WORKING DRAFT

COVID-19 ECONOMIC IMPACT AND RECOVERY



Downtown Charlottesville

June 2020

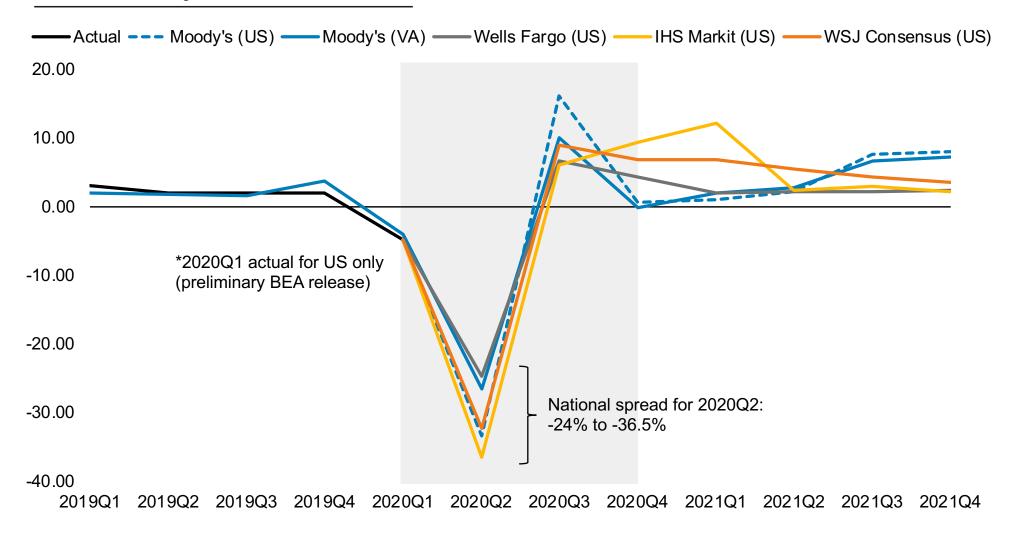
MANY STATE AGENCIES HAVE CONTRIBUTED INSIGHTS AND/OR DATA THAT HAVE INFORMED THIS IMPACT ANALYSIS*

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

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

Quarterly real GDP growth

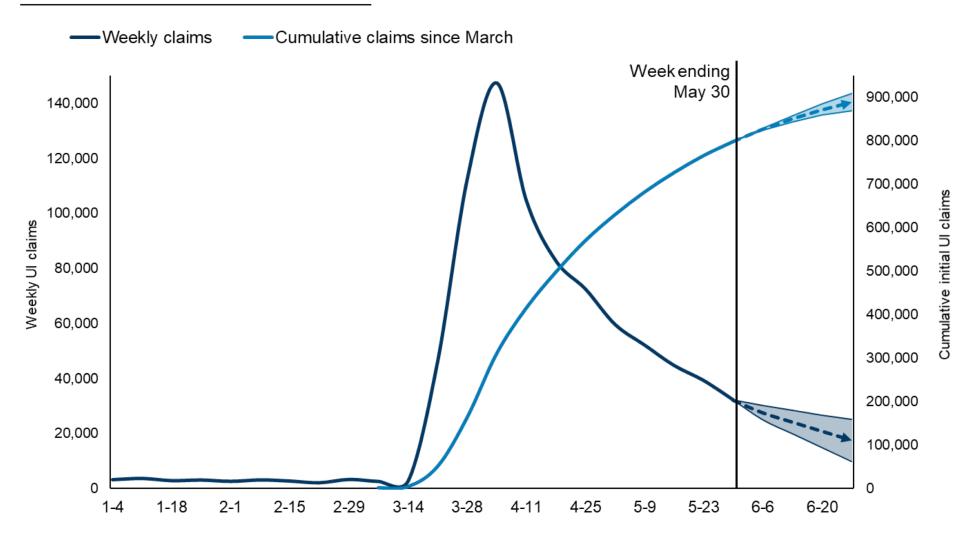
Annualized % change, billions of chained 2012 \$



ALMOST 800,000 VIRGINIANS HAVE FILED INITIAL UNEMPLOYMENT CLAIMS SINCE THE BEGINNING OF MARCH

Weekly UI initial claims¹ in Virginia

YTD weekly claims (through May, 30 2020), NSA



₁For Virginia UI numbers, Pandemic Unemployment Assistance (PUA) claims are included in total claims reported Source: Virginia Employment Commission; VEDP analysis

