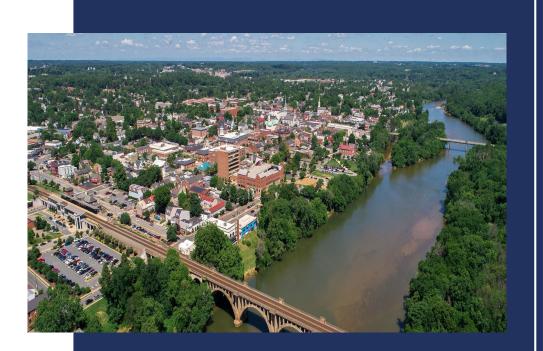






## Virginia Growth and Opportunity Board

2022 Board Retreat April 20-21, 2022 Delta Hotel Marriott, Richmond, VA







- Opening Remarks:
   Nancy Agee, GO Virginia Board Chair
- 2. Virginia's Economic Development Goals & Priorities Return to Normalcy: The Honorable Caren Merrick, Secretary of Commerce and Trade
- 3. State of the Virginia Economy & Regional Perspectives: Fletcher Magnum, Magnum Consulting
- 4. Intermission
- 5. The Role of Talent Development in States' Future Economic Growth: Jason Tyszko, U.S. Chamber of Commerce
- 6. Reflections and Relationship to GO Virginia Program Objectives
- 7. GOVA Program Impact, Success Stories and Lessons Learned: Sara Dunnigan, Deputy Director, GO Virginia
- 8. Adjournment and Reception





#### **Opening Remarks**

Nancy Howell Agee, President and CEO of Carillion Clinic and GO Virginia Board Chair









## Virginia's Economic Development Goals & Priorities – A Return to Normalcy

The Honorable Caren Merrick, Co-Founder of Web Methods, Founding CEO of Virginia Ready Initiative and Virginia Secretary of Commerce and Trade



# Update from Governor Youngkin Administration for GO Virginia

April 20, 2022

#### LEGISLATIVE AND BUDGET UPDATES

- Governor signed bills such as major business facility job tax credit, Advanced Manufacturing Talent Investment Fund,
   Nitrile Glove Manufacturing Training Program, ect.
- Governor Youngkin- proposed an additional \$29 million investment in site development for the 2023-2024 biennium, an increase that would establish a \$20 million baseline for annual investment in site development and build on the one-time \$150 million allocation of surplus funds recommended by former Governor Northam in the current fiscal year.

• Governor Youngkin proposed \$75 million over the biennium to fund a new GO Virginia grant program designed to encourage and support workforce-related collaboration among business, educational organizations, and governmental bodies in each region's prioritized industry sectors.

## VIRGINIA'S RETURN TO NORMALCY EXECUTIVE SUMMARY – MARCH 2022

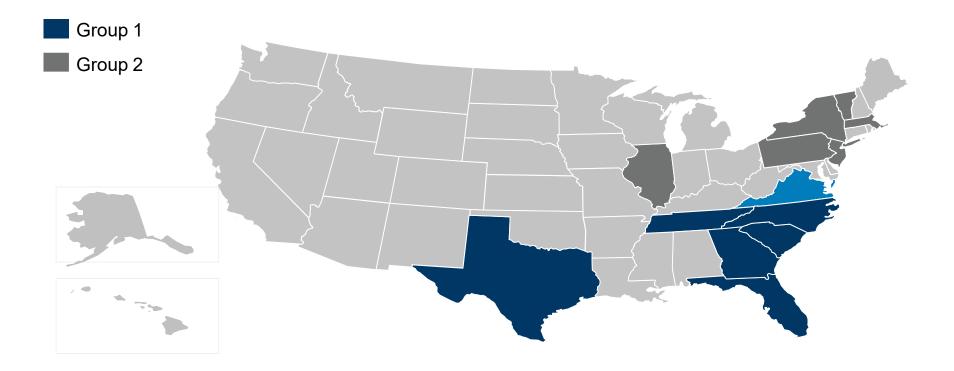
•	2.9%	Quarterly GDP growth, annualized (2021Q3)
1	4.16M	Statewide employment level (Feb '22)
1	54%	Percent employment lost recovered (Feb '22)
4	No. 47	National employment recovery rank (Feb '22)
4	3.2%	Unemployment rate
1	63%	Labor force participation rate (Feb '22)
$\Leftrightarrow$	4	# industries reaching pre-covid employment levels (Feb '22)
4	310K	Statewide job openings (Jan '22)
4	0.1%	Year-on-year population growth (2021)
1	-8,995	Domestic net migration (2021)

#### **EXECUTIVE SUMMARY – MARCH 2022**

1	4.16M	Statewide employment level (Feb '22)	
1	54%	Percent employment lost recovered (Feb '22)	
<u> </u>	No. 47	National employment recovery rank (Feb '22)	
1	63%	Labor force participation rate (Feb '22)	
•	3.2%	Unemployment rate	
<u> </u>	1,678	Initial UI claims (4-week rolling avg)	
<u> </u>	6,816	Continued UI claims (4-week rolling avg)	
•	310K	Statewide job openings (Jan '22)	
<b>1</b>	2022Q4	Pre-COVID-19 employment level recovery forecast (Feb '22)	

4

## TRACKING VIRGINIA'S PERFORMANCE AGAINST TWO GROUPS OF BENCHMARKING PEERS



#### **VIRGINIA COMPARED WITH GROUP 1 PEER STATES**

State	Employment lost (Feb – Apr/May '20)	Employment recovered (by Feb '22)	Recovered %	Recovery rank
South Carolina	207,321	253,674	122	10
Texas	1,943,450	2,176,114	112	12
Georgia	667,621	735,014	110	15
Florida	1,868,820	1,979,759	106	16
Tennessee	517,770	541,916	105	18
North Carolina	843,777	838,851	99	21
Virginia	427,490	231,990	54	47

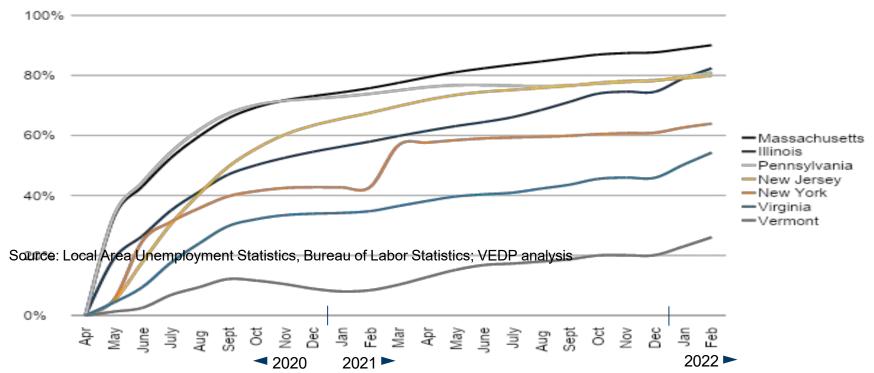
Source: Local Area Unemployment Statistics, Bureau of Labor Statistics; VEDP analysis

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#### **VIRGINIA COMPARED WITH GROUP 2 PEER STATES**

#### Virginia recovery compared to Group 2 peers

% employment recovered, seasonally adjusted, April 2020 – February 2022



#### **VIRGINIA COMPARED WITH GROUP 2 PEER STATES**

State	Employment lost (Feb – Apr/May '20)	Employment recovered (by Feb '22)	Recovered %	Recovery rank
Massachusetts	794,612	715,834	90	29
Illinois	1,015,011	836,219	82	35
Pennsylvania	919,678	744,442	81	36
New Jersey	740,915	591,964	80	37
New York	1,674,458	1,070,326	64	45
Virginia	427,490	231,990	54	47
Vermont	34,786	9,065	26	51

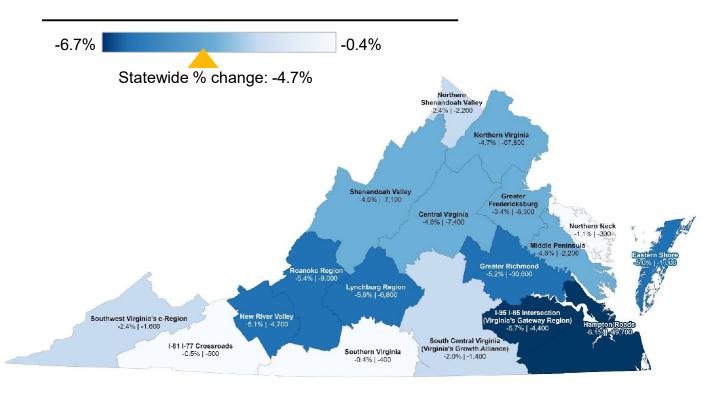
Source: Local Area Unemployment Statistics, Bureau of Labor Statistics; VEDP analysis

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### VIRGINIA HAS SEEN PROGRESSIVE RECOVERY OF JOBS LOST, BUT NOT ALL REGIONS HAVE RECOVERED TO THE SAME EXTENT

#### **Employment change from Feb '20 - Jan '22**

% | absolute employment change, not seasonally adjusted



9

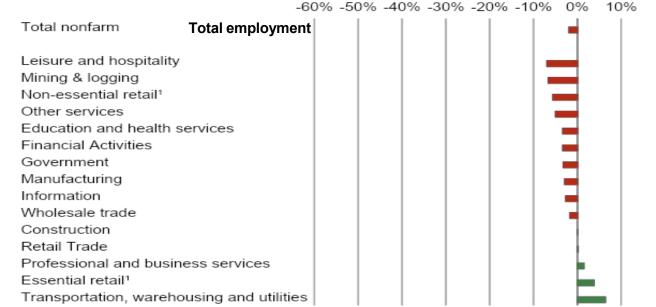
### DESPITE IMPROVEMENTS SINCE APRIL 2020, VA EMPLOYMENT REMAINS BELOW FEBRUARY 2020 LEVELS IN MOST SUPERSECTORS

