

WORKING DRAFT

COVID-19 IN VIRGINIA: ECONOMIC IMPACT ASSESSMENT

Downtown Charlottesville

May 18, 2020

VEDP

Virginia
Economic
Development
Partnership
VEDP.org

MANY STATE AGENCIES HAVE CONTRIBUTED INSIGHTS AND/OR DATA THAT HAVE INFORMED THIS IMPACT ANALYSIS*

- VEC
- DHCD
- VDACS
- Virginia Department of Forestry
- Virginia Marine Products Board
- SBSD/VSBA
- SCHEV
- VCCS
- TAX
- VDOT
- VHDA
- VTC

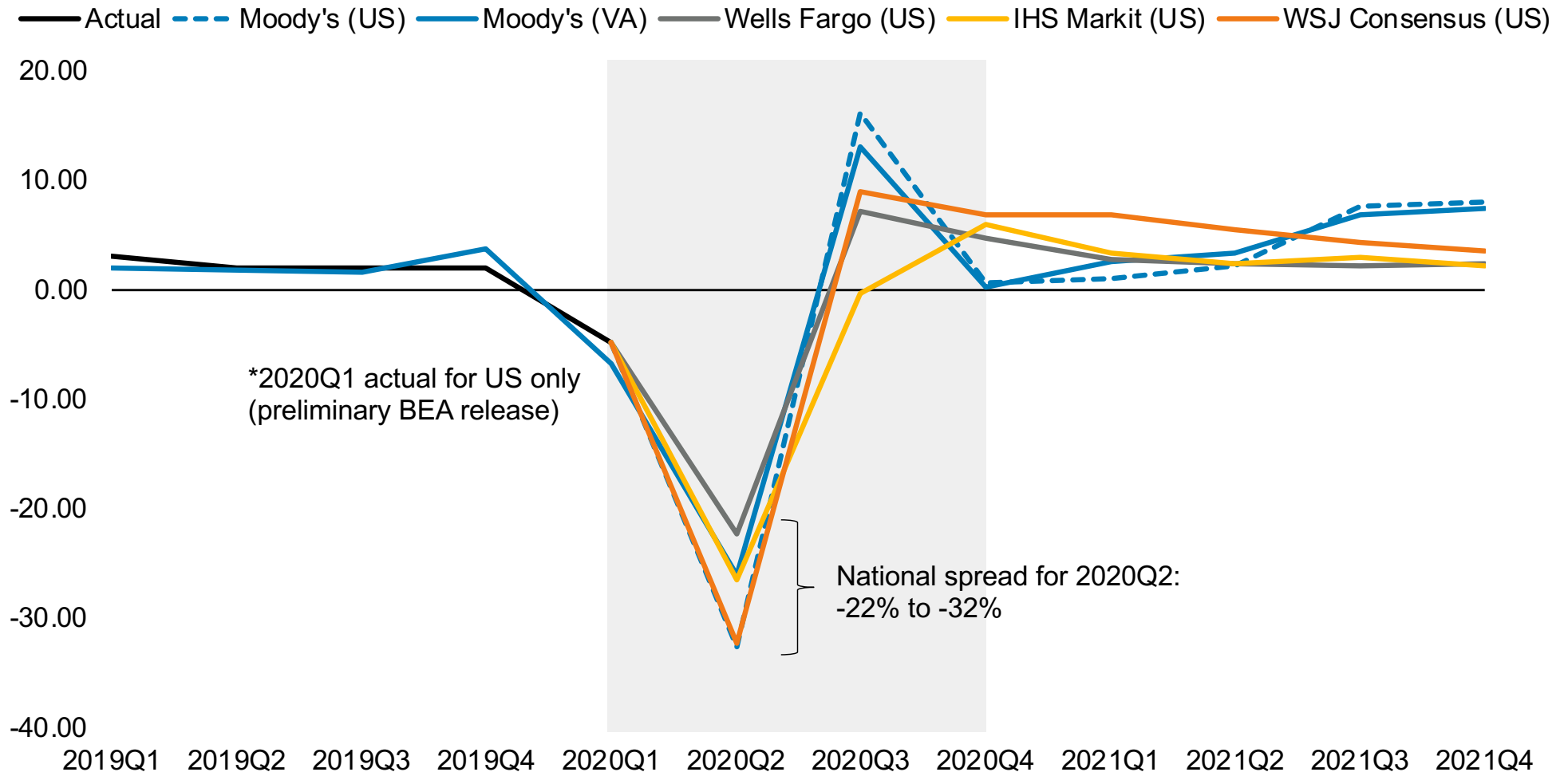
***** PLEASE NOTE ALL ESTIMATES IN THIS DOCUMENT ARE PRELIMINARY AND SUBJECT TO SUBSTANTIAL REVISION *****

National economic forecast

UNPRECEDENTED ECONOMIC SHOCK: FORECASTERS PREDICT SHARP DOWNTURN IN 2020 (ESPECIALLY CURRENT QUARTER)

Quarterly real GDP growth

Annualized % change, billions of chained 2012 \$

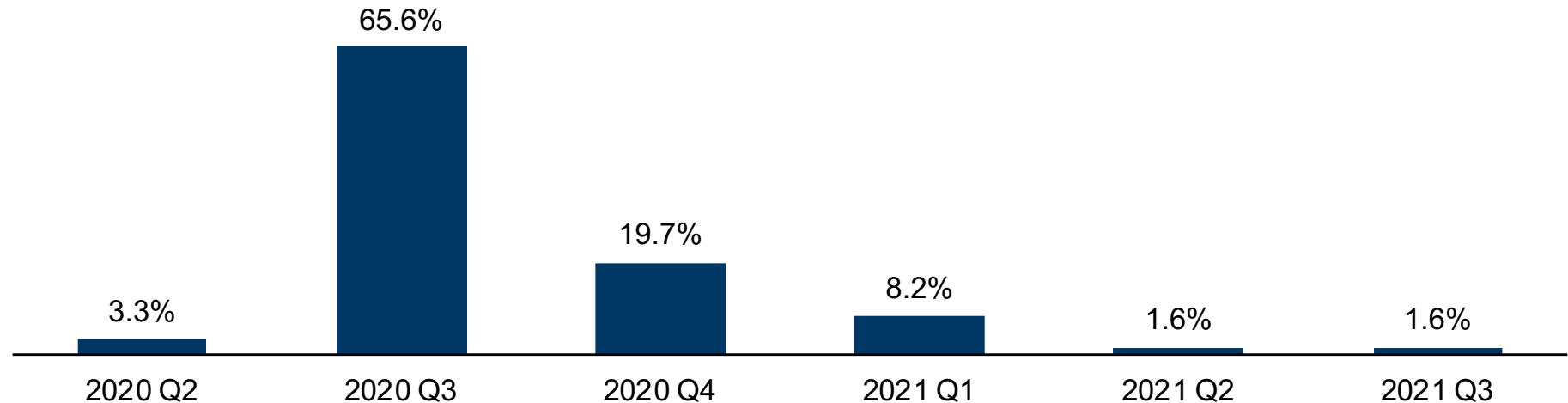


Source: Moody's Analytics (May /April baselines); Wells Fargo (April forecast); IHS Markit (April update); Wall Street Journal (May survey); VEDP analysis

MAJORITY OF ECONOMISTS SURVEYED BY THE WALL STREET JOURNAL EXPECT ECONOMIC RECOVERY TO START IN 2020Q3

When do you expect the economic recovery to start?