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

UI initial claims¹ by industry March 4 to May 30, 2020, NSA		Percent of total
Accommodation and food services	148,115	19%
Retail trade	96,403	12%
Health care and social assistance	86,284	11%
Administrative and waste services	58,506	7%
Other services	43,482	5%
Manufacturing	41,361	5%
Professional and technical services	28,878	4%
Educational services	24,644	3%
Transportation and warehousing	21,601	3%
Construction	21,164	3%
Arts, entertainment, and recreation	20,828	3%
Wholesale trade	12,010	2%
Real estate and rental and leasing	8,415	1%
Information	7,511	1%
Public administration	6,477	1%
Finance and insurance	6,471	1%
Management of companies	3,146	<1%
Mining	1,105	<1%
Ag, forestry, fishing and hunting	968	<1%
Utilities	164	<1%
Unknown	158,242	20%

Numbers doe not add up to cumulative total on previous slides due to data availability issues (e.g. interstate claims) ₁For Virginia UI numbers, Pandemic Unemployment Assistance (PUA) claims are included in total claims reported Source: Virginia Employment Commission; VEDP analysis

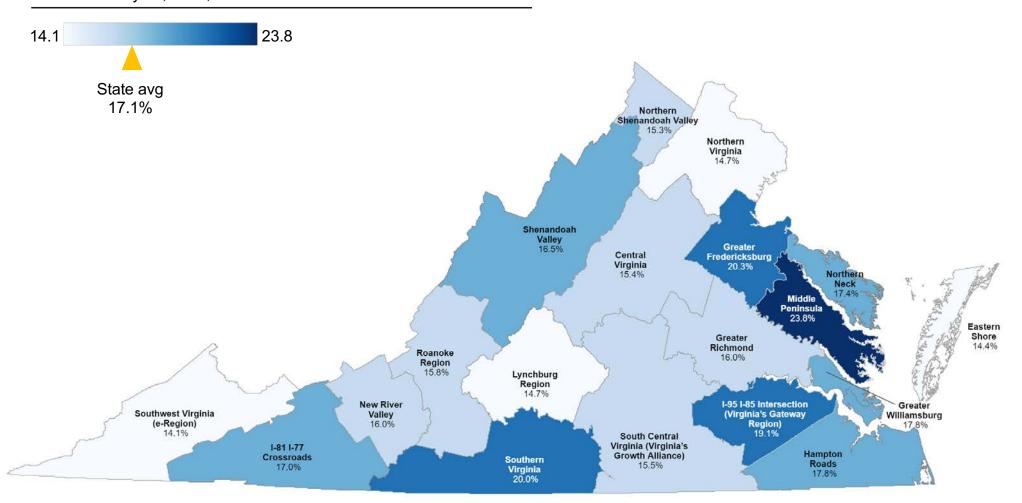
CLAIMS BY OCCUPATION: UNEMPLOYMENT CLAIMS HAVE BEEN CONCENTRATED IN A HALF DOZEN OCCUPATIONS

UI initial claims¹ by occupation March 4 to May 30, 2020, NSA		Med. wages 2019, \$
Food Prep & Serving	91,333	22,290
Office & Admin Support	76,358	37,650
Sales & Related	67,581	28,190
Personal Care & Service	62,185	25,040
Management	53,170	126,180
Transport & Material Moving	51,372	31,500
Production	33,803	35,720
Healthcare Pract. & Technical	29,180	66,200
Healthcare Support	28,680	27,490
Installation, Maint, & Repair	24,400	51,400
Construction and Extraction	23,429	43,600
Arts, Design, Ent, Sports, & Media	22,319	55,640
Ed Instruction & Library	21,423	48,650
Building & Grounds Cleaning and Maint	19,742	26,470
Business & Financial Operations	16,210	78,780
Computer & Mathematical	13,187	99,170
Community & Social Service	7,701	47,040
Protective Service	7,505	42,750
Architecture & Engineering	6 ,377	85,550
Life, Physical, & Social Science	4,331	75,820
Legal	2,822	89,260
Farming, Fishing, & Forestry	■ 1,452	32,610
Unknown	110,5	20 N/A

Numbers doe not add up to cumulative total on previous slides due to data availability issues (e.g. interstate claims) ₁For Virginia UI numbers, Pandemic Unemployment Assistance (PUA) claims are included in total claims reported Source: Virginia Employment Commission (UI claims); Bureau of Labor Statistics, OES (avg. wages); VEDP analysis

