May be recall from layoffs	Entire Month	Flow
Total Separations	The total number of employees separated	Entire Month	Flow
Quits	Voluntary separations initiated by the employee (excluding retirements)	Entire Month	Flow
Layoffs and Discharges	Involuntary separations initiated by the employer	Entire Month	Flow
Other Separations	Retirements, transfers to other locations, and separations due to death or disability	Entire Month	Flow
Employment	Employment includes persons on the payroll who worked or received pay for the pay period that includes the 12th day of the reference month.	Pay period including the 12th of the month	Stock



#### **Concepts and Analysis** (continued)

#### **Analysis: Beveridge Curve**







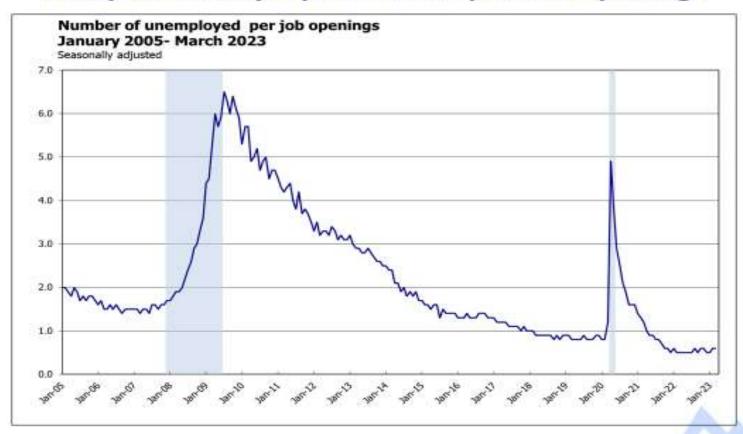
### **Analysis: Job Openings**

- Job openings are considered unmet Labor Demand
- Number of Unemployed Persons is considered Labor Supply
- To gauge Labor Demand vs. Labor Supply we can look at Job Openings level (JOLTS) compared to the Unemployment level (CPS)
- One way to analyze this relationship:
  - Number of unemployed persons per job opening



#### **Concepts and Analysis** (continued)

#### **Analysis: Unemployed Persons per Job Openings**

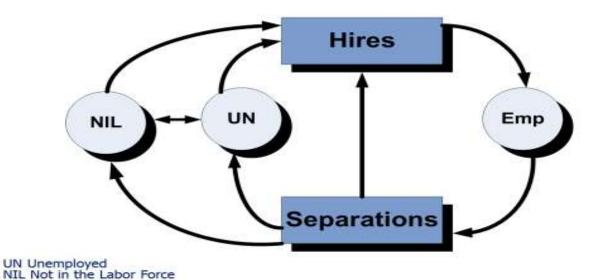






### **Concepts and Analysis** (continued)

#### **Analysis: Hires and Separations**



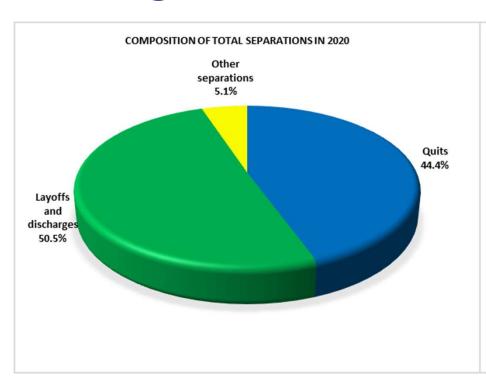
36 - U.S. BUREAU OF LABOR STATISTICS + bis.gev

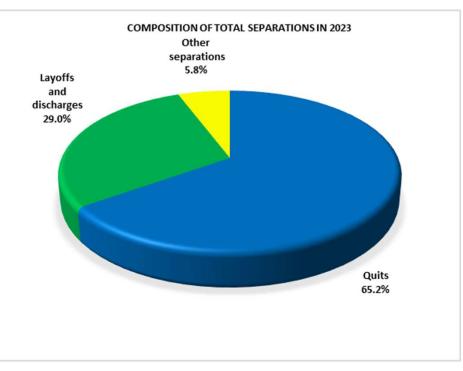




# **Analysis: Components of Total Separations**

- Total Separations = Quits + LD + OS
- Quits vs. LD the percent contribution to TS can vary while OS generally does not change much over time







### **Concepts and Analysis** (continued)

Churn, Hires, and Separations Monthly Average for the Twelve - Month Period Ending December 2022







# Job Openings and Labor Turnover Survey

### Methodology



# Methodology Sample Design

- JOLTS sample size = 21,000 units (establishments)
- Establishments are stratified by:
  - Ownership, Region, Industry, Size classes
- Establishments are in sample for 36 months. They are then rotated out of the sample for at least 3 years.
- Certainty Units: All establishments with 5,000 or more employees are included in the sample
- Each month, a new noncertainty panel is rolled into the sample while an old noncertainty panel is rolled out of the sample.



## Methodology Sample Frame

- Establishments for the JOLTS sample come from two sources:
  - Quarterly Census of Employment and Wages (QCEW): This program covers approximately 95% of jobs in the US including those in the private sector, federal, and state and local government.
  - ► Federal Railroad Administration: JOLTS adds establishments from the Federal Railroad Administration to the QCEW database.



# What is the scope of JOLTS? (cont)

- Out-of-Scope Establishments
  - ► Agricultural workers
  - Self-employed
  - Unpaid family workers
  - Private household employees

NOTE: The JOLTS scope is consistent with the survey scope for the Current Employment Statistics (CES) survey.



# Methodology **Survey Form Example**

Please provide data for the time period indicated for each item. Enter 0 if none.  See the explanation of these terms on the back of this page.								
See the ex	EMPLOYMENT  Number of full- or part-time employees who worked or received pay for the pay period that includes the 12th of the month	JOB OPENINGS A job is open if it meets all three conditions:  • A specific position exists  • Work could start within 30 days  • You are actively seeking workers from outside this location to fill the position	HIRES A hire is any addition to your payroll, and:  • May be new, rehired, or recalled from layoff  • May be permanent, short-term, or seasonal	SEPARATIONS  Report by type of separation in the columns below.  Column D Quits, except retirements  Column E Layoffs, discharges, and other terminations initiated by the employer  Column F Other separations due to: retirements; transfers from this location; deaths; employee disability				
Report for month of:	A Total Employment for the pay period that includes the 12th of the month	B  Number of Job Openings on the last business day of the month	C Hires for the entire month	D Quits	E Layoffs and Discharges for the entire m	F Other Separations		



## Methodology **Data Collection Process**

- System: Microdata are collected via a data collection centers (DCC) in Atlanta, GA and Kansas City, KS using a computer assisted telephone interview (CATI) system.
- Communication: During this process, the establishment address is determined and a contact person is obtained. Establishments are sent an enrollment package.
- Participation: Microdata are collected from participating establishment using CATI for 1 - 6 months. Then, the majority of reporters are moved to web reporting.