Survey of 60 economists by WSJ, May 1, 2020



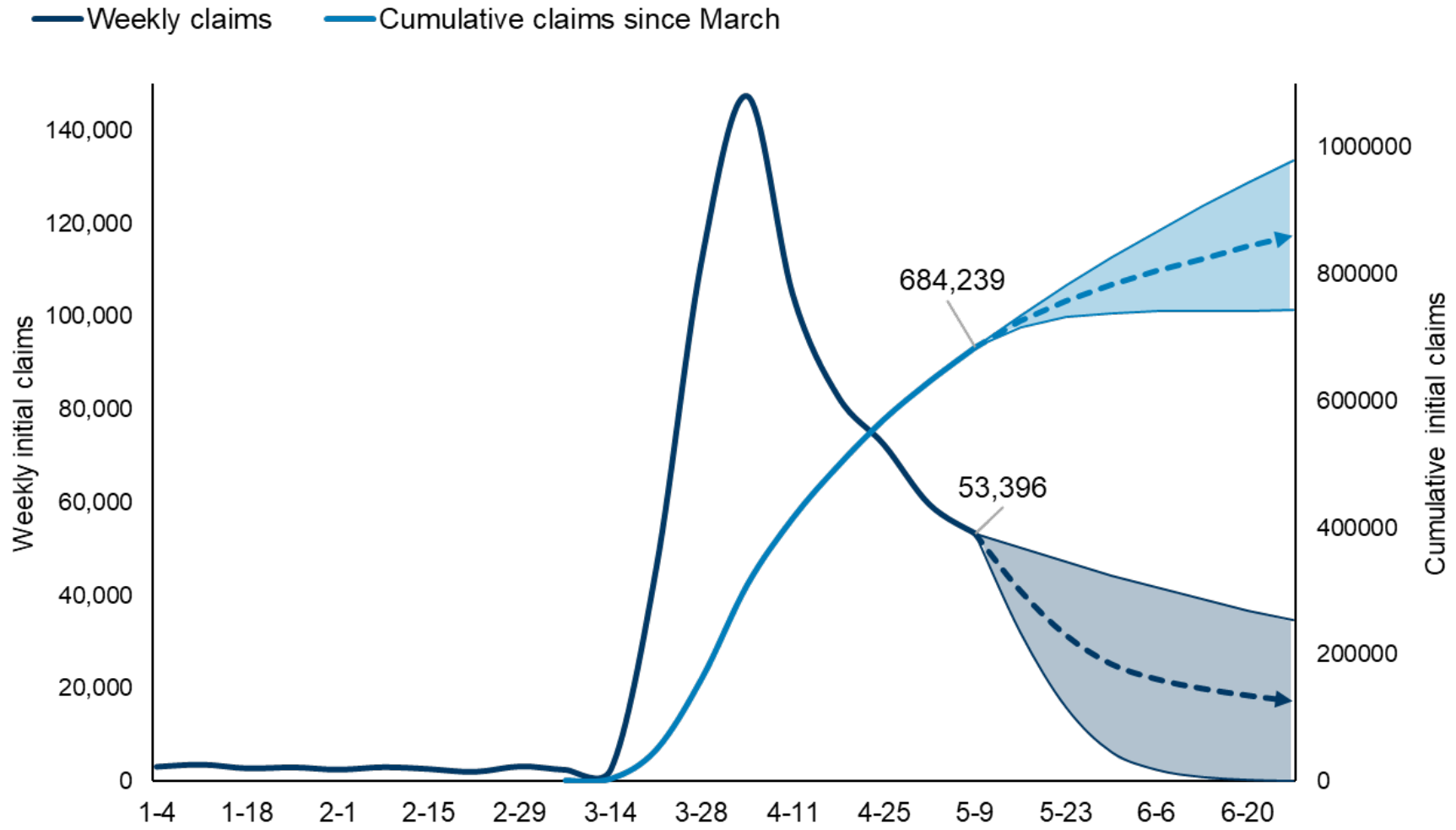
- Moody's Analytics current national and Virginia forecasts have job loss peaking in May 2019.
- The Wall Street Journal's April survey of leading economists found about two third of economists predicting the labor market's low point in the U.S. will be in the third quarter of 2020.
- A recent epidemiological model published by the University of Washington's Institute for Health Metrics and Evaluation (IHME), points to a mid- to late-April apex. Most public health experts agree that we would need 3-4 weeks of sustained drop in infection rates, deaths before a gradual easing of containment measures.
- There are other **key requisites for lifting containment measures** that need to be met, including adequate hospital, testing, and public health capacity. If these conditions cannot be met, further economic losses could be faced.

Impact in Virginia

TRENDS IN INITIAL UNEMPLOYMENT INSURANCE CLAIMS HELP INFORM IMPACT PROJECTIONS

Weekly UI initial claims in Virginia

YTD weekly claims (through May, 9 2020), not seasonally adjusted



CLAIMS BY OCCUPATION: UNEMPLOYMENT CLAIMS HAVE BEEN CONCENTRATED IN A HALF DOZEN OCCUPATIONS

UI initial claims by occupation
March 4 to May 2, 2020¹

Med. wages
2019, \$

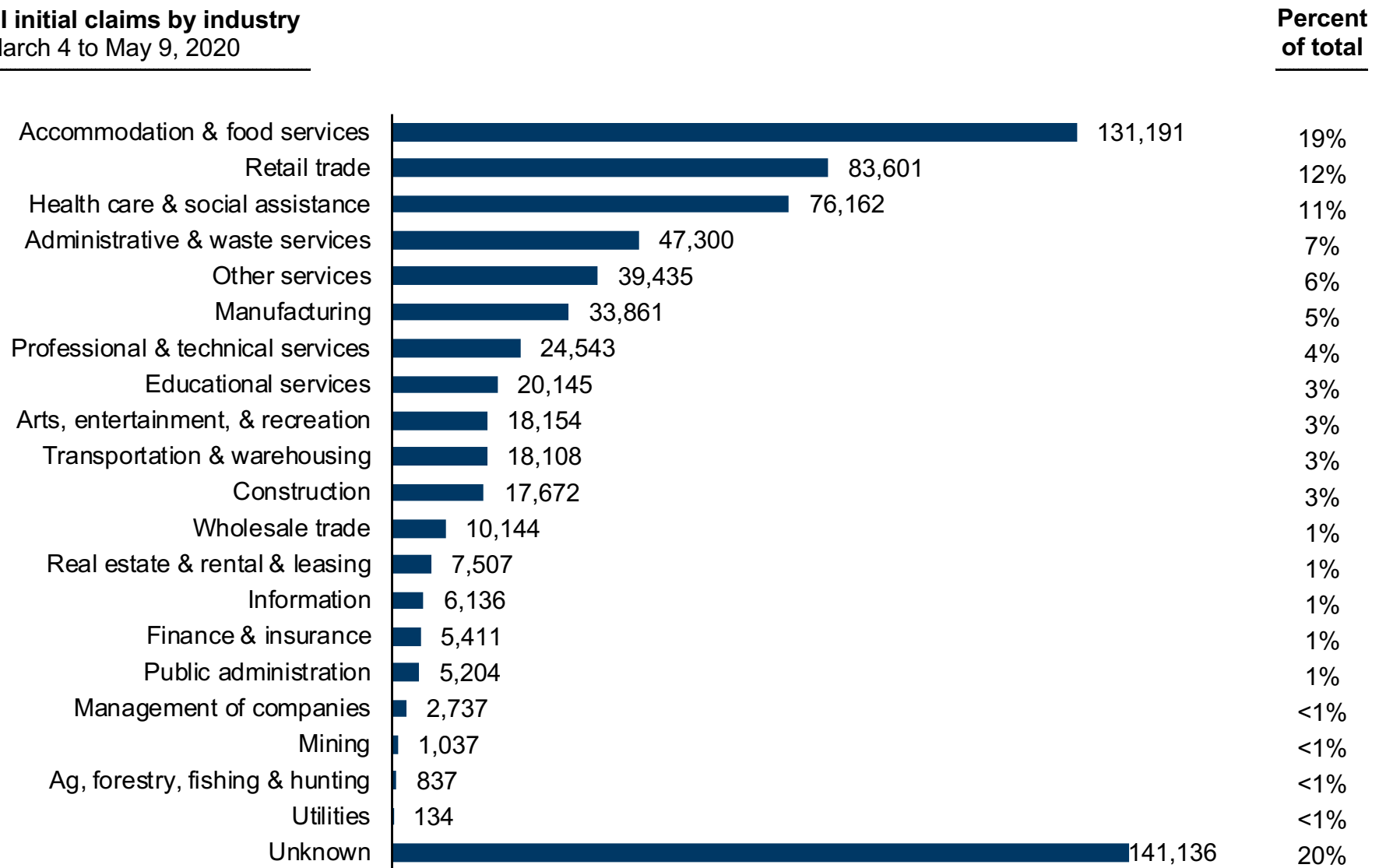


¹ Data not yet available for most recent week

Source: Virginia Employment Commission (UI claims); Bureau of Labor Statistics, OES (avg. wages); VEDP analysis