INITIAL UNEMPLOYMENT CLAIMS HAVE VARIED SIGNIFICANTLY ACROSS VIRGINIA REGIONS

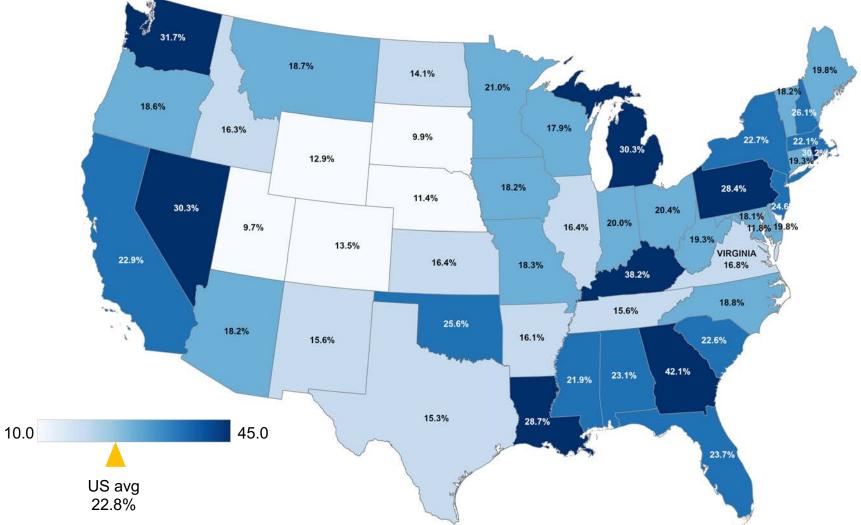
UI initial claims and baseline unemployment as % of baseline jobs March 4 to May 30, 2020, NSA



Numbers doe not add up to cumulative total on previous slides due to data availability issues (e.g. interstate claims) 1 For Virginia UI numbers, Pandemic Unemployment Assistance (PUA) claims are included in total claims reported Source: U.S. Department of Labor; BLS Current Population Survey; Emsi 2020.1; VEDP analysis

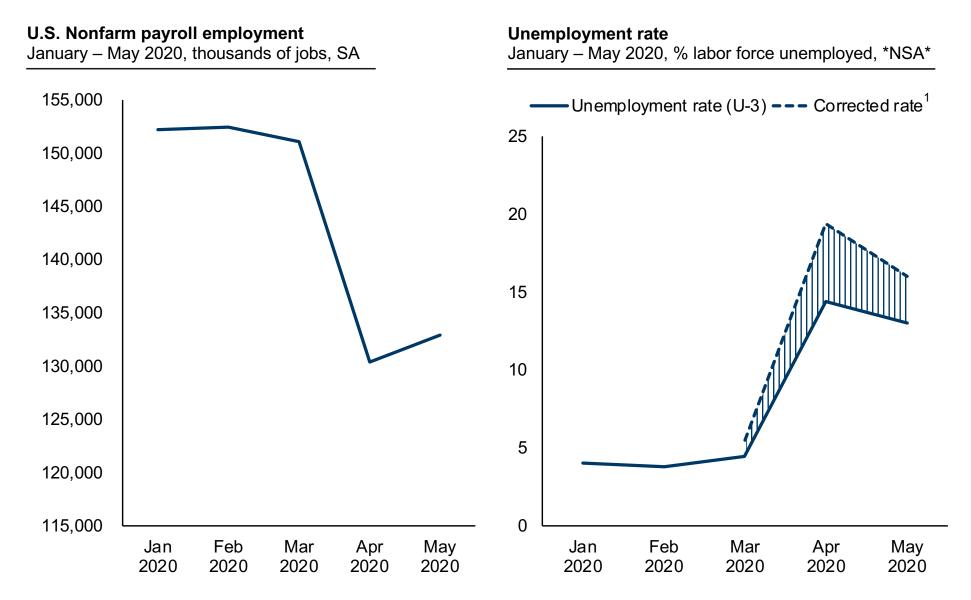
TO DATE, EMPLOYMENT IN VIRGINIA HAS NOT BEEN HIT AS HARD BY COVID-19 AS MOST OTHER STATES

UI initial claims¹ and baseline unemployment as % of baseline jobs March 4 to May 30, 2020, NSA, baseline = January 2020