# Job Openings and Labor Turnover Survey

### National Estimates



## National Estimates SUMMARY

#### Total nonfarm September 2024

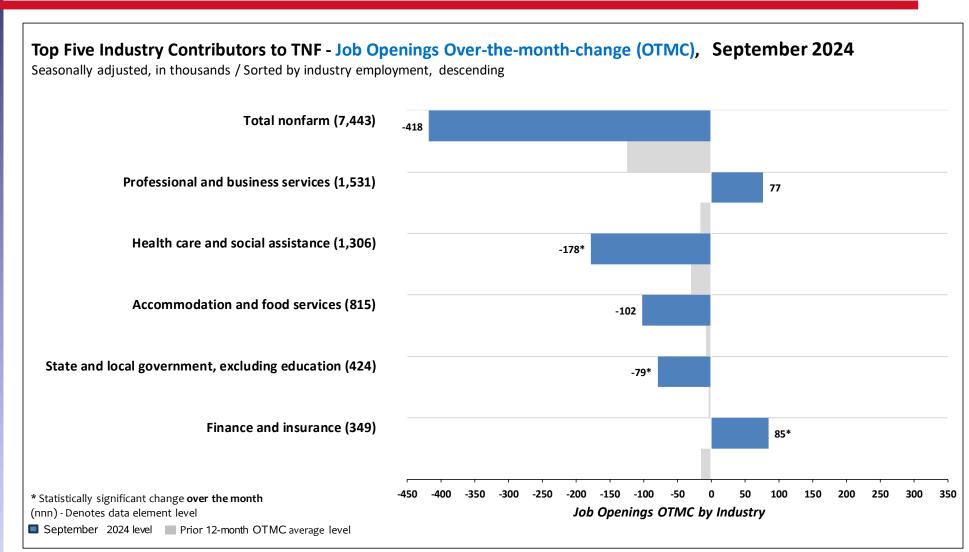
Seasonally adjusted, in thousands

	Sep 2023 Levels	Aug 2024 Levels	Sep 2024 Levels	OTM Level Change	OTM % Change	OTY % Change
Job openings	9,307	7,861	7,443	-418	-5.3%	-20.0%
Hires	5,851	5,435	5,558	123	2.3%	-5.0%
Total separations	5,522	5,168	5,196	28	0.5%	-5.9%
Quits	3,596	3,178	3,071	-107	-3.4%	-14.6%
Layoffs and discharges	1,595	1,668	1,833	165	9.9%	14.9%
Other separations	331	322	292	-30	-9.3%	-11.8%
CES Employment	156,667	158,851	159,105	254	0.2%	1.6%