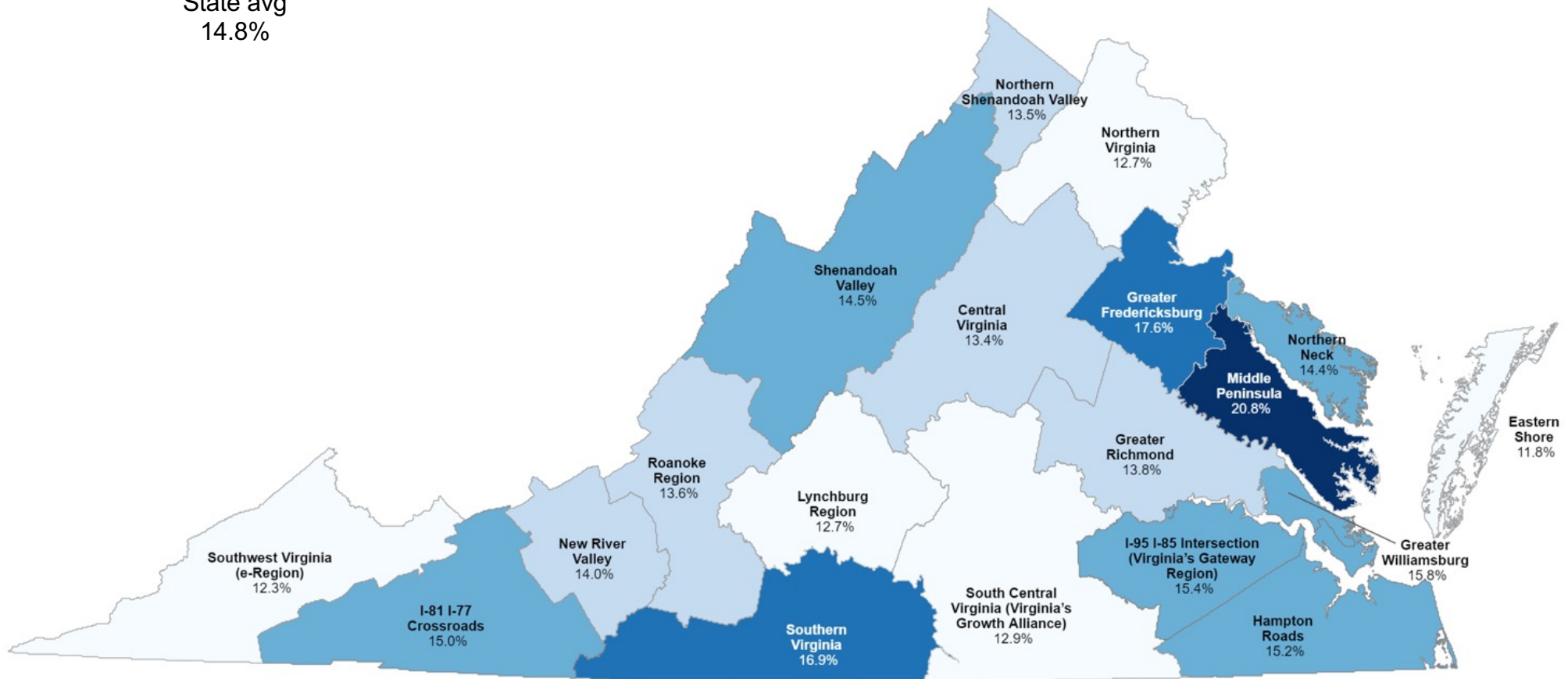
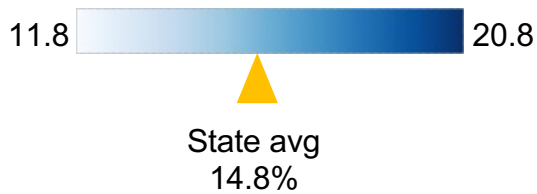
CLAIMS BY INDUSTRY: THREE INDUSTRIES ACCOUNT FOR THE MAJORITY OF INITIAL UI CLAIMS TIED TO SPECIFIC INDUSTRIES