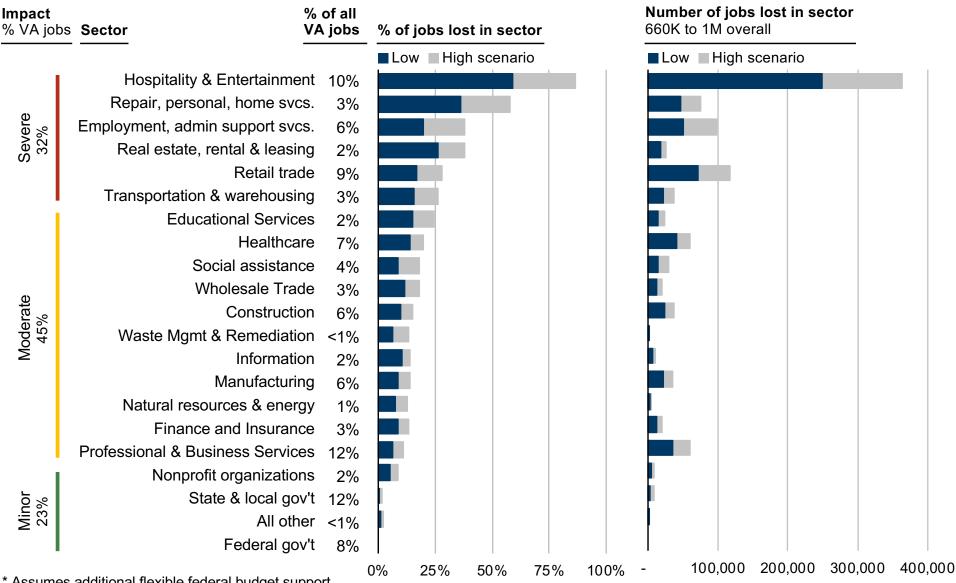
Does not include Pandemic Unemployment Assistance claims due to inconsistent reporting standards Source: U.S. Department of Labor; BLS Current Population Survey; Emsi 2020.1; VEDP analysis

THE MAY JOBS REPORT SURPRISED MOST FORECASTERS, WITH AN ALMOST 2.5M GAIN IN JOBS AND DROP IN UNEMPLOYMENT RATE



¹ Correction of misclassification error for some respondents absent from work due to 'other reasons' Source: Bureau of Labor Statistics, Current Employment Statistics, Current Population Survey, May 2020

AT OUTSET OF CRISIS, VEDP ESTIMATED ROUGHLY 660K-1M JOBS IN VA 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

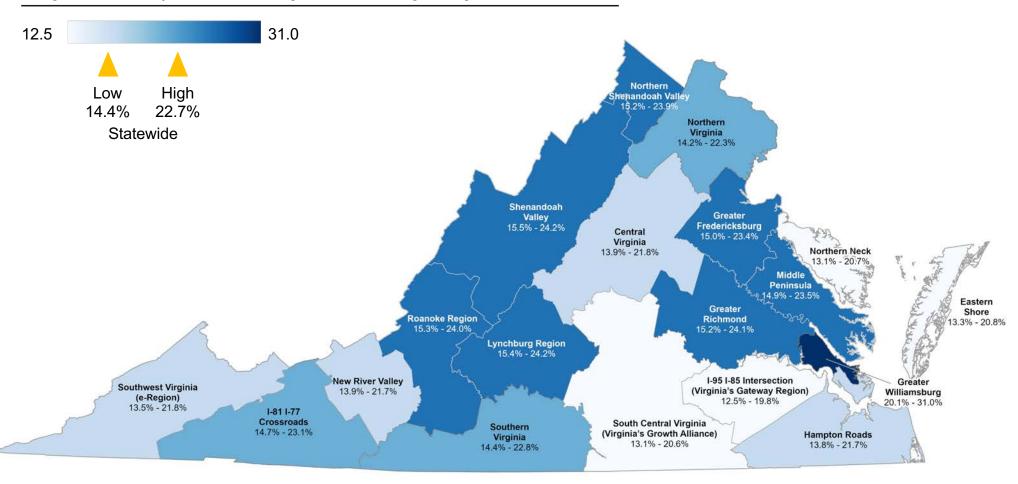
			Healthcare 41 - 60	sv	ocial ass. Ed. Svcs	
	Retail trade 70 – 117	Employment, admin support svcs. 51 – 98	Construction	Social a		
		Trans. & ware- housing 22 – 37	24 – 37		Wholesale Trade 13 – 20	
Hospitality & entertainment 250 – 364	Repair, personal, home svcs. 47 – 75	Real estate, rental & leasing 18 – 26	Manufactu- ring 21 – 34 State & local g	Fin. & insur. 13 – 20 ov Noi	Info mai nprofi	tion