#### Virginia employment change since Jan '20 by supersector

% non-farm payroll employment change from Jan '20 – Feb '22, seasonally adjusted

Lowest employment level

■Current employment level



#### Change in # jobs since Jan<sup>2</sup> Thousands of jobs

Lost	Recovered	
-480.1	402.3	
-202.8	173.6	
-0.9	0.4	
-49.1	40.1	
-39.0	29.2	
-65.1	46.6	
-7.7	0.6	
-54.9	31.5	
-20.6	13.7	
-4.9	3.1	
-6.5	4.7	1
-11.7	11.8	
-56.0	56.6	
-37.5	48.9	
-7.5	16.7	
-6.3	15.4	

<sup>&</sup>lt;sup>1</sup>Essential / non-essential retail employment change based on assumptions from national trends

<sup>&</sup>lt;sup>2</sup>Jobs lost at / recovered since lowest employment level for industry. Industry sub-totals do not equal state total due to differing time frames Source: Current Employment Statistics, Bureau of Labor Statistics; VEDP analysis

#### TARGET INDUSTRIES FOR WHICH VAIS COMPETITIVE











**Automotive** 

Software

Headquarters

Aerospace

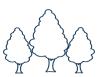
Cybersecurity







**Unmanned Systems** 



**Wood Products** 



**Data Centers** 



Business Process Services



Supply Chain Management



Food & Beverage Processing



Advanced Materials



Offshore Wind

#### **Workforce Shortages Priorities**

#### GOVirginia Regional Priority Industry Clusters

#### **REGION ONE:**

Advanced Manufacturing
Agriculture and Food and Beverage
Manufacturing
Information and Emerging
Technologies
Energy and Minerals

#### **REGION FOUR:**

Advanced Manufacturing
Health/Life Sciences and
Biosciences
Information and Emerging
Technologies
Logistics

#### **REGION TWO:**

Food and Beverage Manufacturing
Information and Emerging
Technologies
Life Sciences and Healthcare
Manufacturing

#### **REGION FIVE:**

Advanced Manufacturing
Cybersecurity/Data
Analytics/Model-Sim
Logistics/Port Operations/Warehousing
Shipbuilding and Repair
Water Technologies
Unmanned Systems and Aerospace

#### **REGION THREE:**

Advanced Manufacturing
Healthcare
High-Value Natural Resource Products
Business Services and IT Data Centers
Professional Services

#### **REGION SIX:**

Computer Services
Cybersecurity
Consulting Services
Financial Services
Engineering Services
Life Sciences
Research Organizations

#### **Workforce Shortages Priority, cnt.**

#### GOVirginia Regional Priority Industry Clusters

#### **REGION SEVEN:**

Computer Services
Cybersecurity
Consulting Services
Financial Services
Engineering Services
Life Sciences
Research Organizations

#### **REGION EIGHT:**

Financial and Business Services
Light Manufacturing
Healthcare
IT and Communications
Transportation and Logistics
Value-added Food-related
Manufacturing
Biomedical/Biotechnical

#### **REGION NINE:**

Light Manufacturing
Biotechnology and Biomedicine
Food and Beverage Manufacturing
IT and Communications
Financial and Business Services

#### The Way We Return to Normalcy

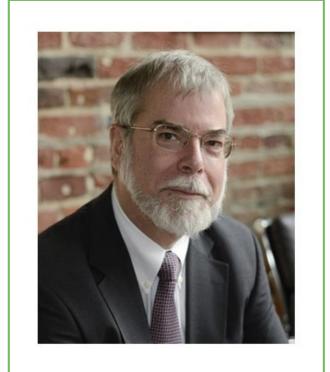
- Cross Secretariat and Agency collaboration to identify priorities and align funding streams, focus.
- Workforce, Infrastructure, Policy
- Form Capture Teams to Get Things Done
- Build better regional cooperation by touring VA.
- Full review of policies, taxes, regulations to remove barriers to growth.
- Find or create recurring revenue streams to fund ongoing investments in site readiness and economic development
- Work more closely with businesses to retain and recruit talent





## State of the Virginia Economy & Regional Perspectives

Fletcher Mangum, Governor's and General
Assembly's Joint Advisory Board of Economists
and Founder and CEO of Mangum Economic
Consulting



#### May You Live in Interesting Times

Presentation to GO Virginia Board April 20, 2022





#### **About Mangum Economics**

Mangum Economics is a Glen Allen, Virginia based firm that was founded in 2003. We specialize in producing objective economic research that our clients use for strategic decision making in a variety of industries and environments.

- Economic Development
- Energy
- Information Technology
- Policy Analysis

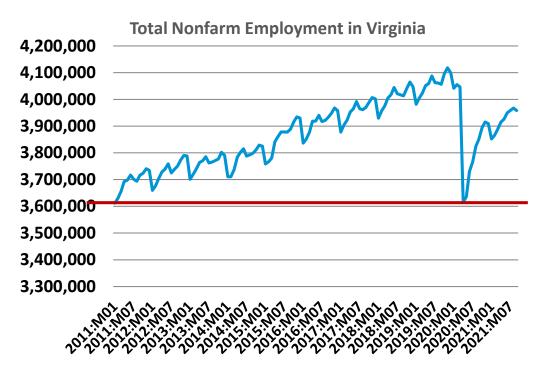


#### Outline

- 2020 was not a good year
- Important trends
- GO Virginia regional profiles
- Issues on the horizon

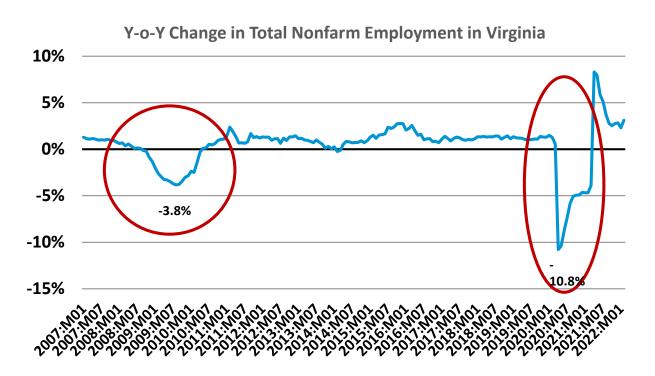


## In just one month Virginia lost 9 Years of employment growth



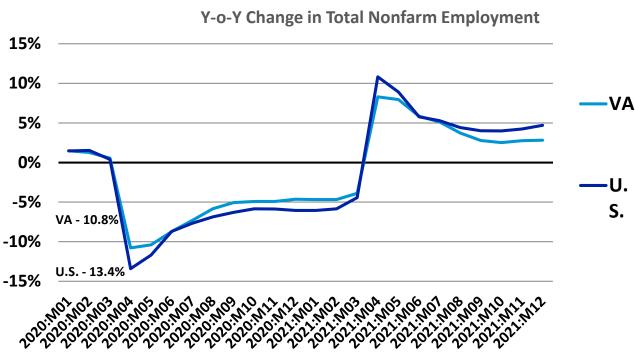


#### Worse than Great Recession



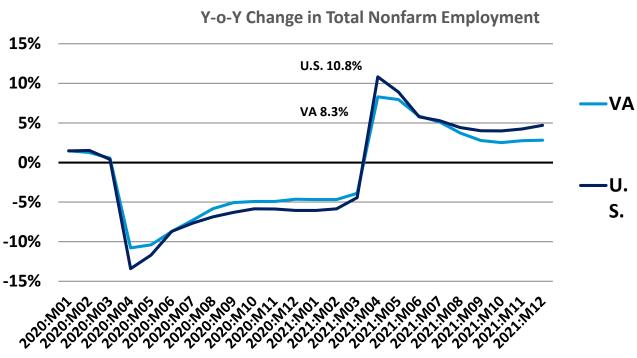


## The "good" news is we were not as badly hit as the U.S. as a whole





## The bad news is Virginia's recovery has not been as robust as the U.S. as a whole



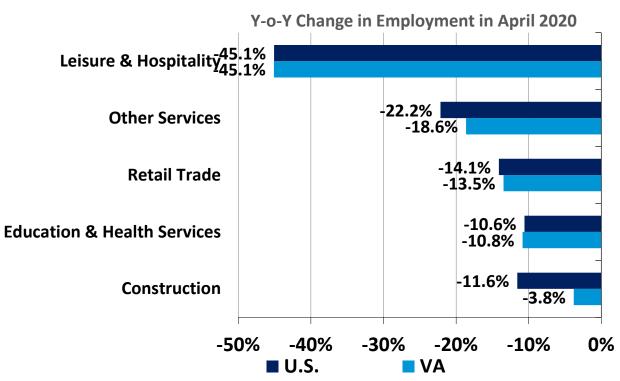


#### Why did Virginia do better than the U.S. as a whole?

- Virginia is far more dependent on federal government expenditures than most states specifically Department of Defense expenditures. That cushioned the blow.
- Virginia is relatively less heavily invested in key sectors that were hit hardest.
- Virginia is relatively more heavily invested in key sectors that were not as hard hit.