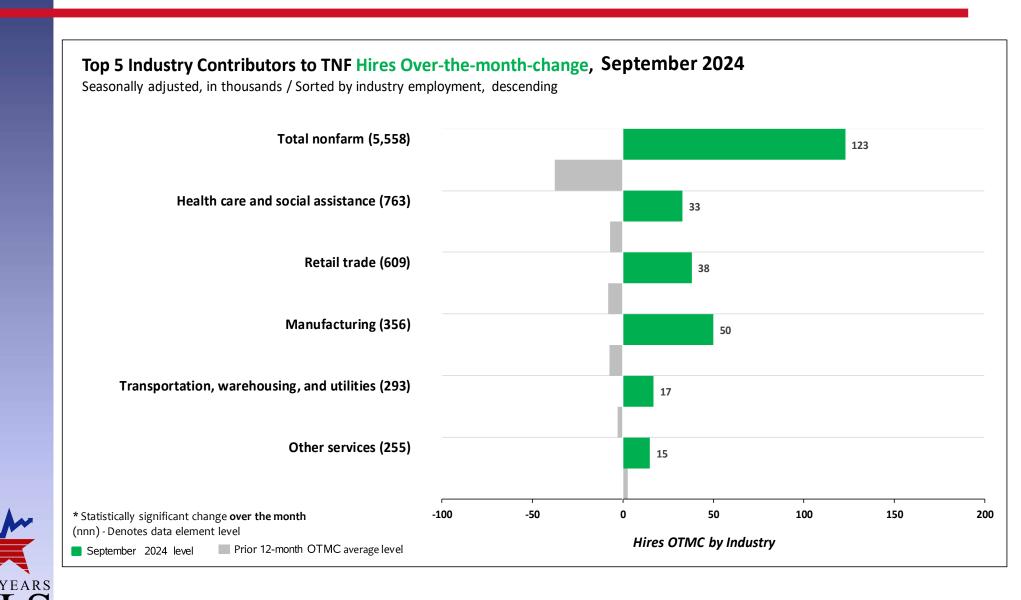


# National Estimates JOB OPENINGS

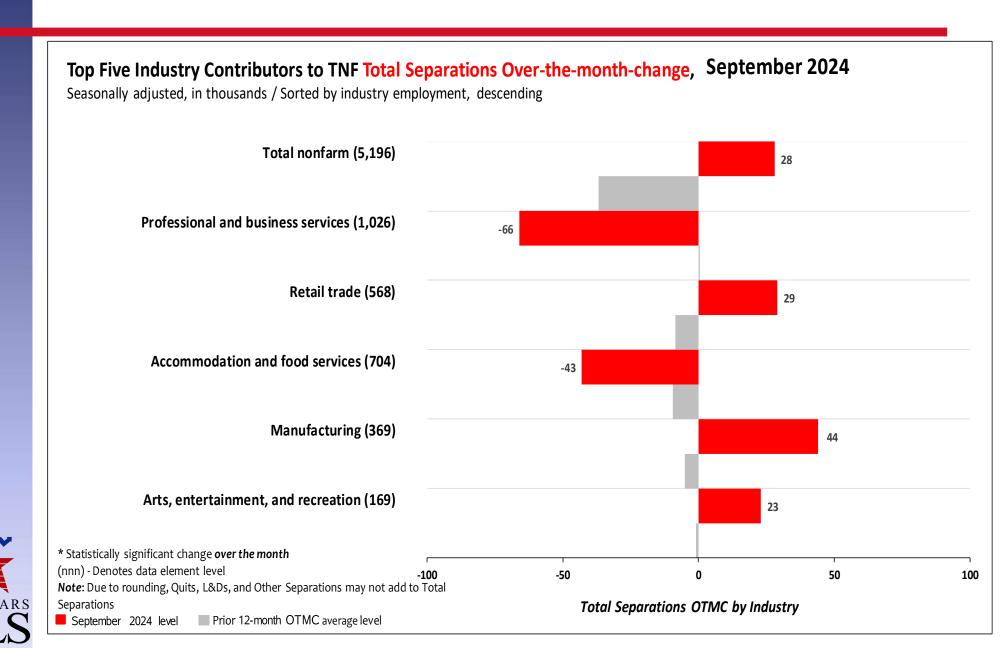




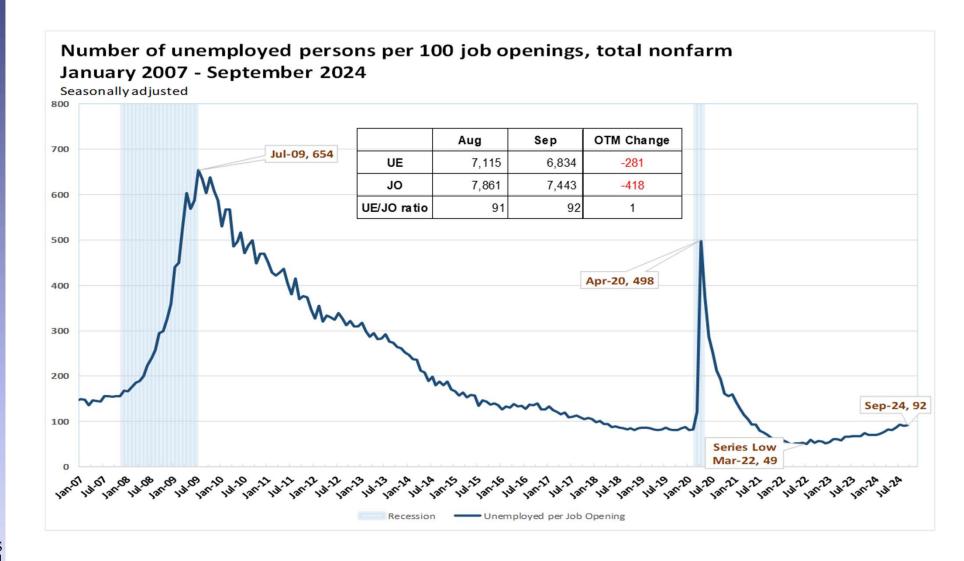
## National Estimates HIRES



## National Estimates TOTAL SEPARATIONS



# National Estimates Unemployed Per Job Opening





# Job Openings and Labor Turnover Survey

### State Estimates



### **State Estimates**Overview

- JOLTS state estimates were developed to leverage other BLS programs' data to better understand statelevel labor market.
- First experimental estimates released to public on May 24th, 2019
  - ► Official publications of JOLTS state estimates began in October 2021; a few weeks after JOLTS national release
- Estimates are produced by combining the JOLTS sample with model-based estimates using CES estimates and the QCEW database.



### State Estimates Overview - Continued

- Geographical Detail: 50 states and DC
- Levels and Rates: JO, H, TS, Q, L&D (No Other Separations)
- Industry Detail: Total nonfarm (only)
- Error Measures: Median standard errors
- Seasonality: Seasonally adjusted and not seasonally adjusted
- Data Availability: Official BLS website



# JOLTS State Estimates Methodology

#### Model Inputs:

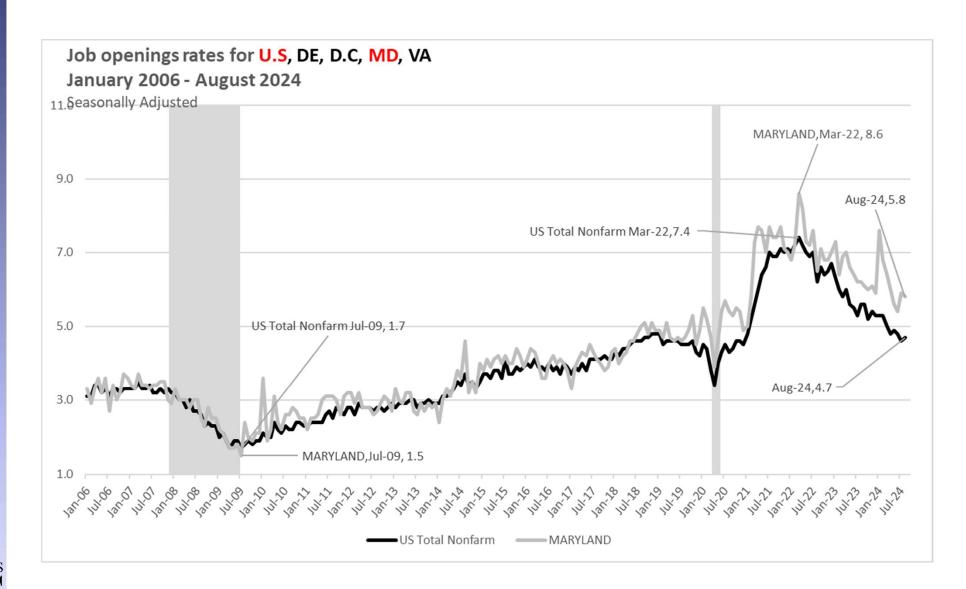
- ► JOLTS microdata records
- ► All weights from JOLTS estimation (final weights that account for a sampling weight, nonresponse adjustment factor (NRAF), agg-codes, etc.)
- ▶ JOLTS published regional rates estimates (regional JO, H, Q, LD, and TS rates)
- CES state-supersector employment
- QCEW-based modeled rates