UI initial claims by industry
March 4 to May 9, 2020



INITIAL UNEMPLOYMENT CLAIMS HAVE VARIED SIGNIFICANTLY ACROSS VIRGINIA REGIONS

UI initial claims as % of baseline jobs
March 4 to May 9, 2020

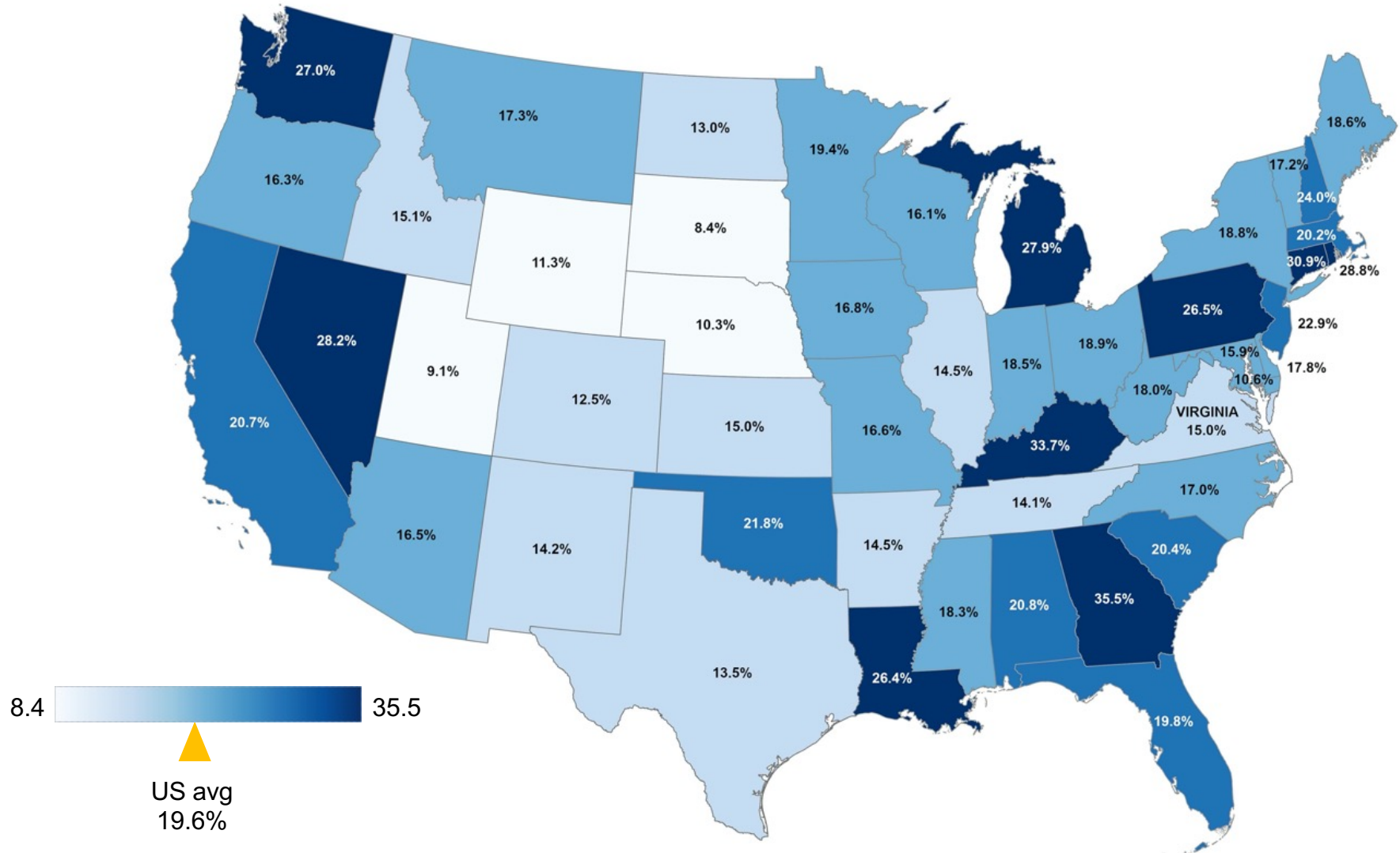


Source: Virginia Employment Commission; VEDP analysis

TO DATE, EMPLOYMENT IN VIRGINIA HAS NOT BEEN HIT AS HARD BY COVID-19 AS MOST OTHER STATES

UI initial claims as % of baseline jobs

March 4 to May 9, 2020, not seasonally adjusted

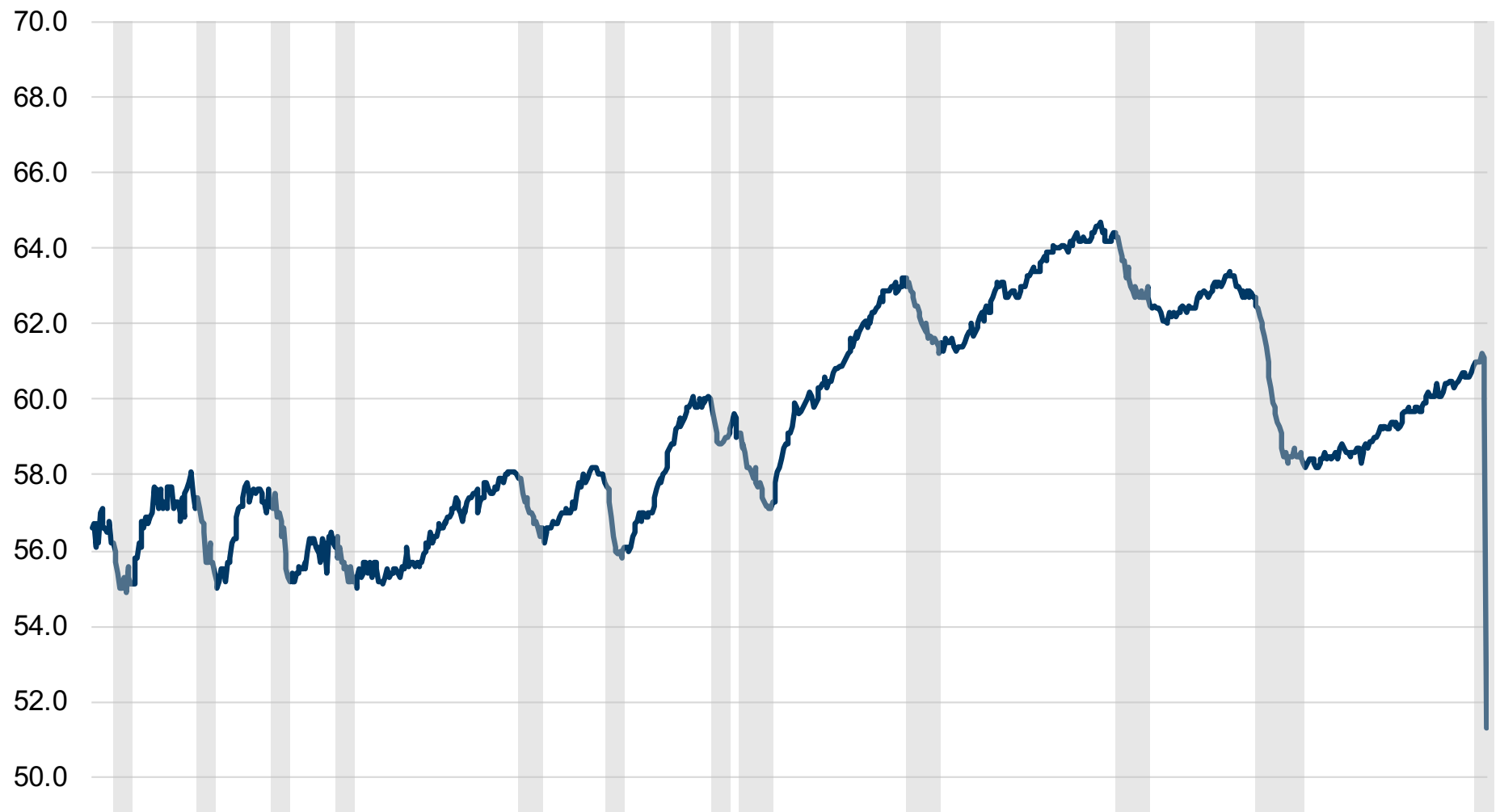


Source: U.S. Department of Labor; VEDP analysis

ONLY ABOUT HALF OF ADULTS WERE WORKING IN APRIL, THE LOWEST EMPLOYMENT-POPULATION RATIO ON RECORD

Employment-Population Ratio

Population age 16 and over, Seasonally Adjusted, Monthly, 1948 – 2020