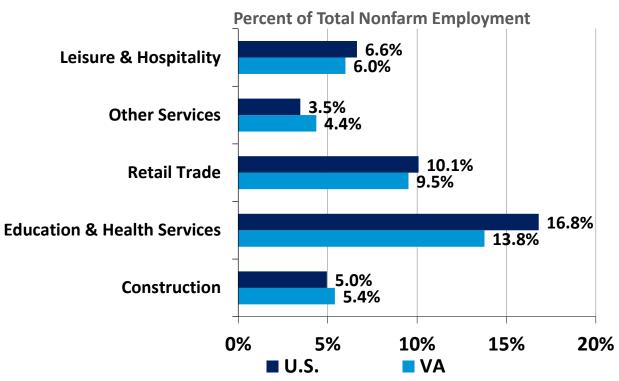


## Virginia generally performed "better" in worst hit sectors



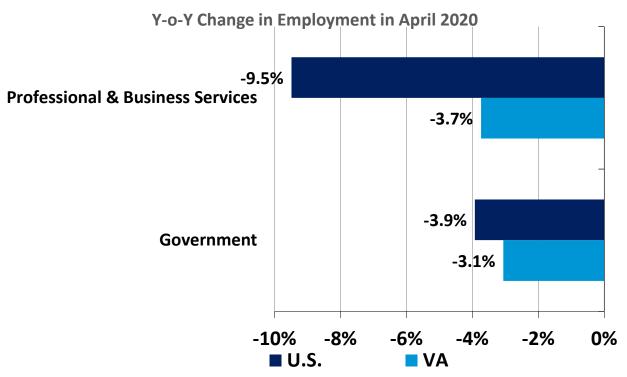


## Virginia also generally less invested in worst hit sectors



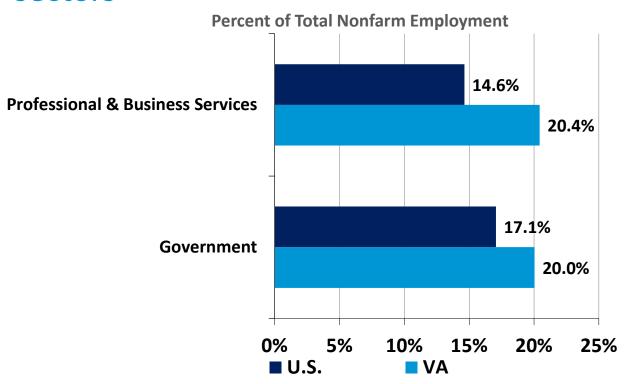


## Virginia also performed "better" in key sectors that were not as badly hit





## And Virginia was more invested in those sectors



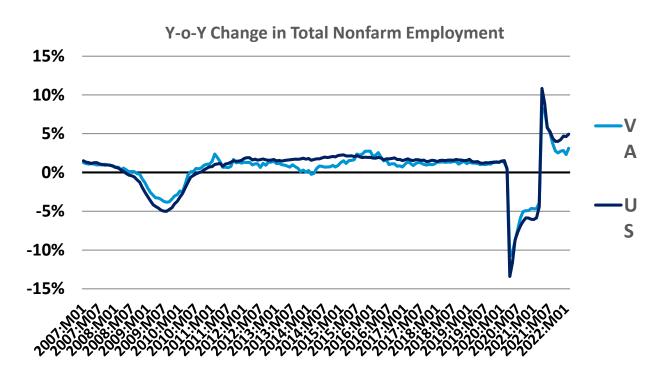
#### Outline

- 2020 was not a good year
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#### **Employment**

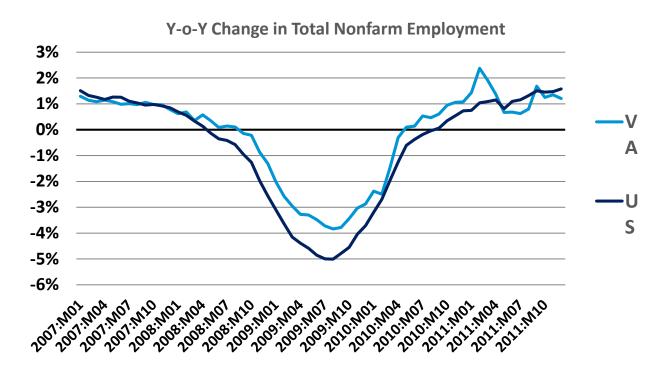


#### Y-o-Y Change in Employment: 2007-2022



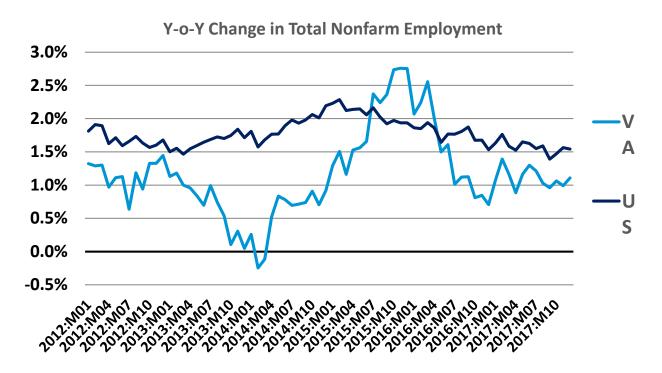


#### The Great Recession: 2007 - 2011



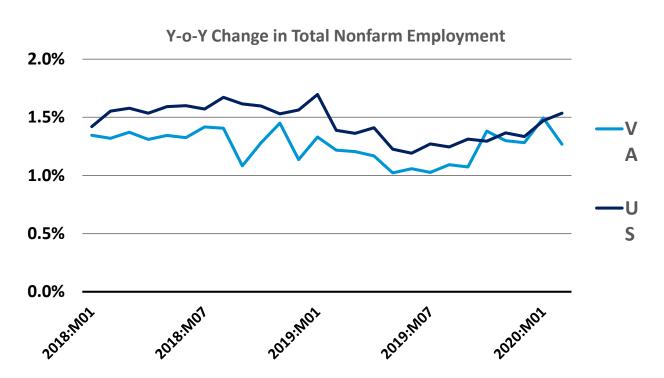


#### The "Recovery": 2012 - 2017



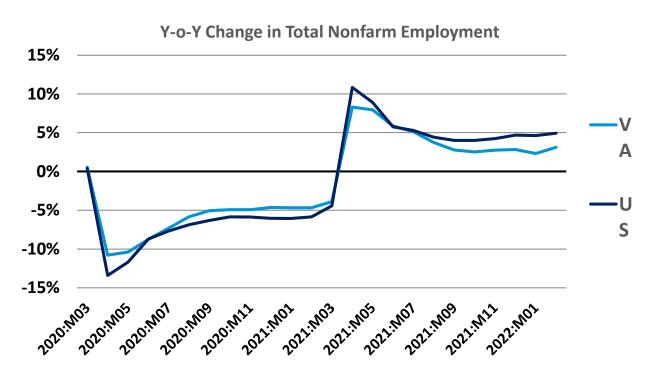


#### The Recovery: 2018 - 2020



#### MANGUM

#### The Lockdowns: 2020 - 2022

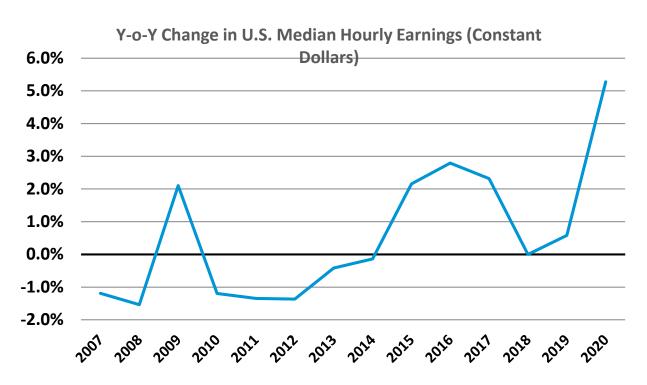


MANGUM A

### Wages



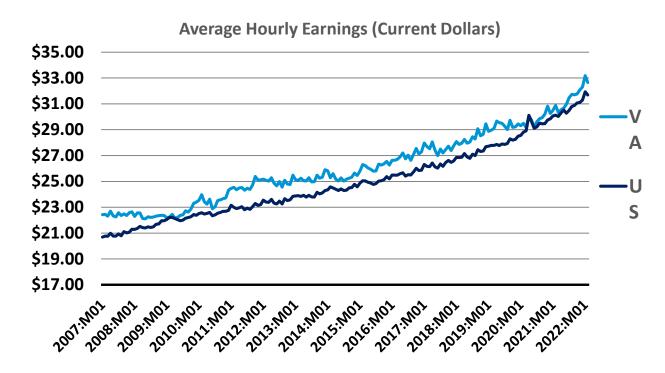
#### **National Wage Trends**



Data Source: U.S. Bureau of Labor Statistics, Current Population Survey © 2022 Mangum Economics