#### **GENERAL ESTIMATION FORMULA**

JO Level = CES STATE EMP×((Final weight JOLTS rate×CMW)+(Specific Model rate×CMW))

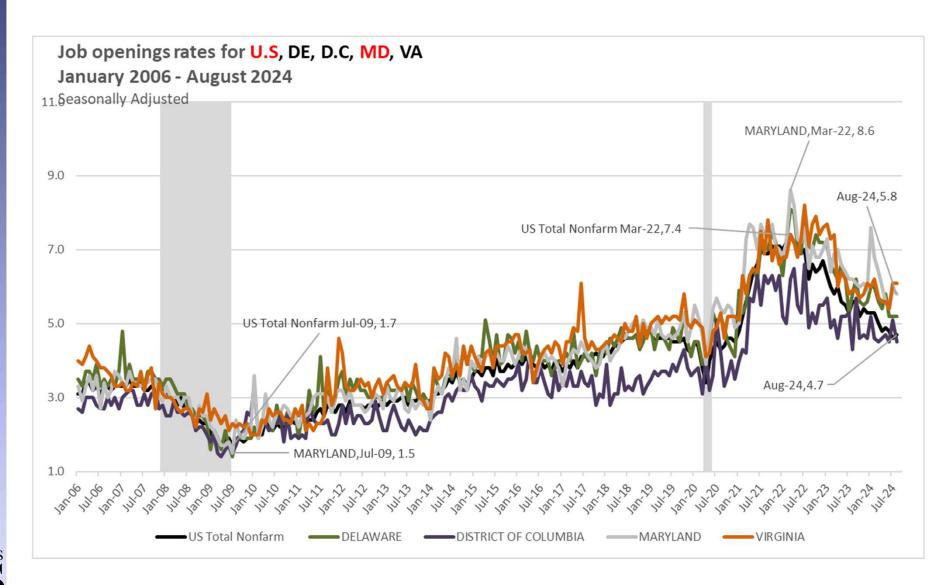


## Job Openings Rates (Maryland Vs US)



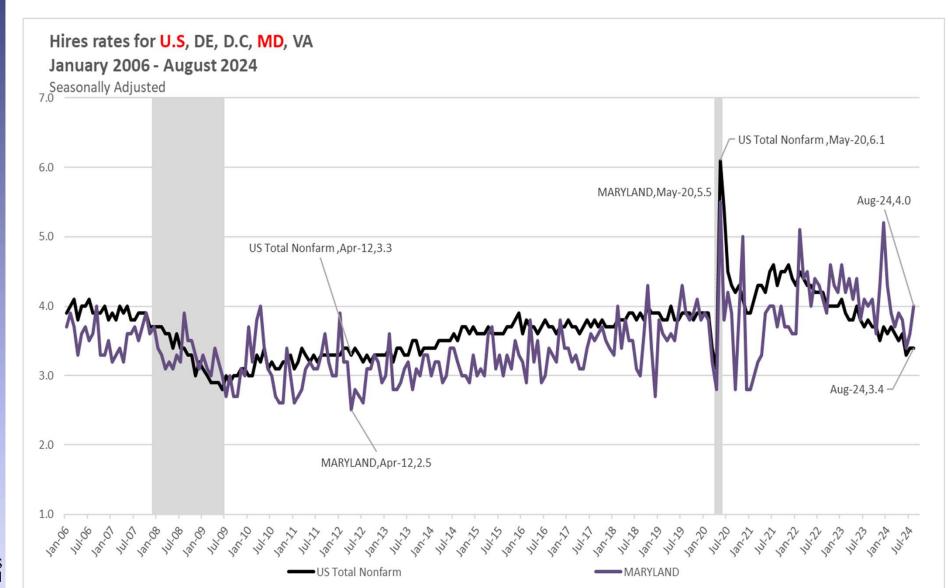


#### **Job Openings Rates**



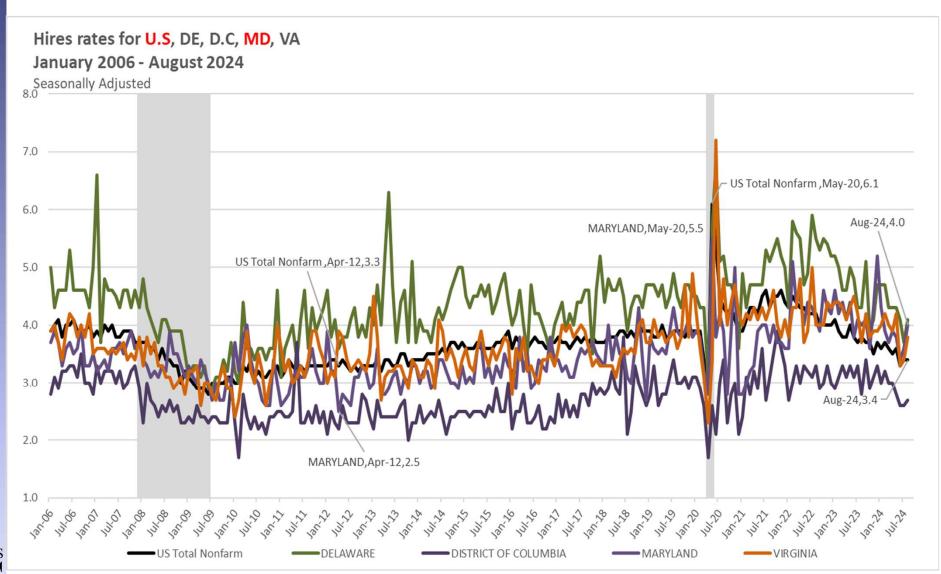


## Hires Rates (Maryland Vs US)



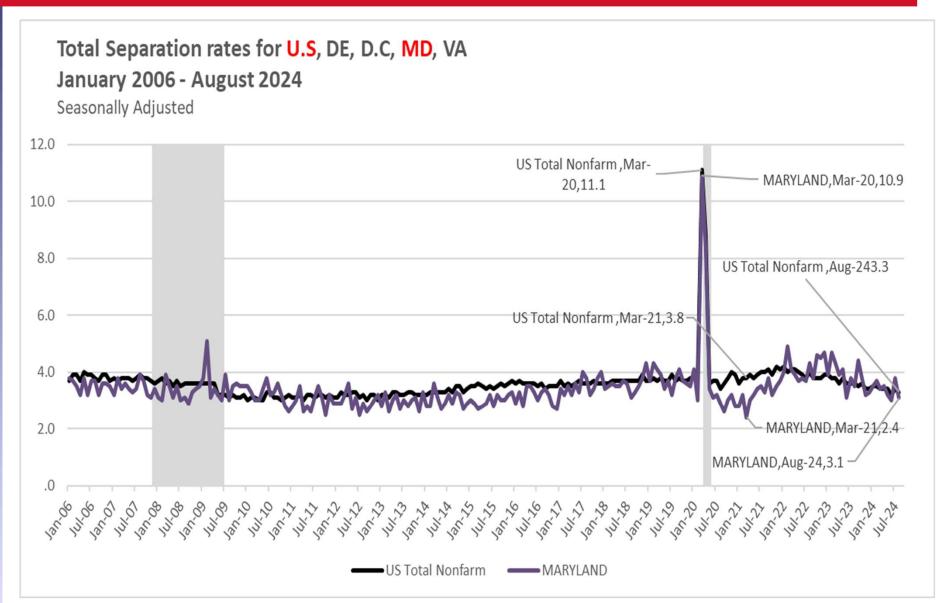


#### **Hires Rates**



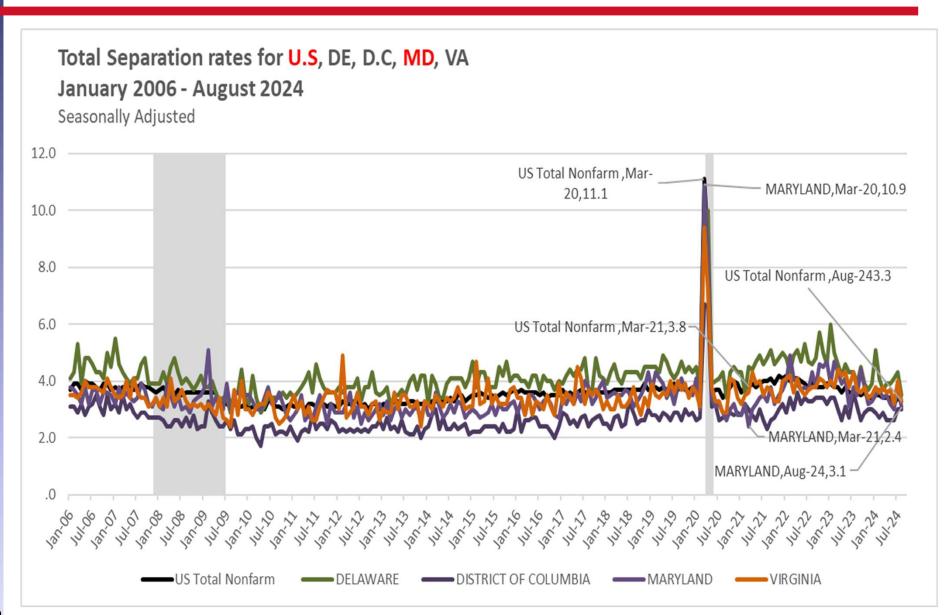


# **Total Separations Rates (Maryland Vs US)**



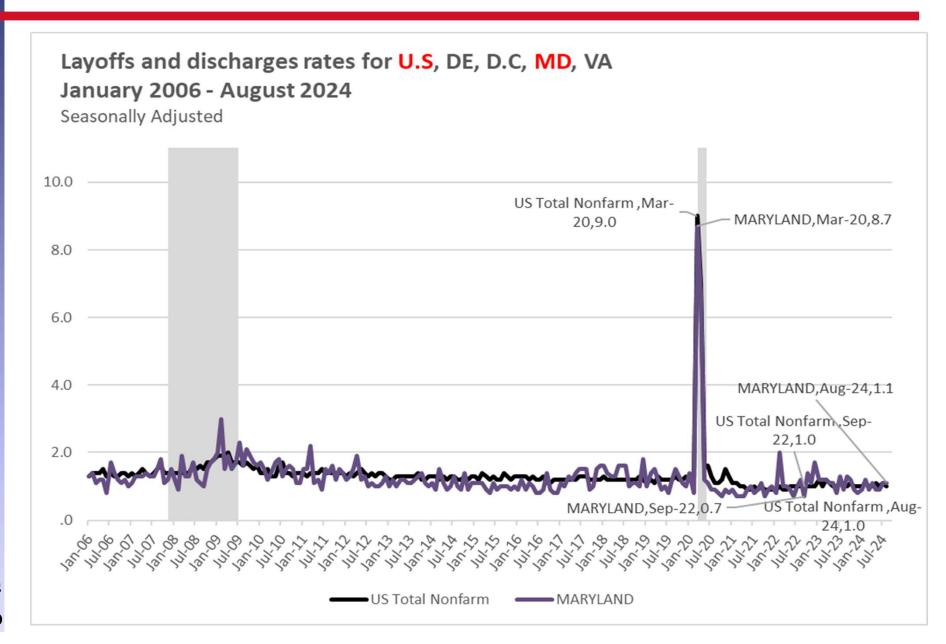


### **Total Separations Rates**



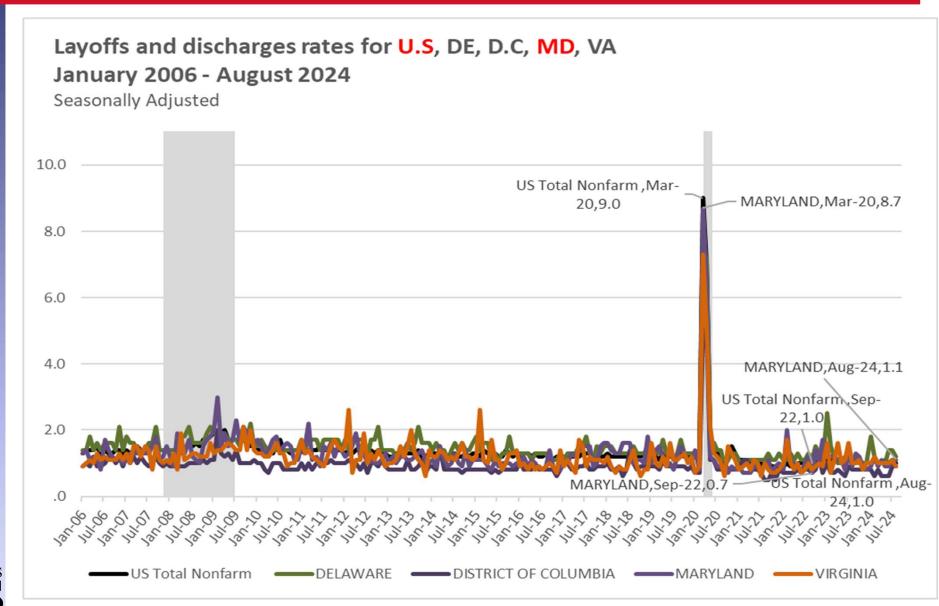


# Layoffs & Discharges Rates (Maryland Vs US)



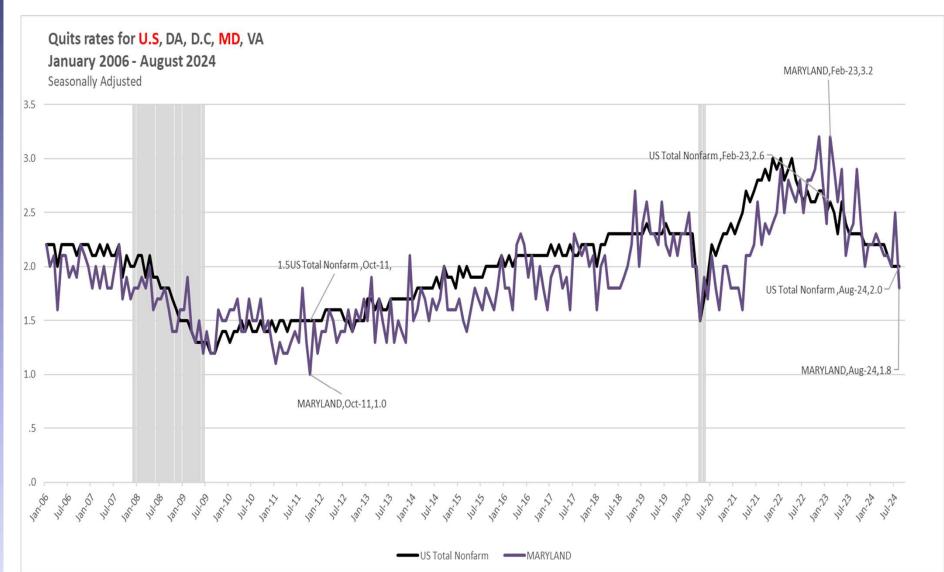


#### **Layoffs & Discharges Rates**



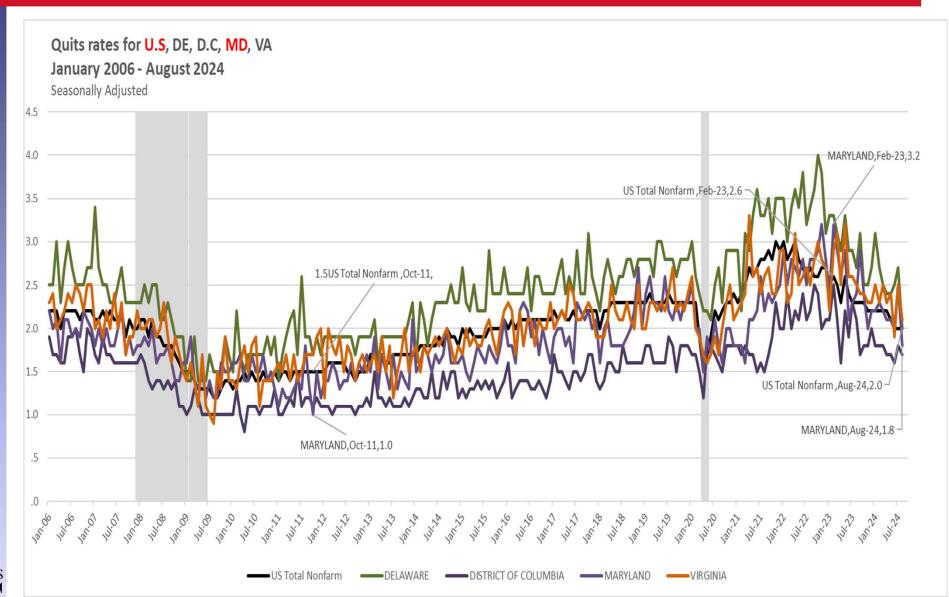


# Quits Rates (Maryland Vs US)



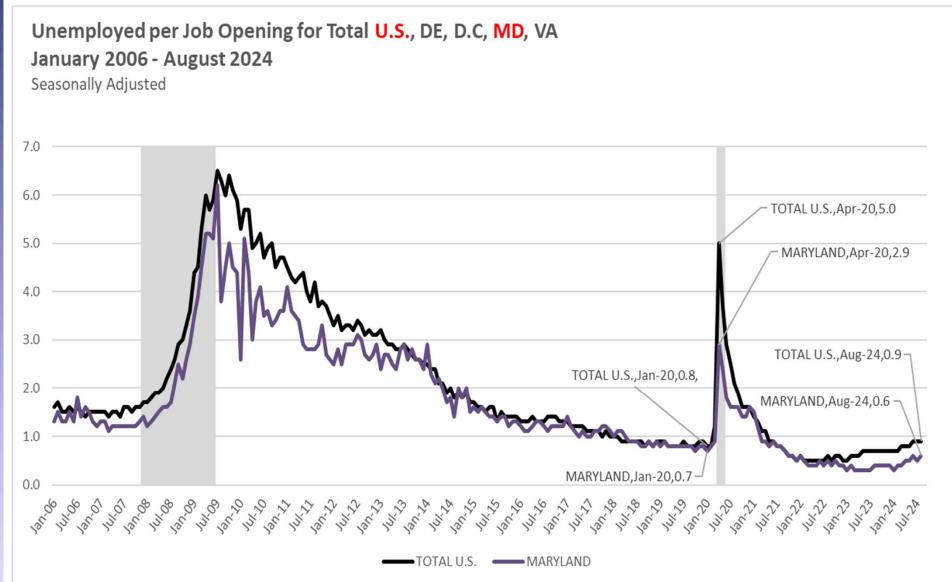