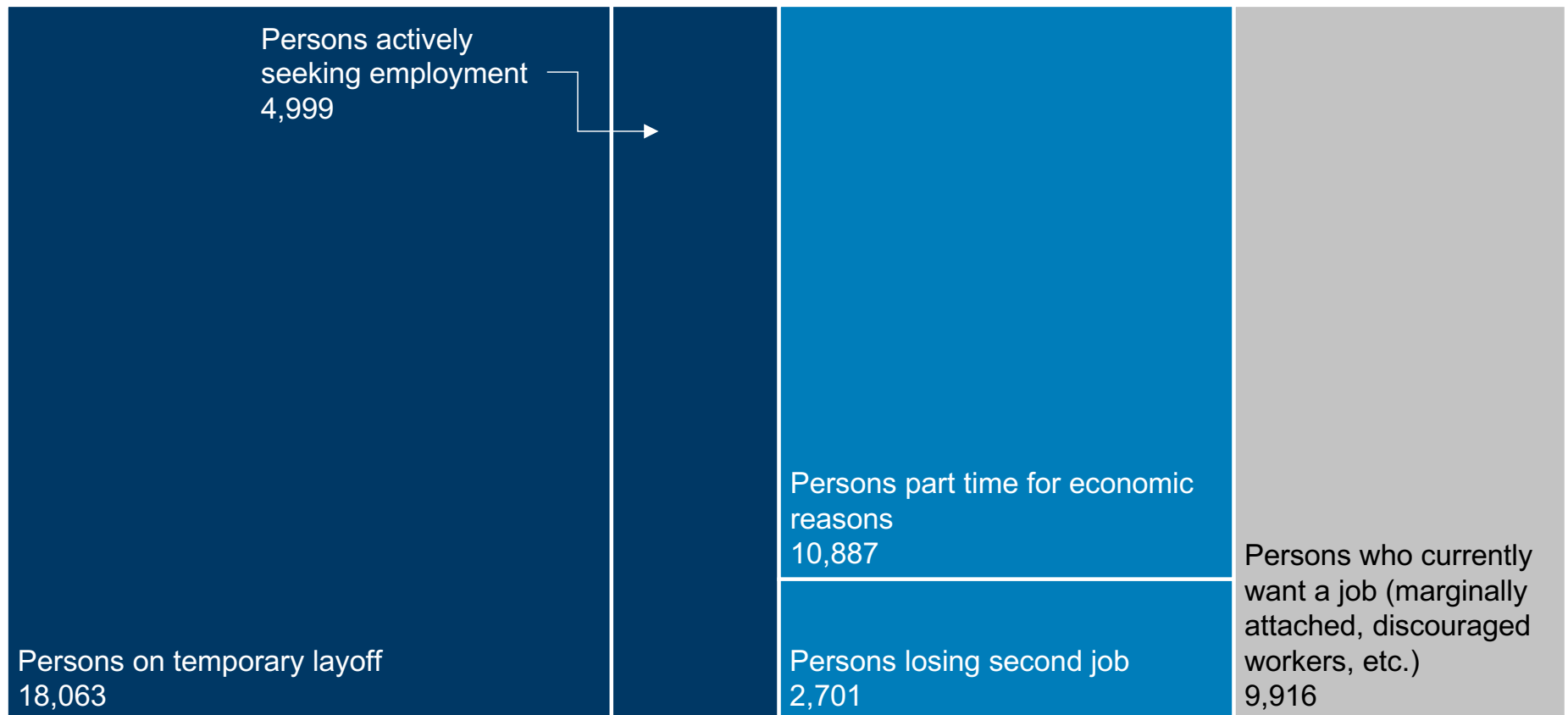


IMPACT OF COVID-19 EXTENDS BEYOND THOSE UNEMPLOYED TO OTHER CATEGORIES OF WORKERS

Persons by category

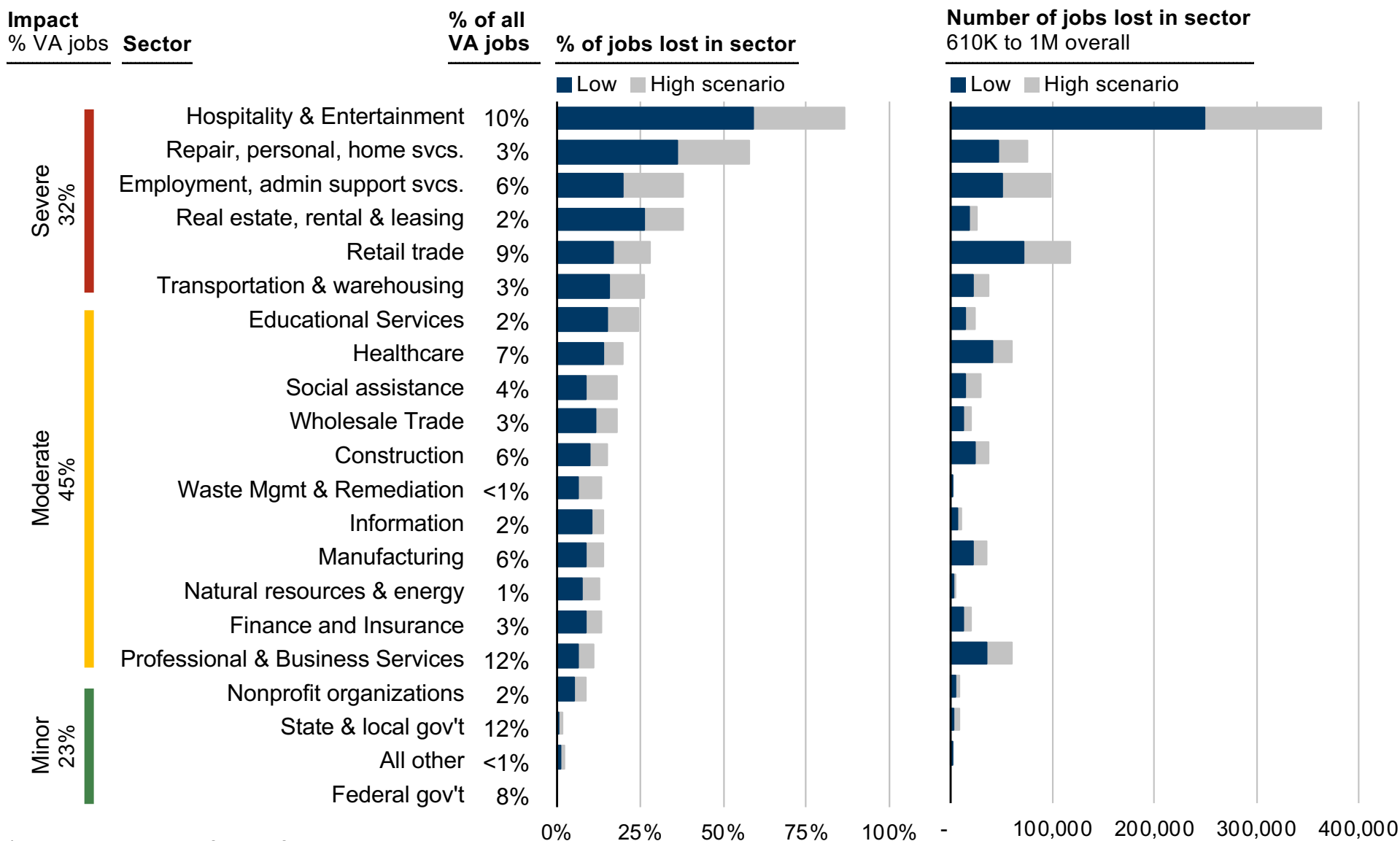
Thousands of persons, Seasonally Adjusted, April 2020

■ Unemployed ■ In workforce ■ Outside labor force



VEDP estimates

PRELIMINARY: ROUGHLY 660K-1M JOBS IN VIRGINIA COULD BE LOST DUE TO DIRECT, INDIRECT, & INDUCED IMPACT



* Assumes additional flexible federal budget support

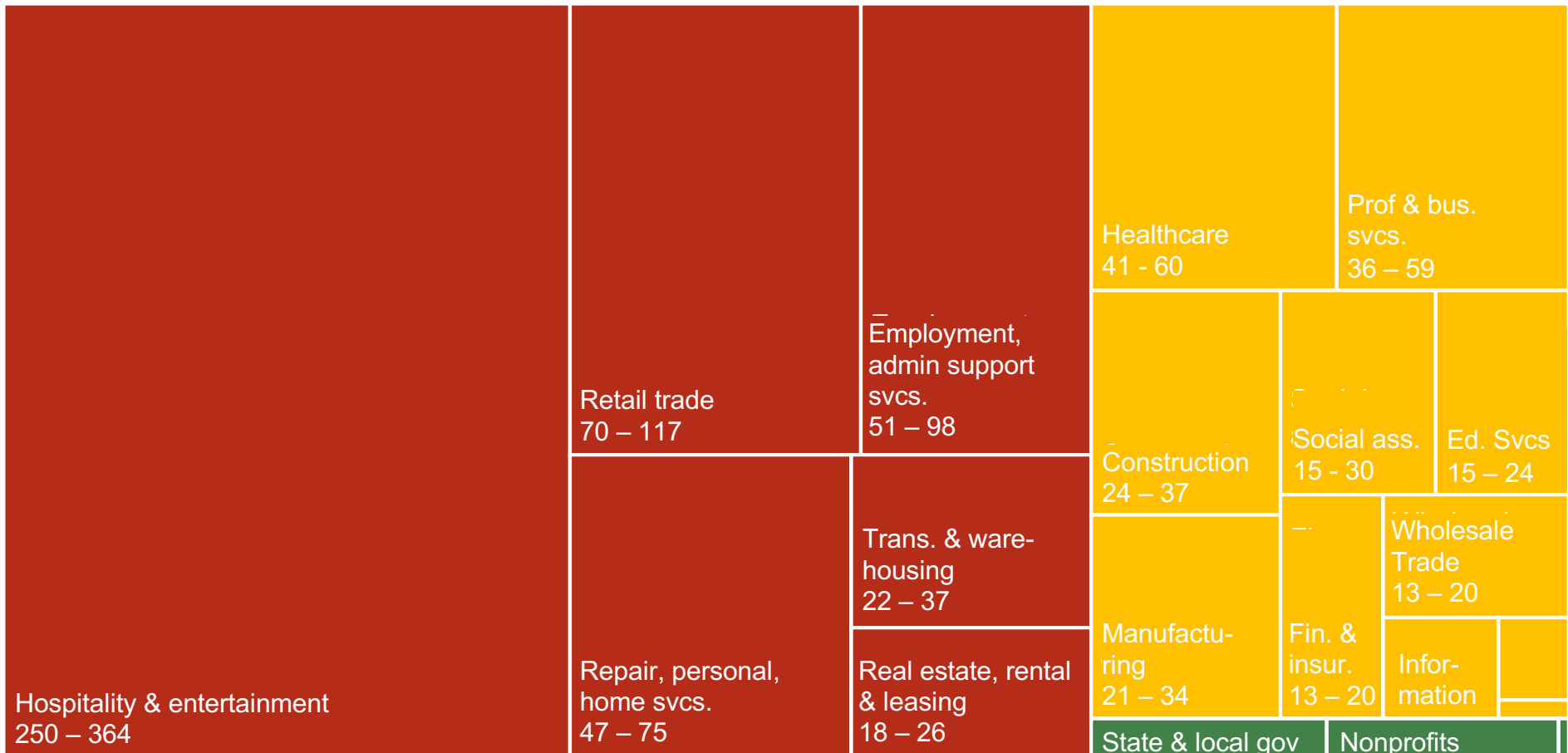
Source: Emsi 2020.1; VEC UI claims; information from Data Compilation workgroup of Virginia Economic Strike Force; interviews with Virginia businesses and stakeholders; review of national economic forecasts, research, and press; VEDP analysis