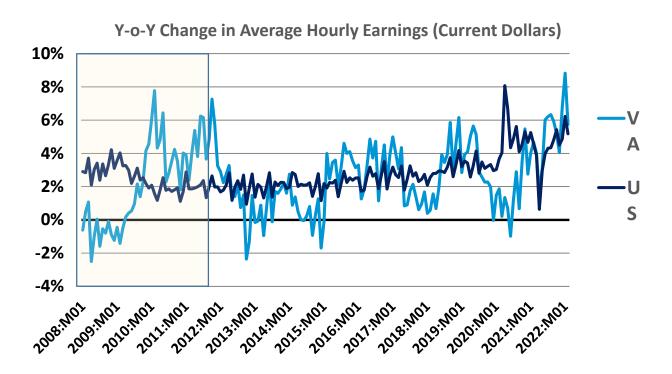


#### Virginia Wage Trends



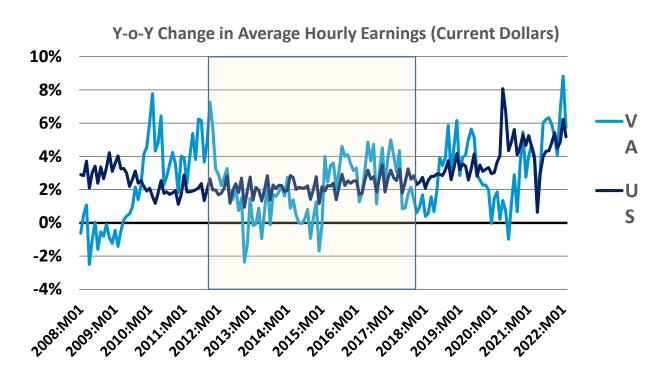


#### Virginia Wage Trends: The Recession



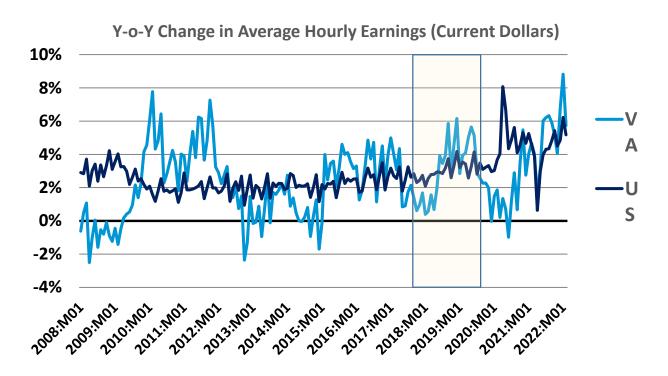


### Virginia Wage Trends: The "Recovery"



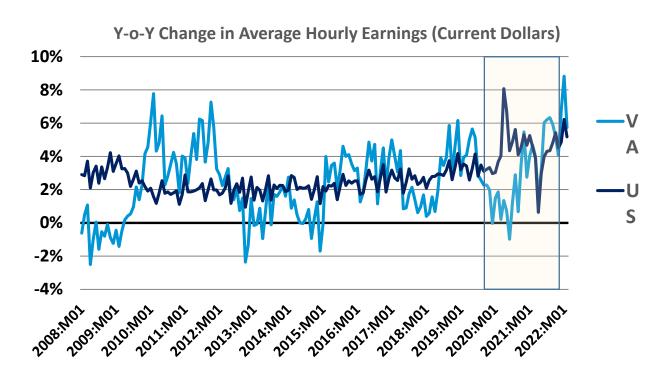


### Virginia Wage Trends: The Recovery





#### Virginia Wage Trends: The Lockdowns



### **Labor Force Participation**



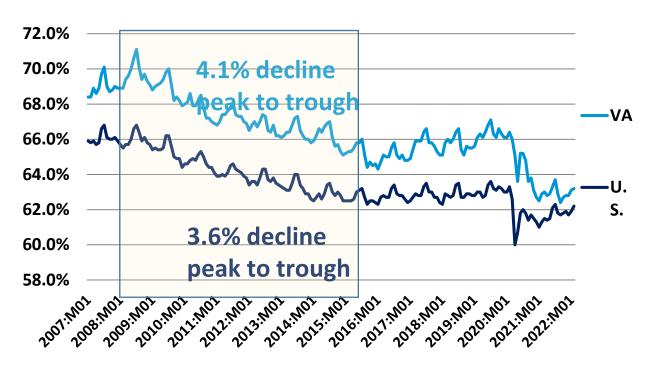
# Unemployment rate is no longer a good measure of tightness in the labor market



# Unemployment rate is no longer a good measure of tightness in the labor market

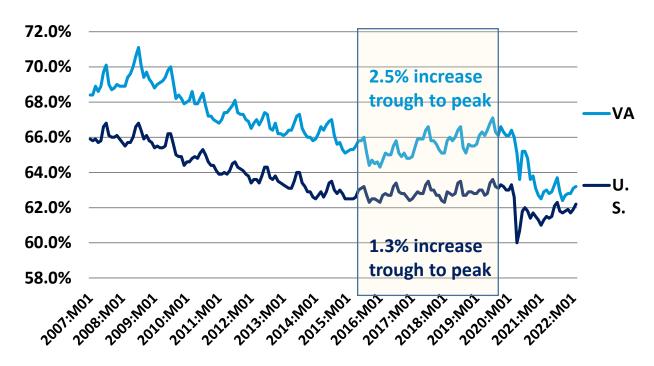


### Labor force participation for 16 and above



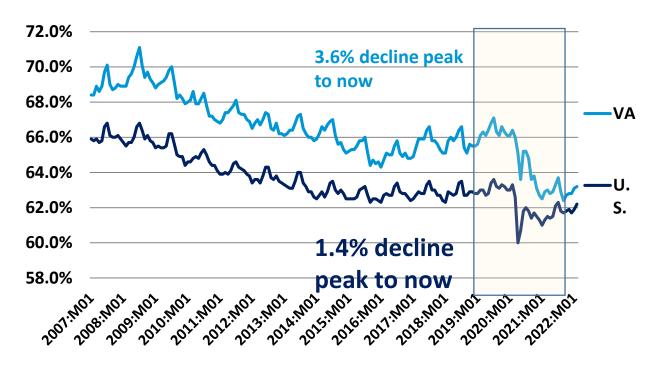


### Labor force participation for 16 and above

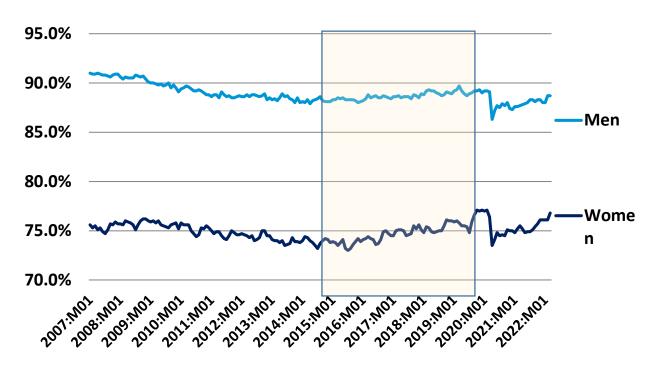




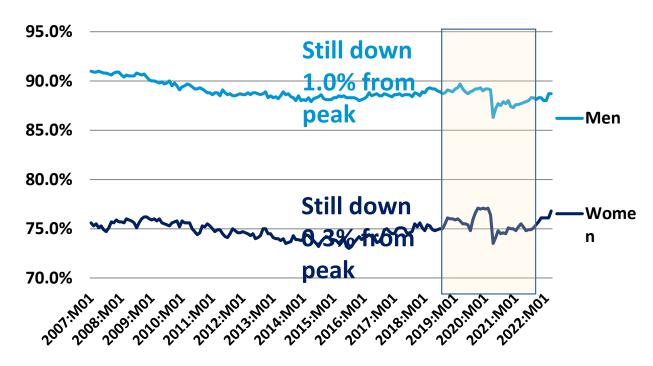
### Labor force participation for 16 and above