## **Quits Rates**



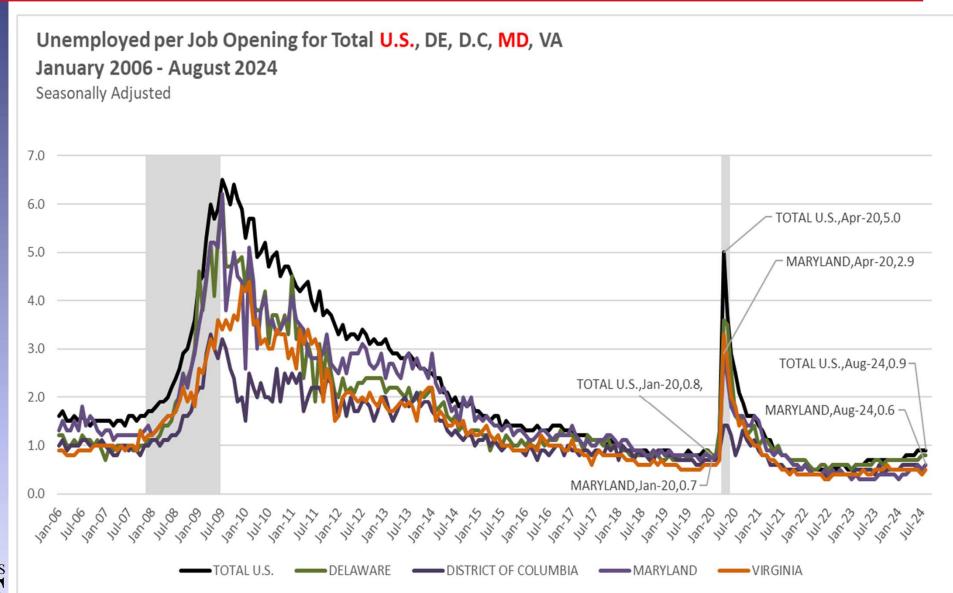


# **Unemployed per Job Opening Maryland Vs US**





## **Unemployed per Job Opening**





## □ Two Releases Published Monthly

#### **NATIONAL**

#### **STATE**





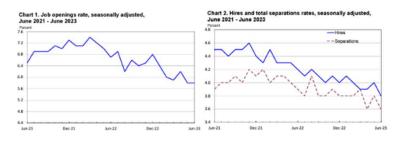
For release 10:00 a.m. (ET) Tuesday, August 1, 2023

Technical information: (202) 691-5870 • JoltsInfo@bls.gov • www.bls.gov/jlt

Media contact: (202) 691-5902 • PressOffice@bls.gov

#### JOB OPENINGS AND LABOR TURNOVER - JUNE 2023

The number of job openings was little changed at 9.6 million on the last business day of June, the U.S. Bureau of Labor Statistics reported today. Over the month, the number of hires and total separations decreased to 5.9 million and 5.6 million, respectively. Within separations, quits (3.8 million) decreased, while