SEVERELY IMPACTED INDUSTRIES REPRESENT OVER TWO-THIRDS OF TOTAL FORECASTED EMPLOYMENT LOSSES

Estimated employment loss by industry

Range of estimated job losses in thousands, area based on average of high & low scenarios

■ Severe
 ■ Moderate
 ■ Minor

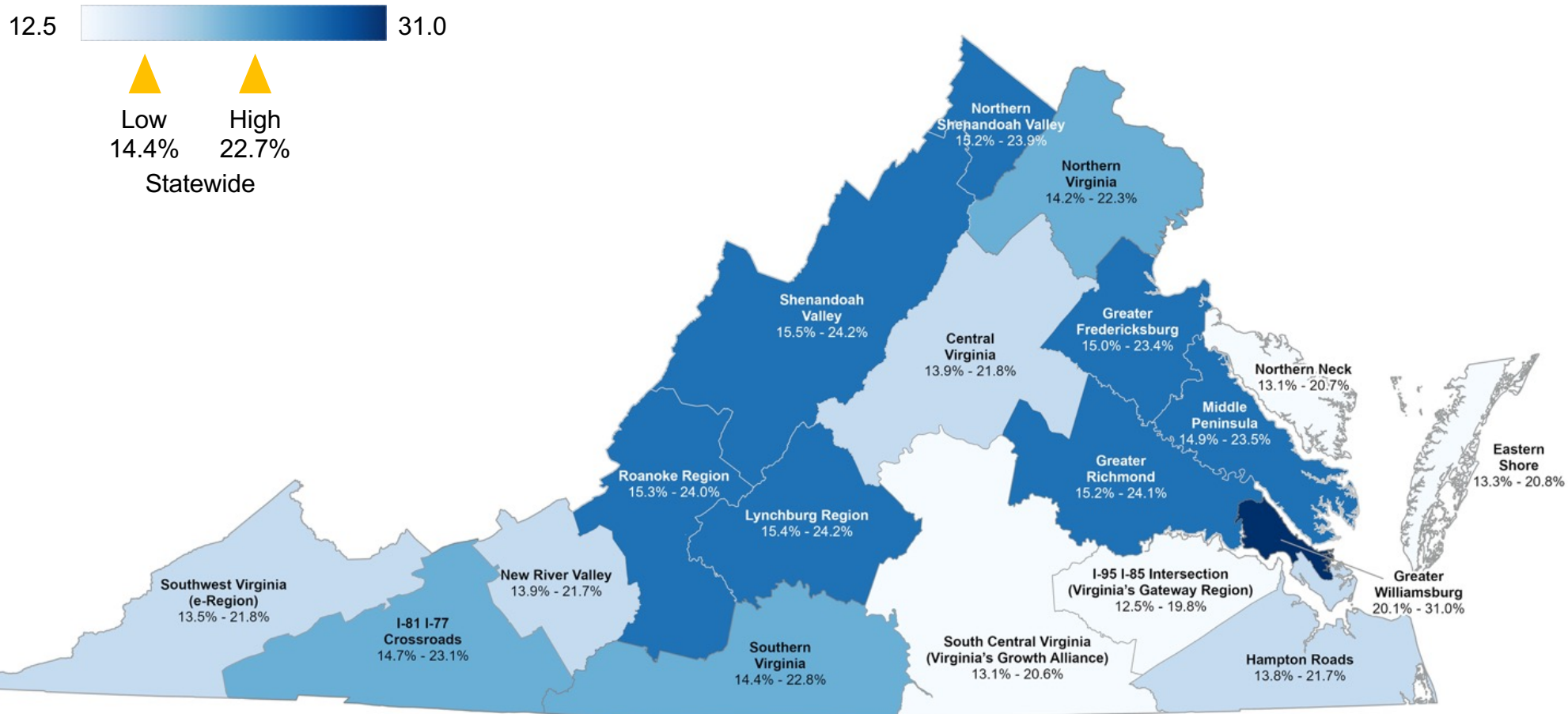


Source: Emsi 2020.1; VEC UI claims; information from Data Compilation workgroup of Virginia Economic Strike Force; interviews with Virginia businesses and stakeholders; review of national economic forecasts, research, and press; VEDP analysis

POTENTIAL JOB LOSSES VARY BY REGION, LARGELY DUE TO DIFFERENCES IN INDUSTRY MIX (E.G., % OF JOBS IN HOSPITALITY)

Estimated jobs lost/furloughed as % of baseline jobs

Range of estimated job losses, shading based on average of high and low scenarios



VARIOUS ORGS FORECASTING JOB LOSSES ARE USING DIFFERENT MEASURES AND METHODS; VEDP RESULTS LARGELY COMPARABLE

Important note on VEDP preliminary estimates

- VEDP preliminary estimates of 660K to 1M correspond to job loss due to direct, indirect, and induced impacts from COVID-19 pandemic. VEDP does not have forecast of the pace or extent of employment recovery over 2020 Q3 & Q4, so cannot estimate net impact for 2020 – e.g. end-of-year balance of job reductions and additions.
- VEDP estimates include payroll jobs covering all sectors, including agriculture, as well as sole proprietors (e.g. self-employed). Most other forecasters present job loss numbers using non-farm payroll, which provide poor or no coverage of the latter categories and may underrepresent full extent of job loss.