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

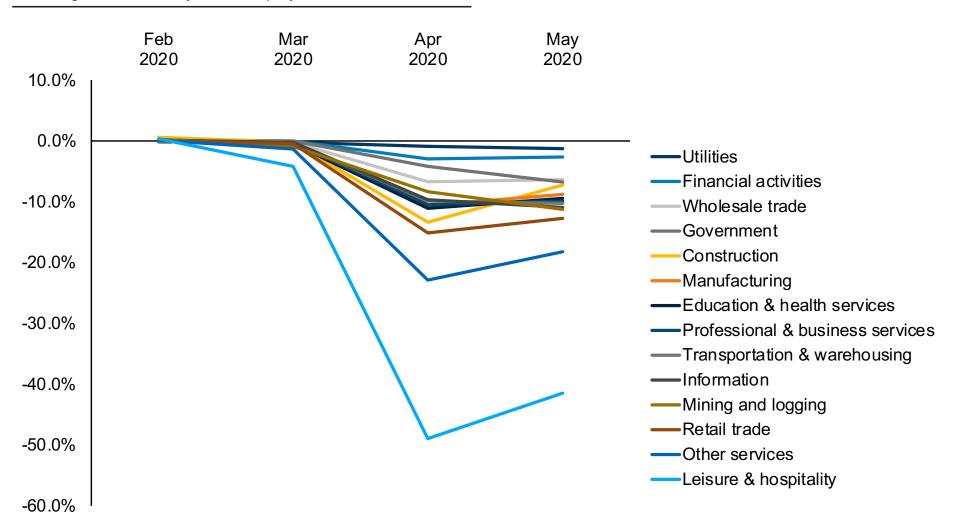
Range of estimated job losses, shading based on average of high and low scenarios



EVEN AFTER GAINS IN MAY, EMPLOYMENT IN ALL SUPERSECTORS REMAINS BELOW JANUARY 2020 EMPLOYMENT LEVELS

Employment change from January 2020 by supersector

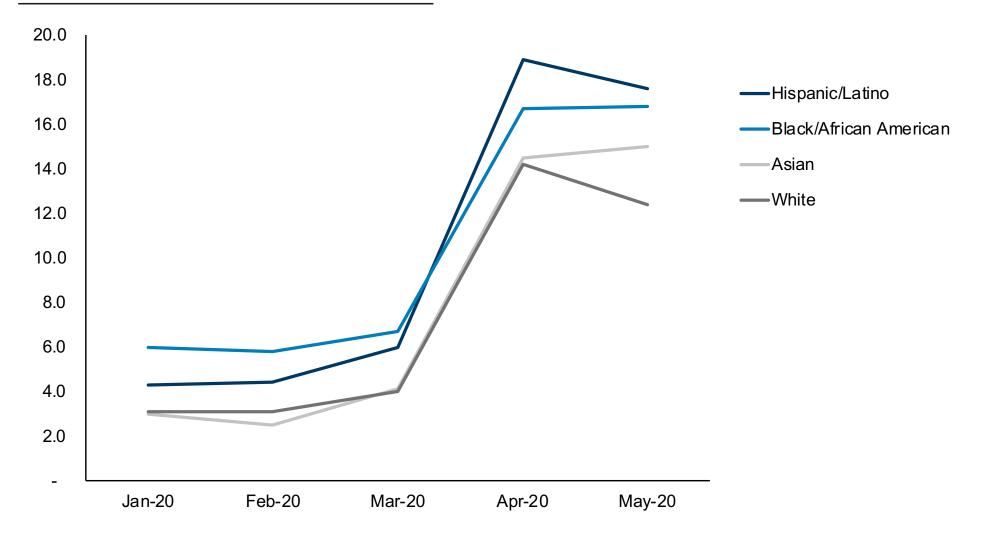
% change from January 2020 employment, SA



DESPITE OVERALL POSITIVE TRENDS, UNEMPLOYMENT RATES ARE NOT FALLING FOR ALL GROUPS OF WORKERS...

Unemployment rate by race / ethnicity

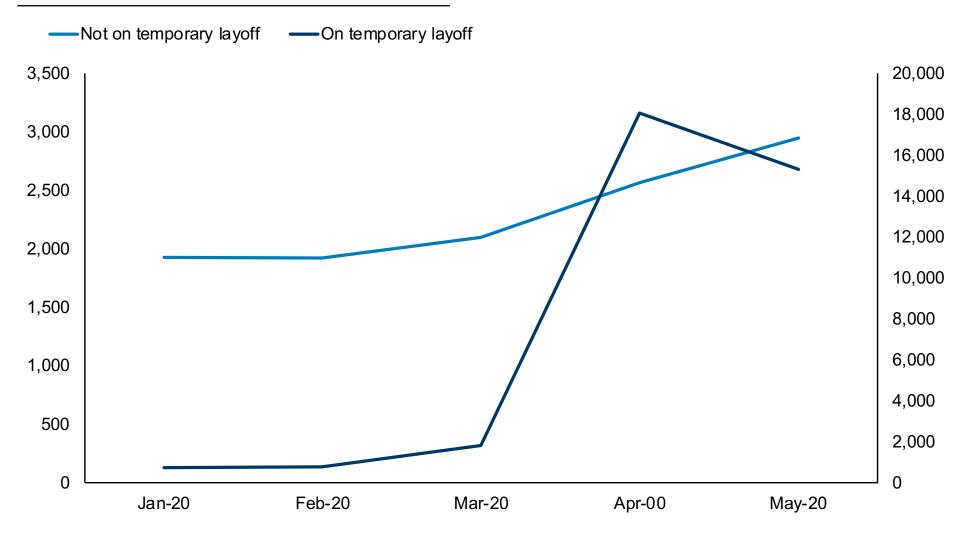
January – May 2020, % labor force unemployed, SA