layoffs and discharges (1.5 million) changed little. This release includes estimates of the number and rate of job openings, hires, and separations for the total nonfarm sector, by industry, and by establishment size class.





For release 10:00 a.m. (ET) Wednesday, July 26, 2023

Technical information: (202) 691-5870 • JoltsInfo@bls.gov • www.bls.gov/jlt

Media contact: (202) 691-5902 • PressOffice@bls.gov

#### STATE JOB OPENINGS AND LABOR TURNOVER - MAY 2023

Job openings rates decreased in 12 states on the last business day of May, the U.S. Bureau of Labor Statistics reported today. Hires rates increased in 5 states and decreased in 2 states. Total separations rates increased in 9 states and decreased in 7 states. Nationally, the job openings rate decreased while hires and total separations rates changed little in May.

This release includes estimates of the number and rate of job openings, hires, total separations, quits, and layoffs and discharges for the total nonfarm sector and for all states and the District of Columbia.



Source: March 2011 Employee Benefits Survey

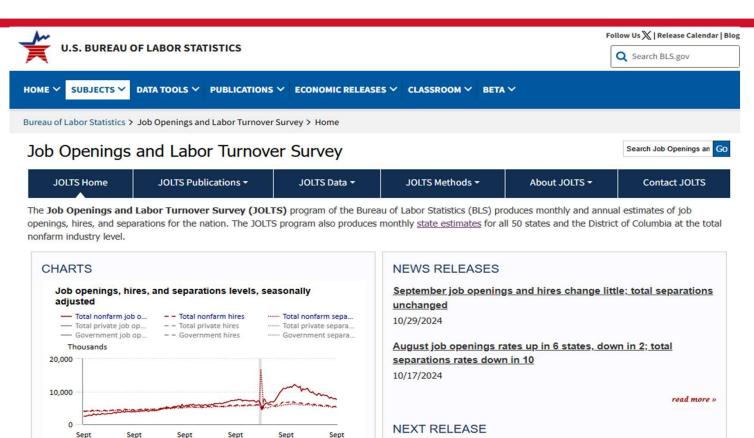
USDL-23-1639

# Job Openings and Labor Turnover Survey

# PRODUCTS & RESOURCES



(continued)





2009

Hover over chart to view data.

LATEST NUMBERS

Source: U.S. Bureau of Labor Statistics

2012

2015

Note: Shaded area represents recession, as determined by the National Bureau of Economic Research

2018



Job Openings and Labor Turnover data for October 2024 are scheduled to

scheduled to be released November 20, 2024, at 10:00 A.M. Eastern Time.

State Job Openings and Labor Turnover data for September 2024 are

be released December 3, 2024, at 10:00 A.M. Eastern Time.