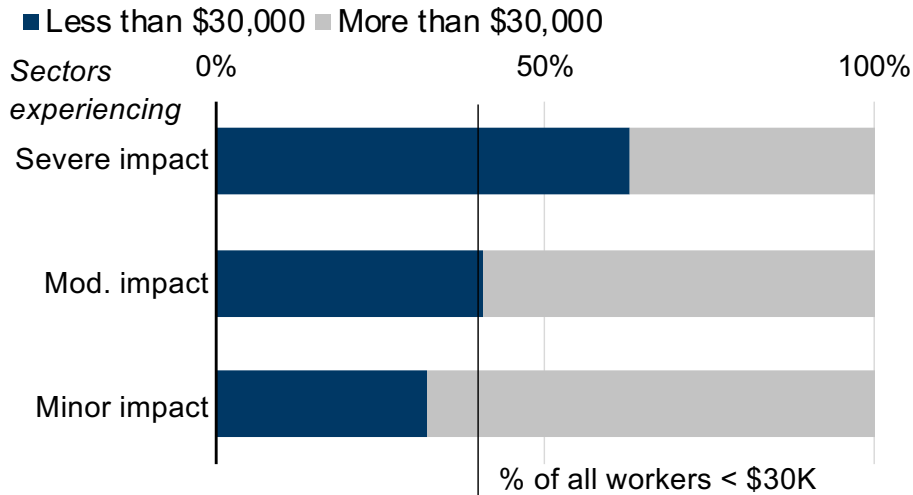
Comparison with other forecasts

- **Moody's** April Virginia forecast projects approximately 512K payroll non-farm jobs lost peak to trough (January 31 and May 31), with employment still down 349K jobs on net December 31.
- **McKinsey & Company** analyzed employment by occupation and determined that a total of 1.3M Virginia jobs were 'vulnerable' to layoff, hour, or wage reduction.
- Dynamic modelling conducted by UVA's **Weldon Cooper Center** projects payroll non-farm job losses ranging from 300K to 500K on net in 2020, based on scenarios ranging from 2% to 6% GDP contraction, respectively. However, Weldon Cooper has not estimated max job losses at peak.

DEGREE OF IMPACT ON VIRGINIA WORKERS LIKELY TO VARY SIGNIFICANTLY DEPENDING UPON SOCIO-ECONOMICS

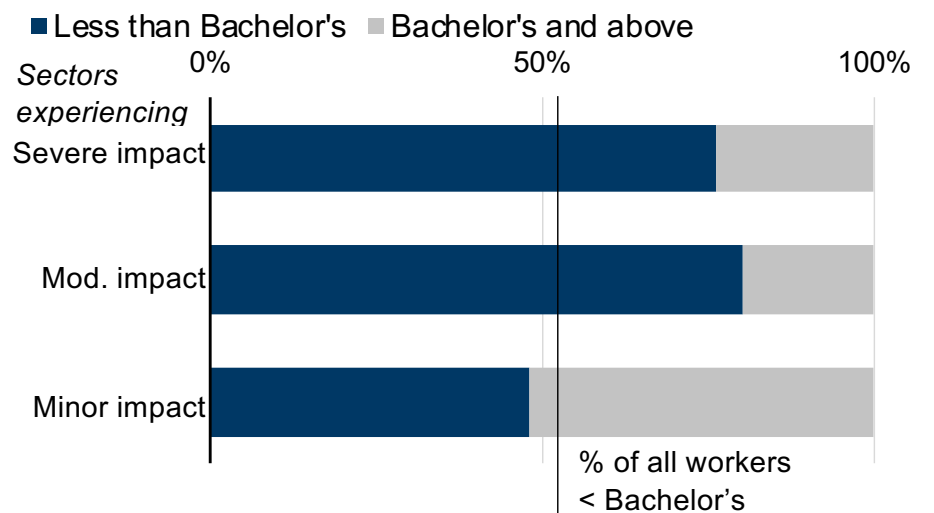
Lower-wage workers disproportionately represented in severe-impact sectors

% of workers by income group



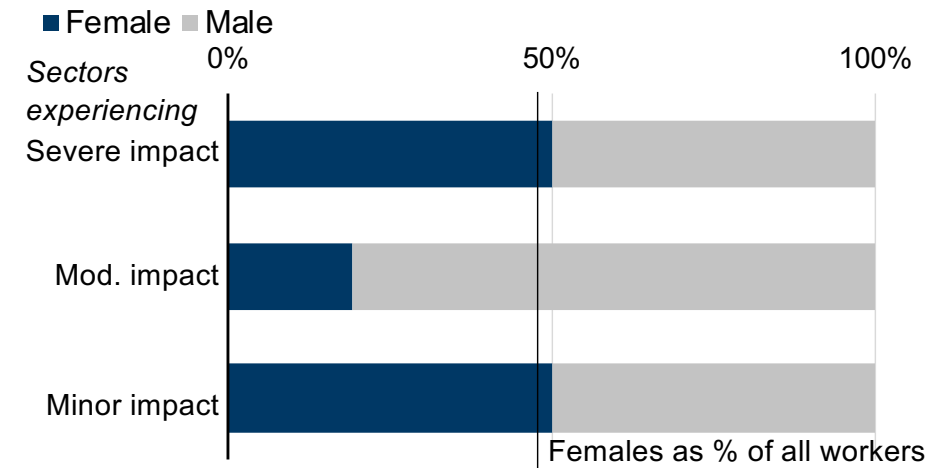
Workers without college degrees disproportionately represented in severe-impact sectors

% of workers by educational attainment



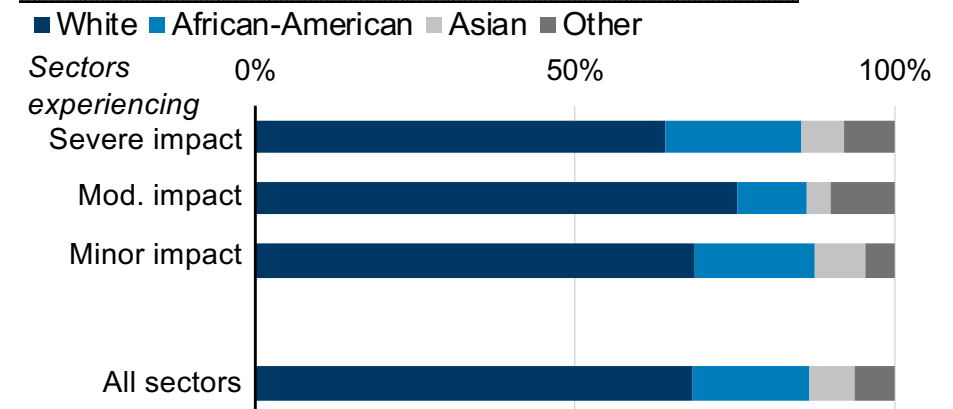
Genders equally represented in severe-impact sectors