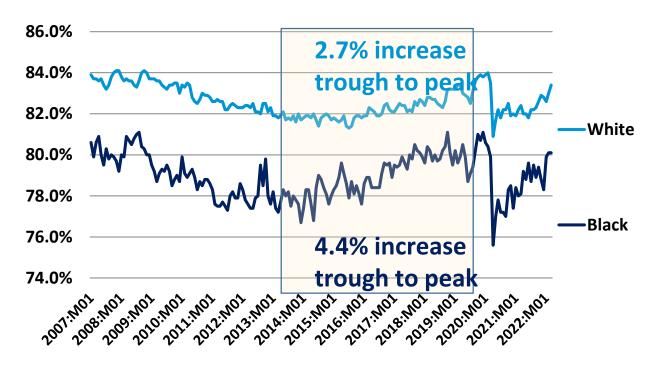




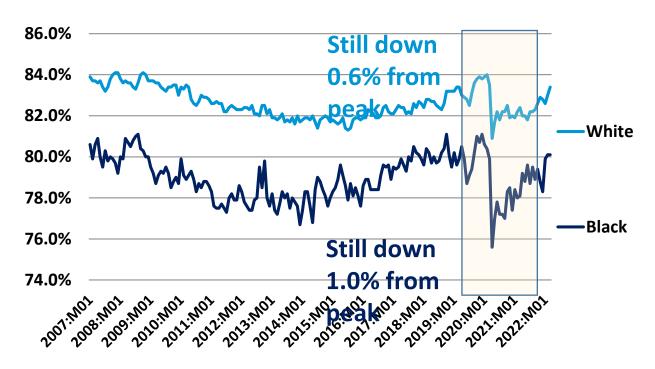










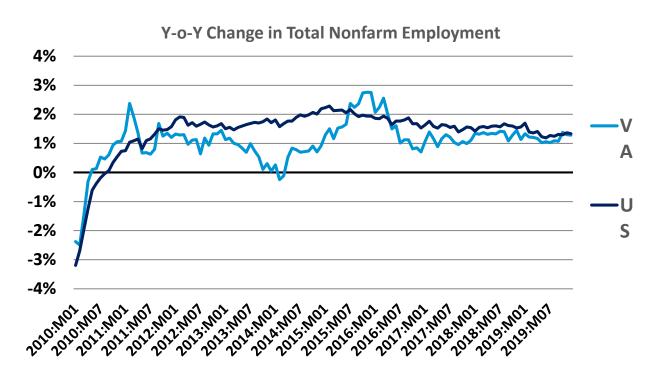


MANGUM N

# Economic Performance Relative to Other States

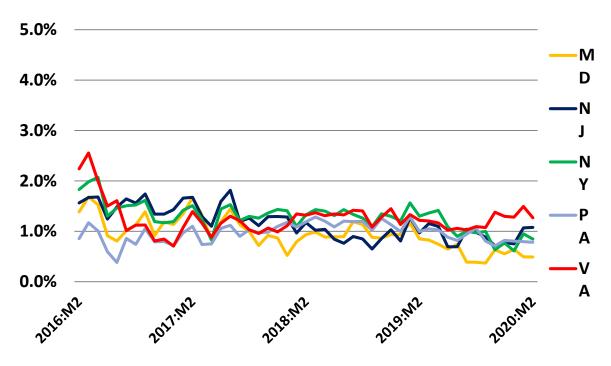


#### Y-o-Y Change in Employment: 2010-2019



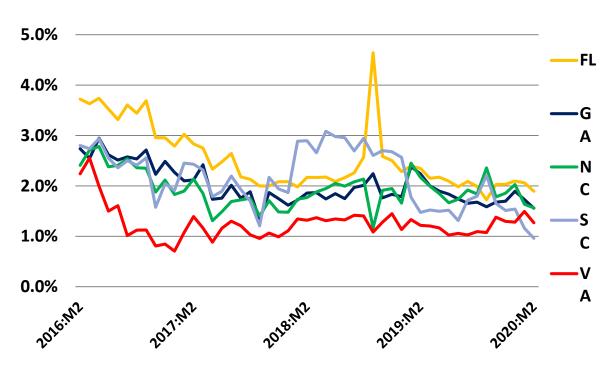


### Starting to look more like our neighbors to the north



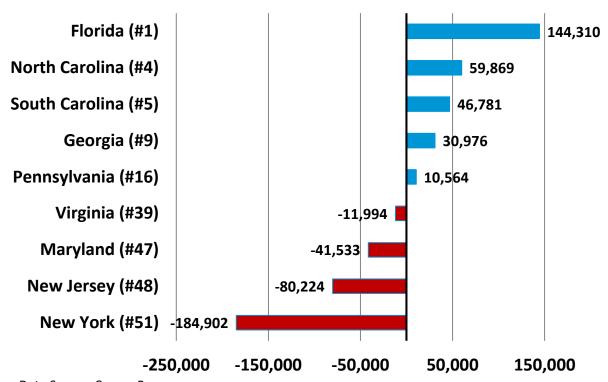


### And much less like our neighbors to the south





### Net state-to-state migration of population in 2019

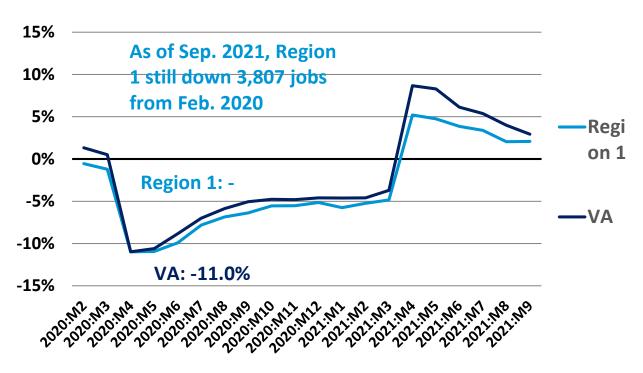


Data Source: Census Bureau. © 2022 Mangum Economics

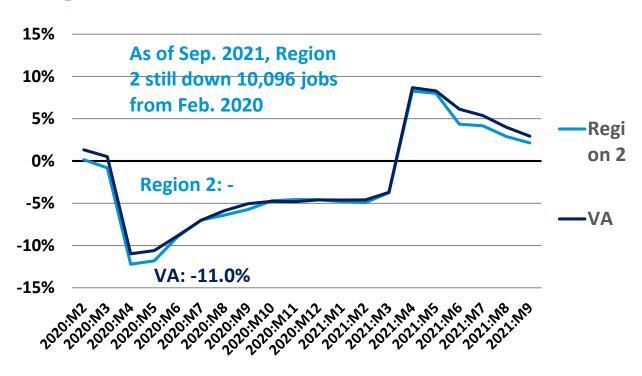
#### Outline

- 2020 was not a good year
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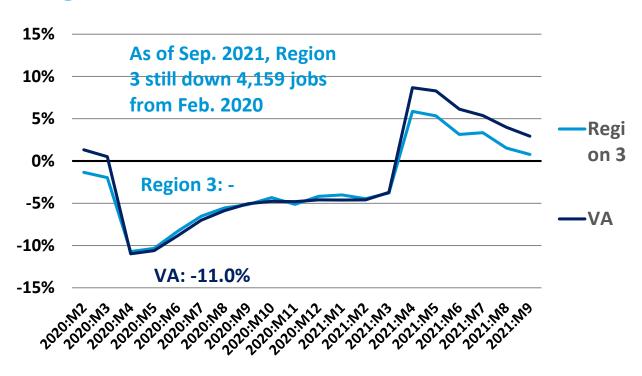




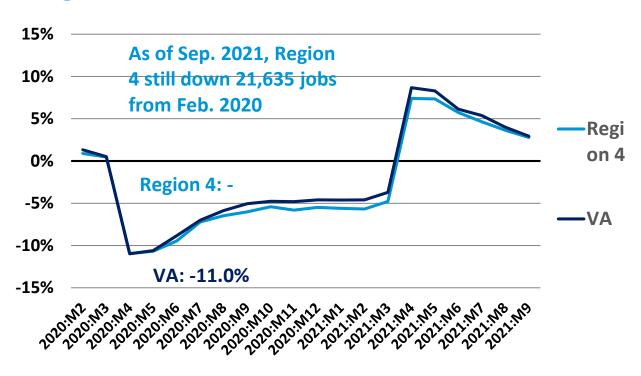




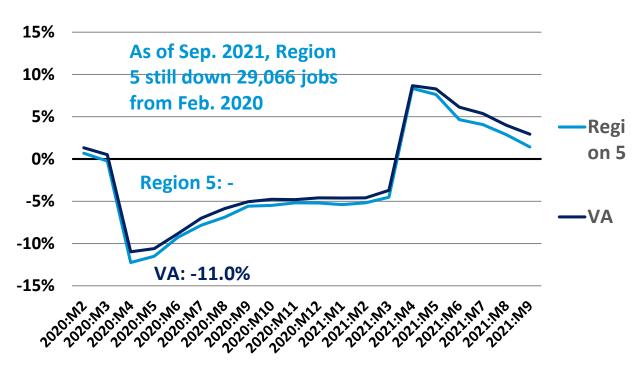




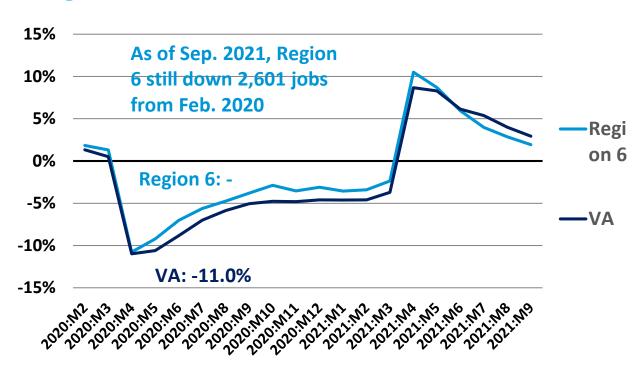




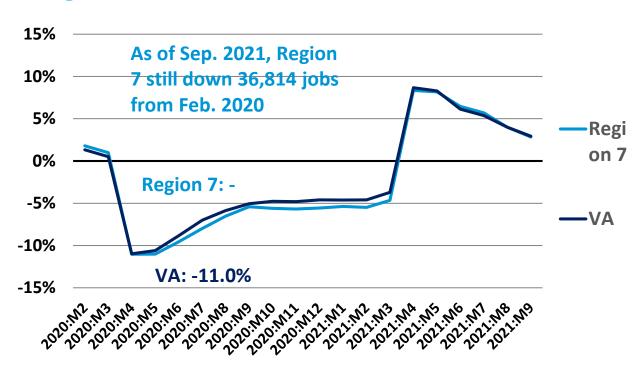




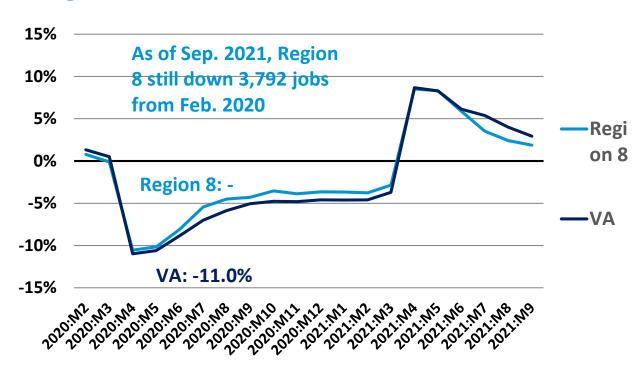




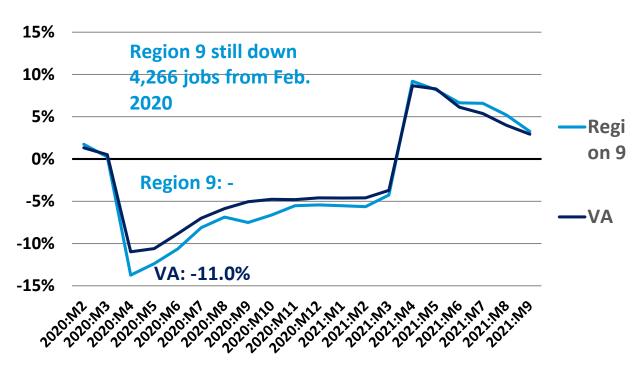












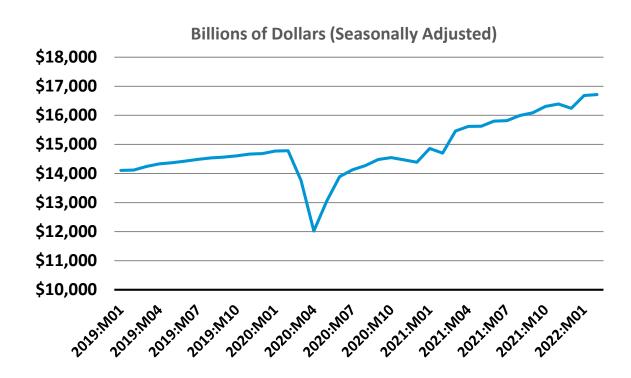
#### Outline

- 2020 was not a good year
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### **Personal Consumption Expenditures**