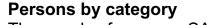
...AND MOST JOB GAINS IN MAY LIKELY CAME FROM WORKERS ON TEMPORARY LAYOFF, PERMANENT LAYOFFS CONTINUED TO RISE

Temporary and permanent job losers

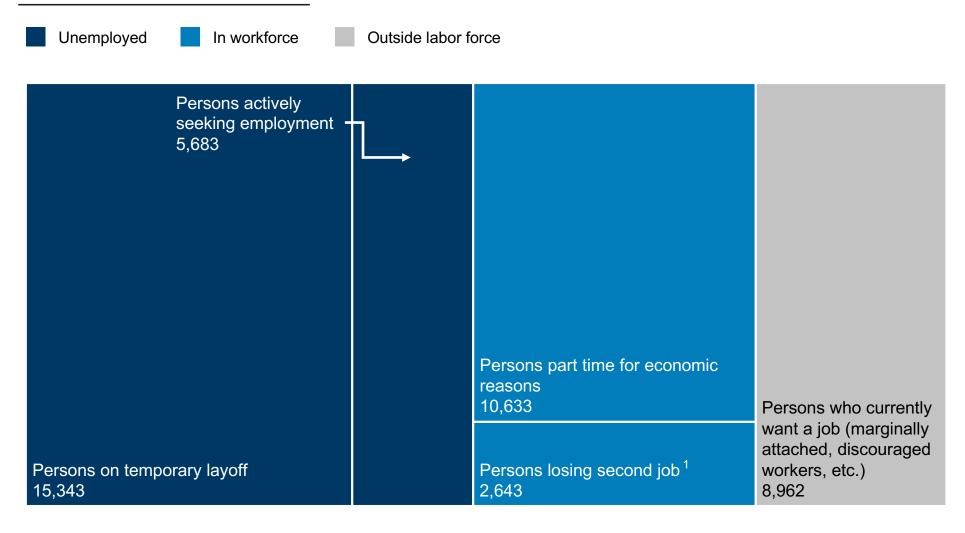
Unemployed by category, thousands of unemployed, SA



BEYOND THE ~20M STILL UNEMPLOYED, TENS OF MILLIONS MORE HAVE BEEN NEGATIVELY IMPACTED BY THE PANDEMIC

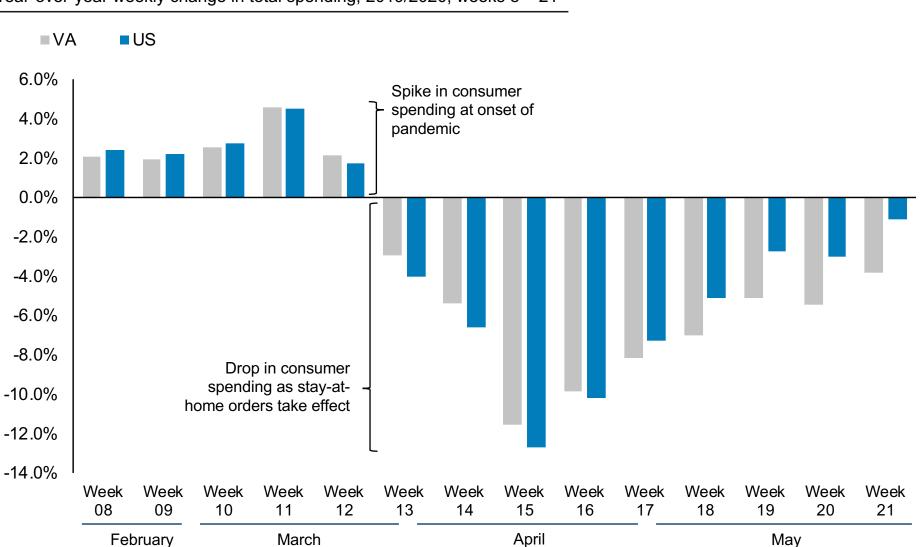


Thousands of persons, SA, May 2020



¹ Change in multiple job-holders between January and May 2020 Source: Bureau of Labor Statistics, Current Population Survey; VEDP analysis