% of workers by gender



Minority workers slightly more heavily represented in severe-impact sectors

% of workers by ethnic group

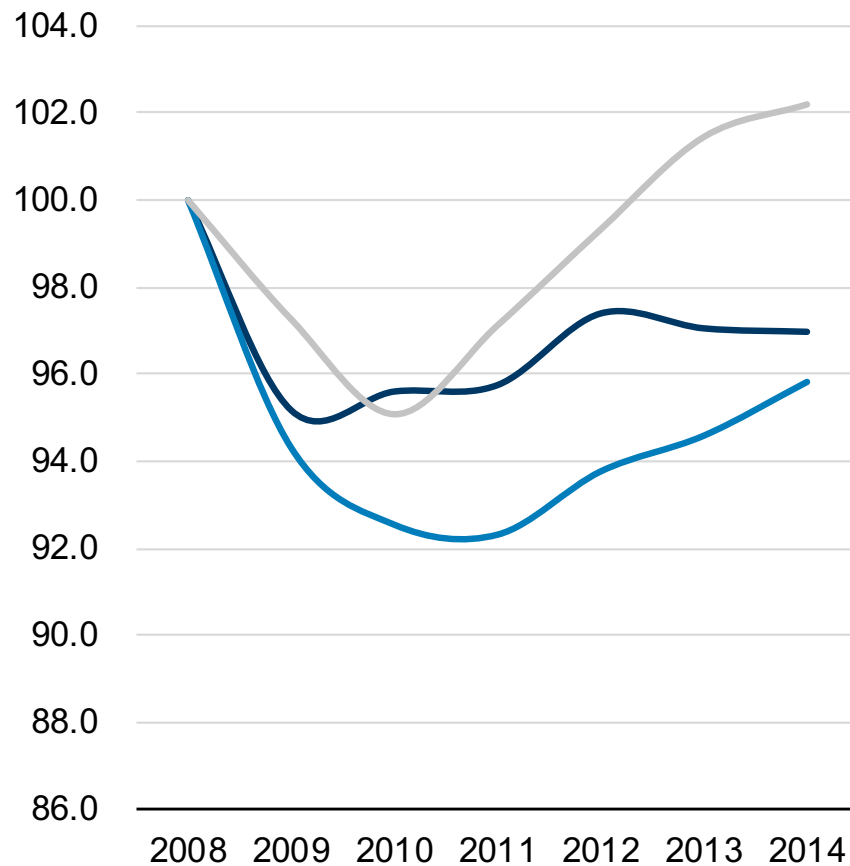


Recovery from the Great Recession

FINDINGS FROM THE GREAT RECESSION: SMALL BUSINESS SECTOR MORE NEGATIVELY IMPACTED, SLOWER TO RECOVER

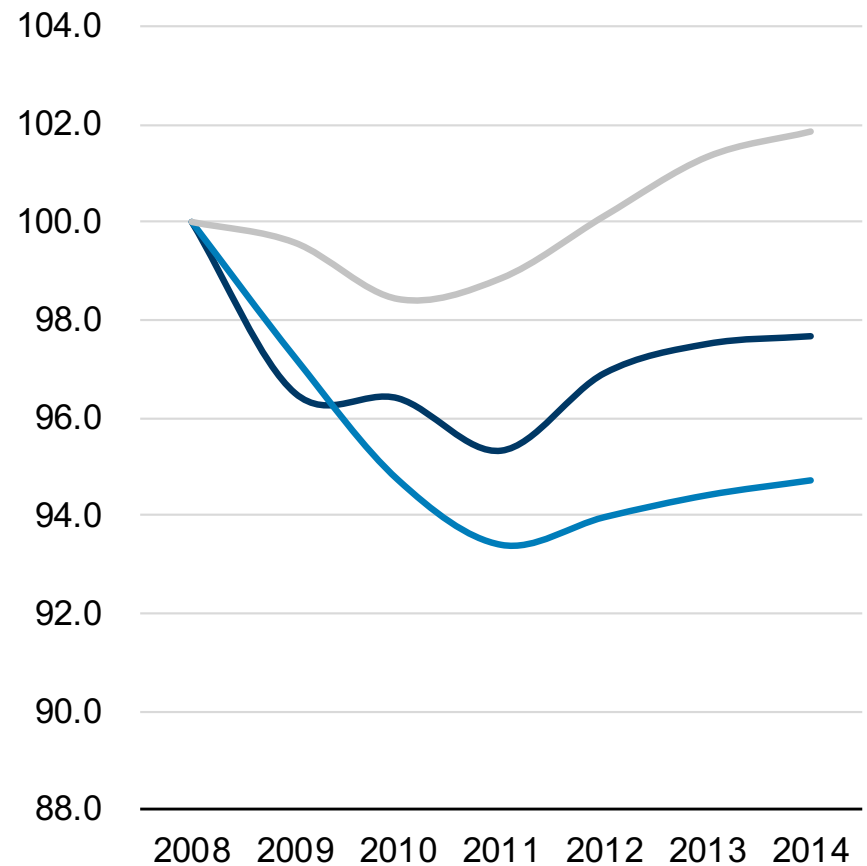
Employment change by firm size

Payroll workers on 3-12 each year, 2008 - 2014, indexed



Firm count change by firm size

2008 - 2014, indexed

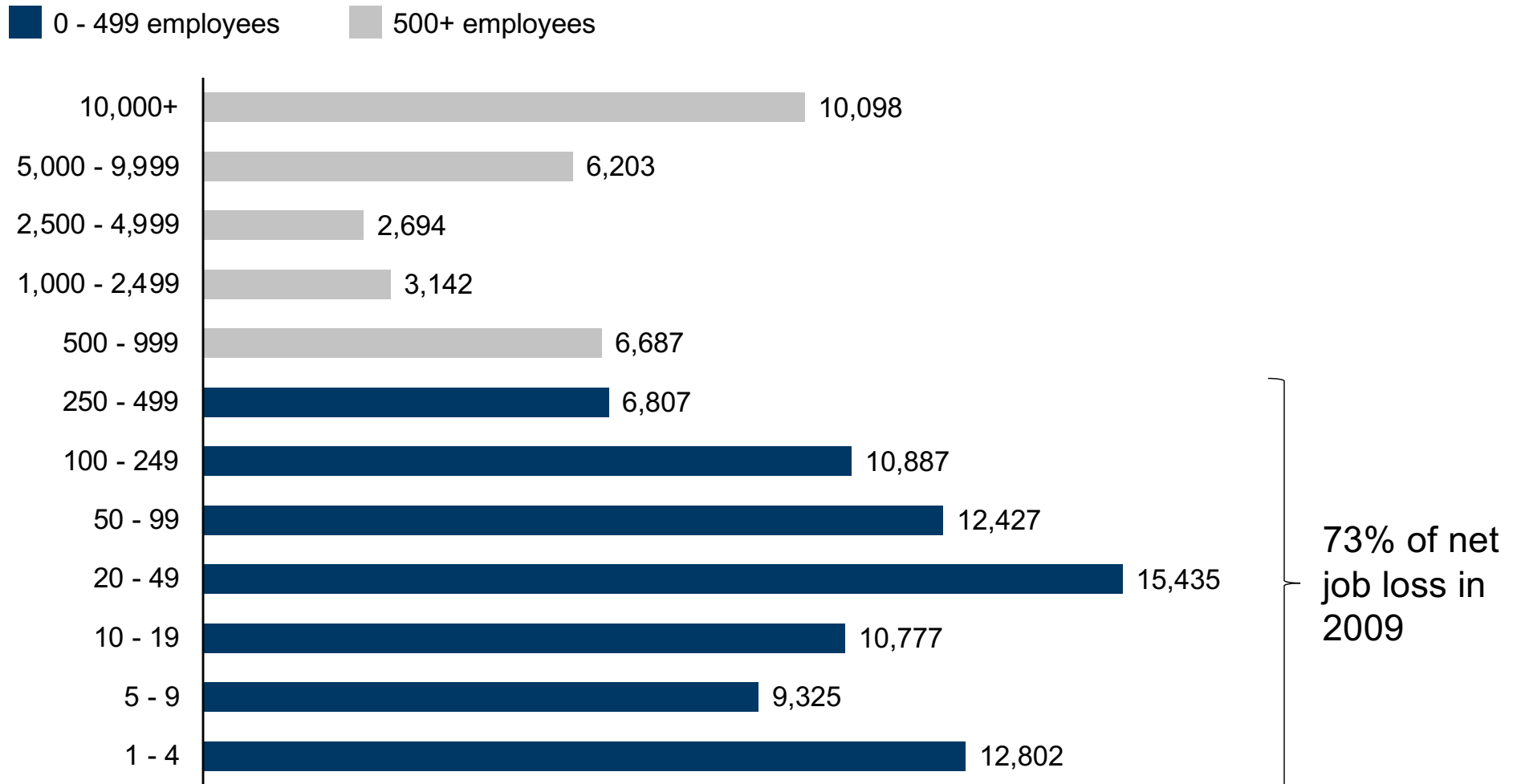


— Micro-business (<5) — 5 – 499 employees — 500+ employees

FINDINGS FROM THE GREAT RECESSION: SMALL BUSINESSES ACCOUNTED FOR 1/2 OF U.S. JOBS, BUT ~70% OF NET JOB LOSSES

Job loss by firm size

Net jobs loss by firm size, total net job loss = 107,284 , 2009



FINDINGS FROM THE GREAT RECESSION: VIRTUALLY ALL BUSINESS CLOSURES IN 2009 WERE FIRMS WITH FEWER THAN 500 EMPLOYEES

Business closures by size

Number of firms, total firm deaths = 12,110, 2009