### Personal Consumption Expenditures



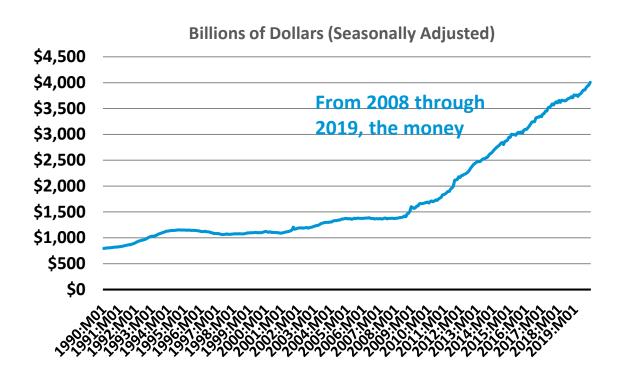
Data Source: U.S. Bureau of Economic Analysis

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# Growth in the Money Supply



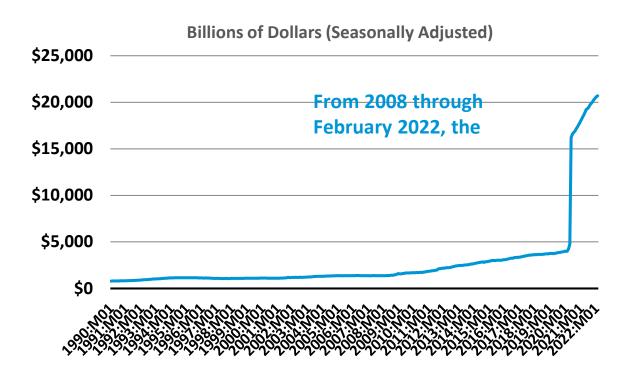
## Money Supply (M1)



Data Source: Federal Reserve Bank of St. Louis, Federal Reserve Economic Data (FRED) © 2022 Mangum Economics



# Money Supply (M1)

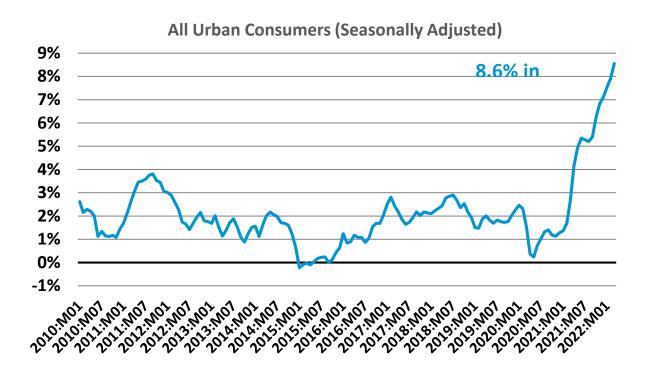


Data Source: Federal Reserve Bank of St. Louis, Federal Reserve Economic Data (FRED) © 2022 Mangum Economics

# Inflation

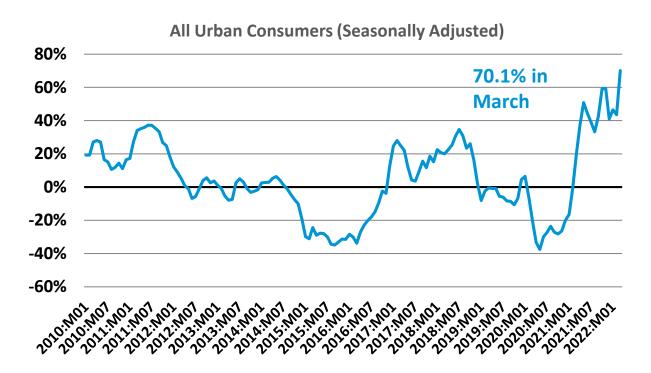


#### Consumer Price Index: All Items



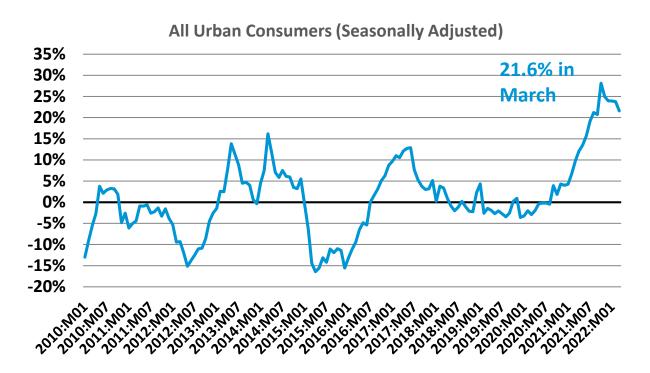


### Consumer Price Index: Fuel Oil



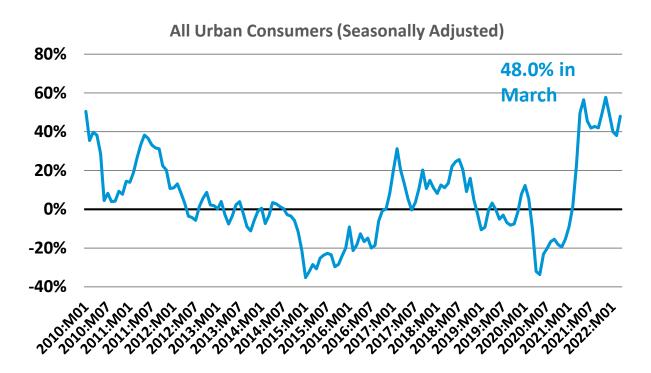


#### Consumer Price Index: Natural Gas



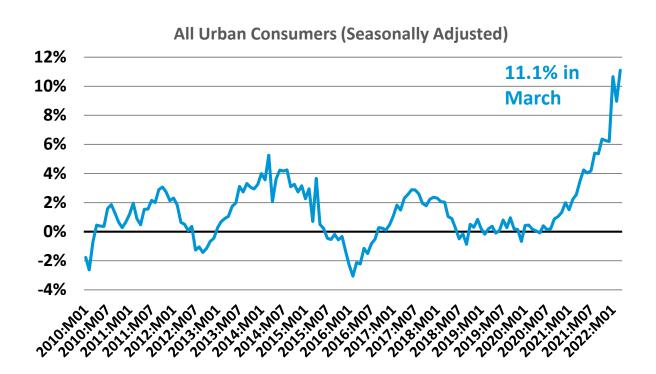


#### Consumer Price Index: Gasoline



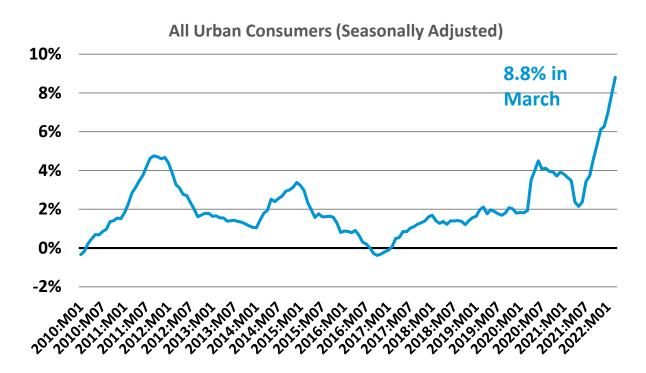


### **Consumer Price Index: Electricity**



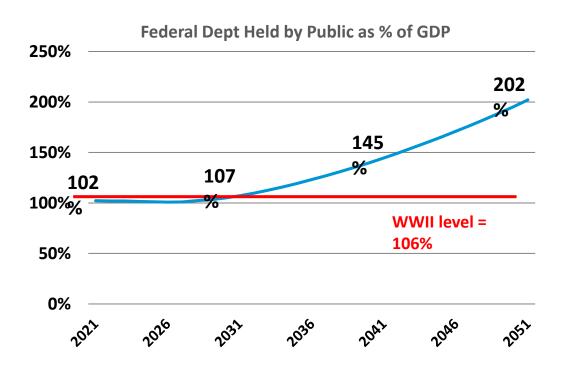


### Consumer Price Index: Food



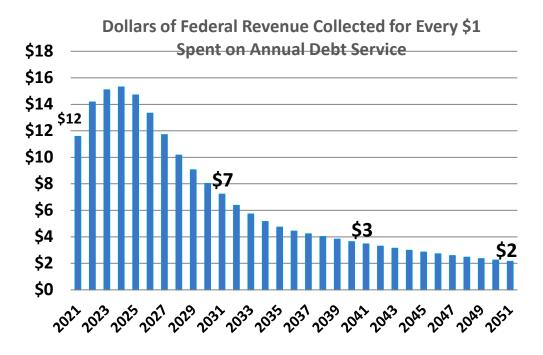
# Federal Debt

### Federal debt is surpassing WWII levels





# And the annual interest payment on that debt is exploding





# What does all that mean for GO Virginia?

- Dramatic growth in the money supply, inflation, and rapidly ballooning debt service on the federal debt must ultimately place downward pressure on federal spending.
- That will have a disproportionately negative impact on Virginia's federally-dependent economy.
- And that makes GO Virginia's mission to cultivate growth in the private sector that much more critical.



- VA's employment loss in April 2020 was the largest in history.
- In a single month, nine years of accumulated employment growth was wiped out.
- The 10.8% statewide Y-o-Y employment loss in April 2020 was worse than the 3.8% loss that occurred at the bottom of the Great Recession.