AFTER SPIKING IN EARLY MARCH, CONSUMER SPEND IN VA HAS BEEN BELOW 2019 LEVELS FOR THE PAST TWO MONTHS



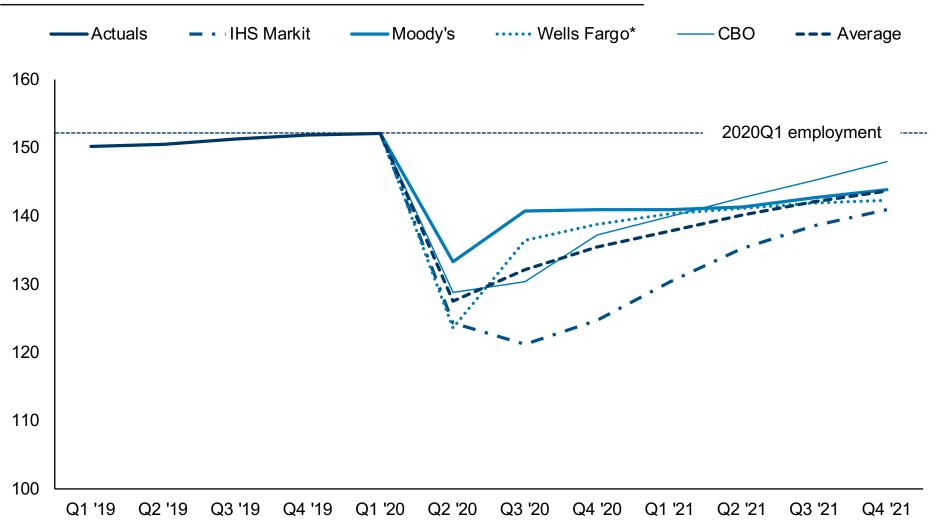
Virginia and national consumer spending trends by week

Year-over-year weekly change in total spending, 2019/2020, weeks 8 – 21

Source: Earnest Research (longitudinal panel of 6 million de-identified U.S. consumers)

CURRENT FORECASTS DIFFER ON EXTENT OF DAMAGE AND RECOVERY TRAJECTORY, BUT ALIGN BY END OF 2021

Quarterly U.S. employment estimates from select macroeconomic forecasters Total nonfarm payroll employment, 2019 – 2021, Millions of jobs

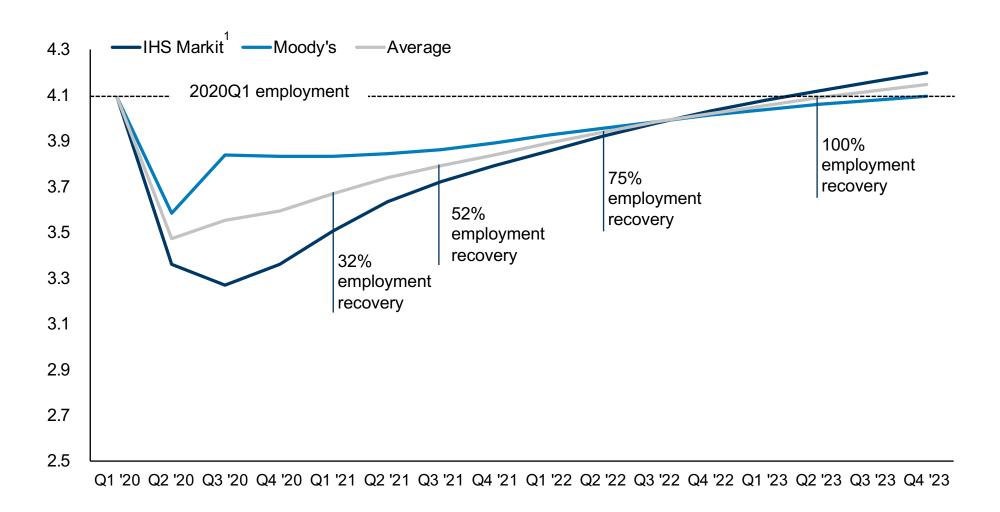


*Wells Fargo publishes average monthly change by quarter. Quarterly estimate derived by tripling average monthly change Source: Moody's Analytics (June baseline); IHS Market (May forecast); Wells Fargo (May forecast); Congressional Budget Office; VEDP analysis