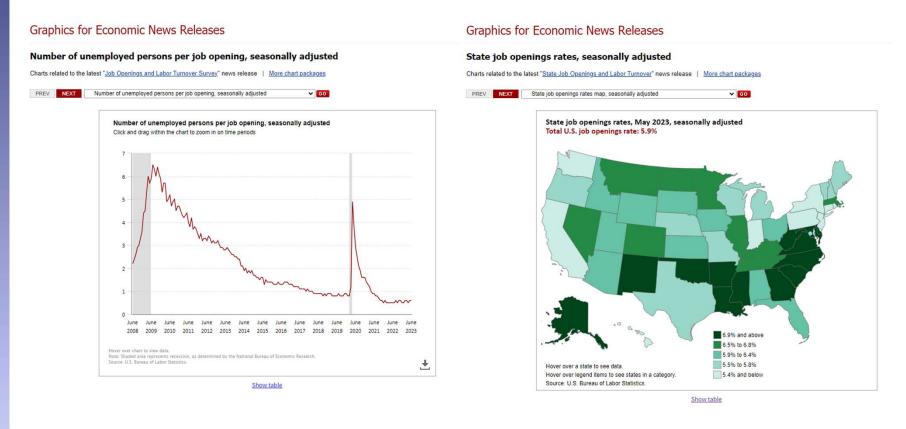
43

2024

read more »

(continued)

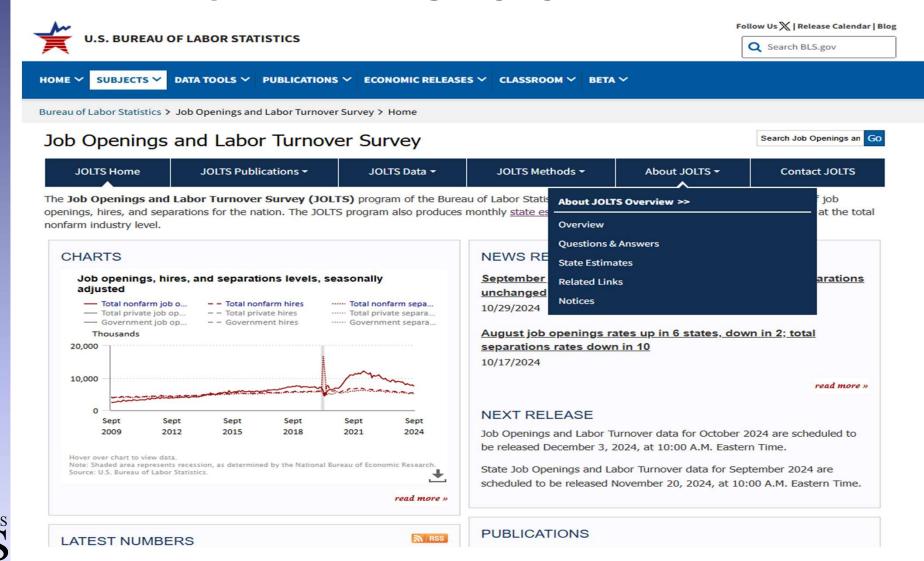
#### **Interactive Charts**





(continued)

#### https://www.bls.gov/jlt/jlt\_statedata.htm



(continued)



#### What is the unemployed people per job openings ratio? A 21-year case study into unemployment trends

By Arthal Adhikori and Tomara Mickle

Since the start of the COVID-19 pandemic in March 2020, there have been entreme movements in the number of unemployed people and job openings. The Bureau of Labor Statistics (BLS) has a useful measure that can help us understand and analyze these movements in the U.S. labor market: the unemployed people per job openings ratio. The ratio is calculated by dividing the number of unemployed people by the number of job openings in a particular month. This number provides insight into how tight or stack the U.S. labor market is. In other words, it tells us about the relationship between labor supply (unemployed people) and labor demand (job openings).



This Beyond the Numbers article will describe the unemployed people per job openings ratio and examine

#### Job openings rate 9.1 percent in West Virginia in December 2022

FEBRUARY 21, 2023

TED HOME TOPICS

TED: The Economics Daily

ARCHIVE BY YEAR ARCHIVE B

In December 2022, West Virginia had the highest job openings rate, 9.1 percent, followed by Louisiana (8.7 percent) and Alaska (8.5 percent). The states with the lowest Job openings rates in December 2022 were New York (4.6 percent), New Jersey (5.4 percent), Connecticut (5.7 percent), and Hawaii (5.8 percent). The national Job openings rate was 6.7 percent in December 2022.





(continued)

#### **Articles and Sources**

- JOLTS Handbook of Methods for detailed program information: <a href="http://www.bls.gov/opub/hom/homch18.htm">http://www.bls.gov/opub/hom/homch18.htm</a>
- JOLTS webpage, publications, for more articles related to the JOLTS program: <a href="http://stats.bls.gov/jlt/publications.htm">http://stats.bls.gov/jlt/publications.htm</a>
- The Beveridge Curve, by Olivier Jean Blanchard and Peter Diamond, Brookings Papers on Economic Activity, Vol. 20, No. 1 (1989), pp. 1-76.
- Structural/Frictional vs. Deficient Demand Unemployment: Some New Evidence, by Katharine Abraham, American Economic Review, Vol. 73, No. 4 (Sep., 1983), pp. 708-724.



#### **BLS REGIONAL RESOURCE**

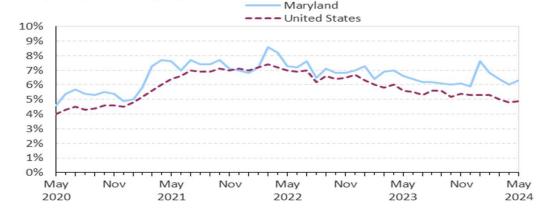
https://www.bls.gov/regions/mid-atlantic/news-release/jobopeningslaborturnover\_maryland.htm



#### Maryland Job Openings and Labor Turnover — May 2024

Maryland had 184,000 job openings in May 2024, compared to 176,000 openings in April, the U.S. Bureau of Labor Statistics reported today. (See <u>table 1</u>.) Regional Commissioner Alexandra Hall Bovee noted that the job openings rate in Maryland was 6.3 percent in May and 6.0 percent in the previous month. (See <u>chart 1</u> and <u>table 2</u>.) The job openings rate nationally was 4.9 percent in May and 4.8 percent in April. (See <u>table 3</u>.) All data in this release are seasonally adjusted.

#### Chart 1. Job openings as a percent of employment for the United States and Maryland, seasonally adjusted







#### **Job Openings and Labor Turnover (JOLTS)**

### **Questions?**

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