- But, Virginia faired better than the nation as a whole. In contrast to VA's 10.8% loss in April, the U.S. experienced a 13.4% loss.
- The reason is that:
  - VA benefited from its heavy dependence on federal employment and contracting.
  - VA is relatively less invested in those sectors that were most heavily impacted (Retail Trade and Leisure and Hospitality) and relatively more invested in those sectors that were less heavily impacted (Professional and Business Services and Federal Government).



- Since 2012, VA has under-performed the national average in employment growth.
- At times, our over-performance in wage growth has partly compensated for that underperformance in employment growth.
- Labor force participation which had trended downward throughout the Great Recession and the "Recovery," rebounded starting in 2016, especially within the minority population.



- But, labor force participation collapsed during the lockdowns, particularly in Virginia, and has yet to recover.
- VA's prolonged economic under-performance has placed us at the bottom of the ranking with neighboring states that are our most immediate competitors.



- Important issues on the horizon include dramatic growth in the money supply, inflation, and rapidly ballooning debt service on the federal debt.
- Which ultimately will create downward pressure on federal spending.
- Which will have a disproportionately negative impact on Virginia's economy.
- Which makes GO Virginia's mission to cultivate growth in the private sector that much more critical.





for more information contact Fletcher Mangum fletcher@mangumeconomics.com

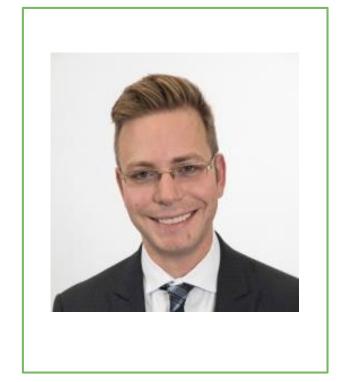




# The Role of Talent Development in State's Future Economic Growth

Jason A. Tyzko, former senior policy adviser to the Illinois Department of Commerce and Economic opportunity and current Vice President of the Center for Education and Workforce at the U.S.

Chamber of Commerce Foundation





# Competing on Talent

April 20, 2022

U.S. Chamber of Commerce Foundation



# Short-Term Trends and Challenges

- Over 1/3 of the global workforce had lost their employment or experienced reduced hours because of the pandemic
- Multiple factors played into why a return to work is difficult
- Labor market bottlenecks constrained supply
- A significantly higher quit rate and elevated interest in retraining made retention more challenging
- Continued desire for greater workplace flexibility, compensation, and overall value proposition



# Long-Term Trends and Challenges

- Many labor markets in a state of decline
- Labor markets become more dynamic not less
- Skills gaps persist and exasperated by technology and innovation
- The half-life of skills and skill obsolescence are a permanent risk
- DEI goals will reshape goals, culture, and talent strategy
- Technology will change work and workforce development



# Elements of a Competitive System

Competing on Partnerships





# Competing on Partnerships

Traditional Approaches to Predicting Employer Needs and their Limitations



**Advisory Boards** 



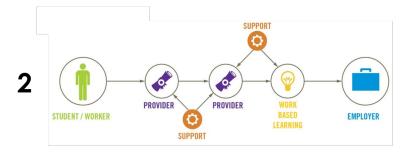
Government and Philanthropic Investment



**Labor Market Information** 

# TPM: A Supply Chain Approach for Talent

1 Raw Materials Supplier Manufacturer Distributor Retailer Customer





# What Makes TPM Different?

- Built on industry best practices
- Focused on employer ROI
- Authentically employer-led
- Provides a structured and agile process for collective action and decision making
- Generates more granular and actionable data on workforce demand
- Engages the full spectrum of talent sourcing partners
- Creates shared value, competitiveness, and accountability



# The TPM Framework





#### Strategy 1:

Organize for Employer Leadership and Collaboration



#### Strategy 4:

Analyze Talent Supply



#### Strategy 2:

Project Critical Job Demand



#### Strategy 5:

**Build Talent Supply Chains** 



#### Strategy 3:

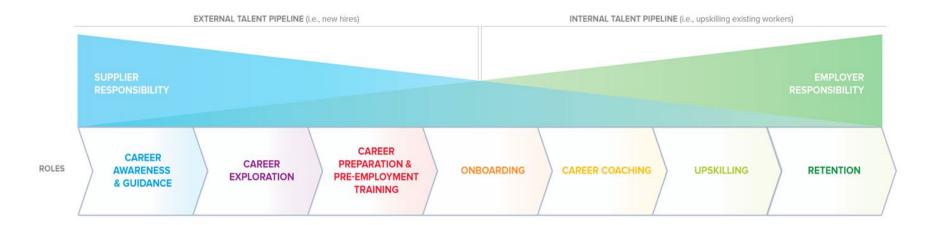
Align and Communicate Job Requirements



#### Strategy 6:

Engage in Continuous Improvement and Resiliency Planning

# Mapping the Talent Value Stream



# TPM Performance Scorecard

Shared Pain Point Measures	Performance	Relative to Goals	Trend
Percentage of applicants from talent providers that meet the requirements	55%	•	<b>+</b>
Average number of days to fill open positions	128 days	•	<b>+</b>
Percentage of hires retained in first year of employment	75%	•	<b>*</b>
Percentage of recent hires from targeted, under- sourced populations	35%	•	<b>+</b>
Percentage of employees completing career advancement programs	48%	•	+
Driver/Transition Measures	Performance	Relative to Goals	Trend
Percentage of employees in entry-level jobs enrolling in career advancement programs	50%	•	<b>†</b>
Number of learners who complete education and training programs	75	•	-
Number of learners enrolled in education and training programs	95	•	-

# Consumers Energy

#### The Challenge

Posted 100 skilled trade job openings, received 4,000 applications, fewer than 50 qualified applicants.

#### The Solution

 Joined the TPM movement with DTE Energy through the MEWDC (an affiliate of CEWD). Went through the TPM system and identified 3 preferred providers.

#### The Results

98% retention and \$30,000 saved per hire



# Competing on Data

- While we have improved our workforce data, major gaps remain
- We need better data on education and training outcomes, including skills
- We do not know enough about in-demand jobs and when they change, and we know even less about employment and earnings outcomes
- Existing LMI has been very useful, but we need a leap forward and more and better primary source data about jobs and employment
- In order to improve the quality, value, and usability of education and workforce data, it must be skills-based, interoperable, and structured (i.e., data about learning, people, and jobs)

# Data about Jobs & Employment

# JEDY Jobs and Employment Data Exchange

- A public-private approach for organizing, collecting and using standards-based data on jobs and employment to: (1) improve government reporting (e.g., UI wage records);
   (2) support workforce analytics; and (3) make possible verifiable employment records for hiring and determining benefit eligibility
- Launched a seven-state partnership and developing its enabling technology this year

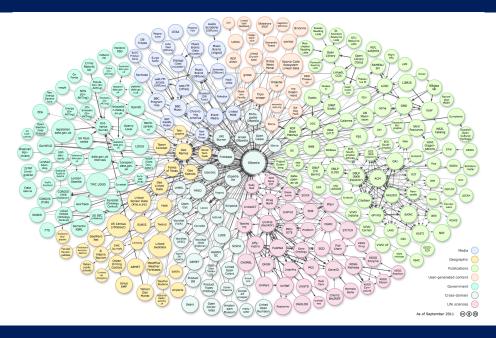
# Structured Data through Standards

NIMS document for exclusive use by - - Mon Jun 12 04:11:25 EDT 2017
CORE COMPETENCY
REQUIREMENTS:
NIMS CERTIFIED

APPRENTICE CORE COMPETENCIES		NIMS CREDENTIALS	
1.	Identify and Demonstrate Use of Machine Safety and Personal Protective Equipment	Measurement, Materials, and Safety Level I	
2.	Demonstrate Compliance with Lock-out/Tag-out Procedures and OSHA Requirements and Guidelines		
3.	Machine Operations and Material Handling, Hazardous Materials Handling and Storage, including EPA, Hazmat, and OSHA		
4.	Part Inspection		
5.	Process Control		
6.	Process Adjustment - Single Part Production		
7.	Participation in Processes Improvement		
8.	Manual Operations: Layout	Job Planning, Benchwork, and Layout Level I	
9.	Manual Operations: Benchwork		
10.	Sawing		
11.	Job Process Planning		
12.	Drilling Operations	Drill Press Skills Level I	
13.	Turning Operations: Turning Between Centers	Turning Between Centers Level I	
14.	Turning Operations: Turning Between Centers	Turning Between Centers Level II	
15.	Turning Operations: Chucking	Chucking Level I	
16.	Turning Operations: Chucking	Chucking Level II	
17.	Milling: Square Up a Block	Milling Level I	
18.	Manual Milling: Vertical and Horizontal		
19.	Manual Milling: Vertical and Horizontal	Milling Level II	
20.	Surface Grinding, Grinding Wheel Safety (Optional)	Grinding Level I	
21.	Surface Grinding, Horizontal Spindle, Reciprocating Table (Optional)		
22.	Surface Grinding, Horizontal Spindle, Reciprocating Table (Optional)	Grinding Level II	
23.	CNC Programming - Milling and / or CNC Programming - Turning		
24.	CNC: Write a Simple CNC Milling and / or CNC Turning Program and Review Tool Path	CNC Milling and / or CNC Turning	

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# Structured and Linked Data



## Data about Jobs & Employment: Where We Are Now

- Unstructured: Neither machine actionable or linked
- Fragmented: Many jurisdictions, many systems, disparate objectives
- **Inconsistent**: Varied data elements, formats, levels of detail
- Inefficient: Redundancies, burdensome to employers, old technologies, customization needed, labor intensive
- Insufficient: Lacking important data, surveys subject to errors and non-response, large-area bias
- Siloed: Access restricted, collaboration and sharing limited, not synchronized
- Untimely: Some data not available for months or years



# **Future State**

- Public-private collaboration
- Consistent definitions
- More granular, expanded data
- Increased frequency
- Improved access
- Common reporting systems, fewer reports
- Expanded value propositions for both public and private sectors