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HALF OF JOBS LOST IN VIRGINIA MAY NOT BE REGAINED UNTIL LATE 2021, WITH FULL RECOVERY POSSIBLE IN MID-2023

Quarterly Virginia employment estimates from select macroeconomic forecasters Total nonfarm payroll employment, 2019 – 2023, millions of jobs

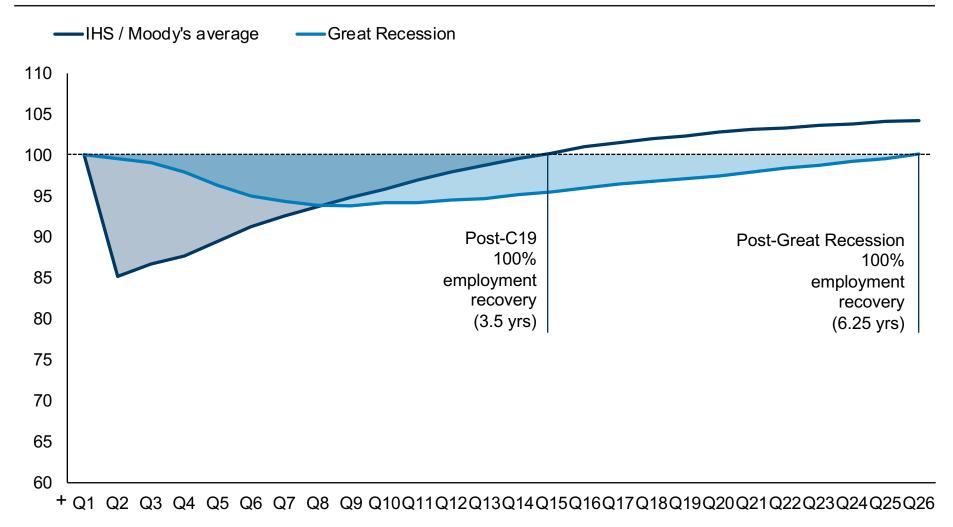


¹IHS forecast estimates are based on national forecasts that have been applied to Virginia employment mix by VEDP Source: Moody's Analytics (May baseline); IHS Markit (May forecast); VEDP analysis

FORECASTS SUGGEST POST-C19 RECOVERY WILL BE SIGNIFICANTLY QUICKER THAN AFTER GREAT RECESSION

Timeline of job loss recovery post-Great Recession compared to post-C19 current forecasts

Historic quarterly U.S. employment, 2009-2014, compared to Moody's/IHS Markit forecasts average, 2020-2026, indexed



FOLLOWING ECONOMIC RELIEF EFFORTS, WE ENVISION FOUR BIG STRATEGIC OPPORTUNITIES FOR ECONOMIC RESTORATION



1. Capture manufacturing reshoring and new supply chain opportunities

- Industry analysis and surveys indicate a significant share of manufacturers will likely bring some production and sourcing back to North America in response to the COVID-19 pandemic
- Additionally, as businesses around the world reconfigure their global supply chains and increase resiliency, many new opportunities will emerge for Virginia exporters
- Virginia can capture these job-creation opportunities by investing in targeted business investment, international trade, and related support activities (e.g., site development)



2. Accelerate Digital Virginia (cloud computing, software, data centers)

- The COVID-19 pandemic has accelerated the transition toward a digital economy for businesses and consumers around the world
- As an established U.S. tech leader, Virginia is well positioned to capitalize on these opportunities in software development, cloud computing, data centers, cybersecurity, and other technologies
- Virginia can capture a larger share of this post-COVID tech wave by complementing exiting efforts (e.g., TTIP) with ubiquitous broadband access and targeted incentives

3. Seize telework transition opportunities, with special focus on rural and small metro regions

- With the widespread shift to telework during the pandemic, industry experts and business leaders are signaling that telework will become the (permanent) new normal for a much larger share of workers
- Virginia can capture these talented professionals (and the tax revenue they generate) by deploying creative incentive and marketing approaches that focus on both businesses and individuals that telework



4. Retool and reskill Virginia's (unemployed) workforce for post-pandemic career opportunities

- Low-wage workers, women, and people of color were disproportionately impacted by the economic shock resulting from COVID-19, and likely will make up a significant share of the long-term unemployed in the absence of targeted efforts
- In addition to new job creation opportunities for the Commonwealth, we have an opportunity to connect displaced workers with higher-wage employment opportunities through workforce initiatives such as G3, the Virginia Talent Accelerator Program, VJIP, and other targeted investments in sub-baccalaureate fields