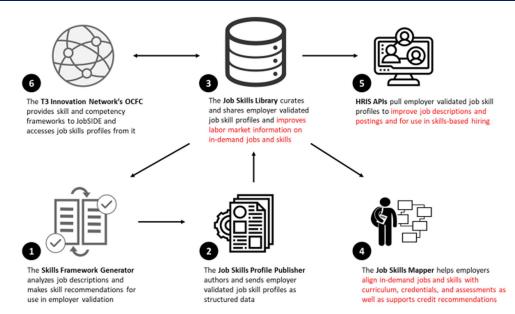
# Higher Value Data, Lower Cost Data

High-Cost, Low-Value Data	Low-Cost, High-Value Data
Individual-entity design	Multi-entity collaborative design
Single purpose	Multiple purpose
Sample data	Population data
Unique collection systems	Common collection system
Dispersed collection	Centralized collection
Program-specific reporting format	Uniform reporting format
Few items per report	All items in a single report
Inconsistent data definitions	Uniform data definitions
Program-specific reporting guidance	Uniform reporting guidance
Infrequent collection	Frequent collection
Inconsistent reporting period	Consistent reporting period
Siloed data management	Cooperative data management



# Coming Soon: JobSIDE

- Produces and shares employer-validated skills profiles for in-demand jobs
- Generated through TPM's Strategy 3 workflow as well as through a standalone application
- Enables use of skills profiles to harmonize hiring requirements, improve job postings, and to map to curriculum, credentials, and assessments

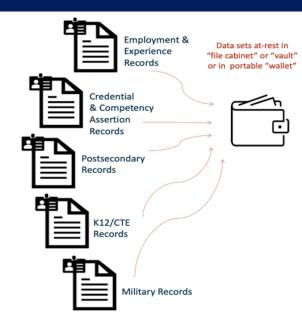




# Data about Learning and Individuals

# 13 INNOVATION NETWORK

- A public-private data and technology infrastructure for a more equitable talent marketplace
- Four networks working toward (1) making all learning count;
   (2) skills the new currency; and (3) empowering learners and workers with data
- Producing, sharing, and scaling skill and competency-based LERs for use by learners and workers



# Skills Data Infrastructure Workflow

- Standardization: Enable the ability to create machine actionable skills data
- Conversion: Convert existing unstructured skills data to machine actionable data
- Authoring: Author new skills data as structured, machine actionable data
- Curation (Host & Present): Store and make available structured skills data
- Search: Make structured skills data searchable, comparable, and discoverable
- Use: Access and put structured skills data to use (e.g., applications in learning, curriculum alignment, employment services, hiring, career advancement, etc.)
- Translation: Compare and translate between skill languages



# Competing on Investment

- Our current system for financing and investing in talent has increased prices and produced record levels of debt
- Risk is borne almost entirely by learners themselves
- Few products exist that are user friendly for existing workers to finance reskilling and upskilling opportunities
- Employers have tremendous skin-in-the-game but may be getting sub-optimal returns on that investment



# Competing on Investment



A more public-private approach for how we finance and invest in talent

Talent Finance refers to the development and use of public and private instruments for aligning investments in talent development and in managing employment and income risks

To make education, training, and credentialing (1) more affordable, (2) with less debt, and (3) to achieve better outcomes for learners and workers

# Example Talent Finance Innovations

- **Joint Procurement & Shared Benefits**: Employer collaboratives negotiating more affordable financing options or terms.
- **Shared Benefits**: Employers using tuition reimbursement investments to pay down student loan debt and to retain workers that stay within their collaborative.
- **Income Tax Deferment**: Reimbursing employer direct investment in talent development.
- Skills Savings Accounts: Work with employers to provide HSA-style savings accounts to use for more flexible, skills-based training and credentialing and align with tax policy.
- Outcomes-Based Financing: Income Share Agreements (ISAs), social impact bonds, credential insurance, and other innovations that reward outcomes and reduce risk.
- Capacity Building: Building new talent finance capabilities in business associations, economic development organizations, and student assistance commissions.



# Imagine a Future Where...

- Employers authentically lead in workforce systems and talent pathways
- Employers begin to function like educators and registrars producing, authentically, verifying, and sharing records as data
- All learning counts and individuals can verify and assert their knowledge, skills, and abilities as data leveraging them for credit, employment, or advancement
- More granular, complete, and comparable data on learning and employment ushers in a new generation of research, analytics and evidence-based policy
- More flexible, fair, and accessible financing options are available to support a wide variety of talent development led by both the public and private sectors



# How to Get Involved

- Promote authentically employer-led talent pathways aligned to the needs of your most critical growth industries
- Modernize your workforce data to improve labor market analytics, achieve productivity gains, and empower learners/workers with data
- Help develop and demonstrate new and innovative financing solutions that are more affordable, with less debt, and produce better outcomes
- Build a system not a program, one that intentionally aligns economic development with talent development and reimagines the roles of the public and private sectors



# **Contact Information**

Make no plans small and be bold, your future competitiveness depends on it

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Jason A. Tyszko
Vice President, CEW
U.S. Chamber of
Commerce Foundation



# Questions for You

- 1. For your organizations, which short-term and long-term workforce challenges carry the greatest risk?
- 2. Which characteristics of a competitive workforce system (partnerships, data, investment) resonate with you and what, if anything, is missing? And how does this apply across regions?
- 3. What resources and support does your region need to recover and grow economically as well as prepare for the future of work?





Reflections and Relationship to GO Virginia Program Objectives

Economic Development Priorities

Economic Imperative

Critical Success Factors for Regions and States





### What is GO Virginia?

A regionally-driven economic development initiative that encourages collaboration between local governments, higher education, private industry and workforce, by incentivizing projects that will create higher-paying jobs in traded industry clusters.







### Characteristics of Industry Clusters

Definition - A regional concentration of related industries in a particular location.

- Enhance productivity and spur innovation
- Close proximity, and the accompanying tight linkages, yield
  - better market insights
  - more refined researches agendas
  - larger pools of specialized talent
  - faster deployment of new knowledge
- Play a fundamental role in driving regional economic competitiveness by encouraging higher rates of
  - job growth
  - wage growth
  - new business formation
  - innovation







### **TRADED CLUSTERS**



- Serve markets in other regions or nations
- Concentrated in regions that afford specific competitive advantages
- Example industries: aircraft manufacturing, management consulting, iron ore mining

LEARN MORE >



### **LOCAL CLUSTERS**

#### THE FOUNDATION OF LOCAL ECONOMIES

- Sell products and services primarily for the local market
- · Located in every region
- Example industries: drug stores, physician offices, elementary schools, radio networks

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#### **Characteristics of Clusters**

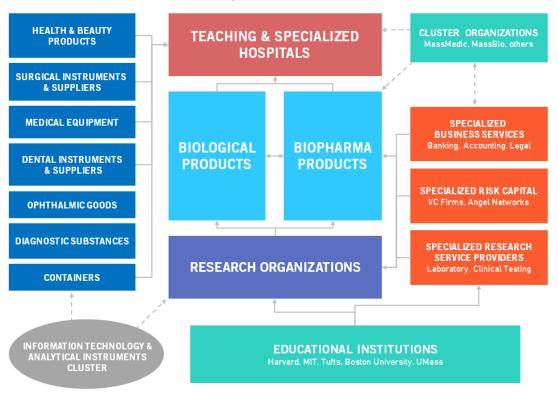
#### **Traded Clusters**

- Groups of related industries that serve markets beyond the region in which they are located
- "Engines" of regional economies; without strong traded clusters it is virtually impossible for a region to reach high levels of overall economic performance
- Higher wages
- Higher levels of innovation

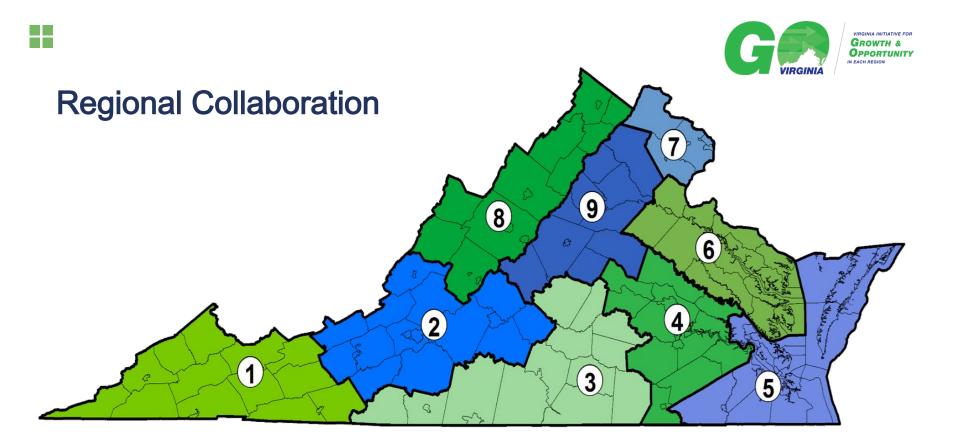
#### **Local Clusters**

- Industries that serve the local market
- Employment in local clusters is usually proportional to the population of that region

#### The Boston Biopharmaceuticals Cluster













# Growth and Diversification Plan A Regional Plan for Action

- Priority Traded Sectors Situational Analysis
- Sector Skills Analysis Talent Pipeline Assessment
- Selected Investment Strategies
- Collaborators/Partners
- Measures of Success





# Regional Industry Cluster Targets - 2021





	Region	Region	Region	Region	Region	Region	Region	Region	Region
Cluster	1	2	3	4	5	6	7	8	9
Manufacturing and Advanced									
Manufacturing	X	X	X	X	X	X		X	X
Agriculture/Beverage/Food									
Manufacturing	Х	X	X		X	X		X	Х
Information and Emerging									
Technologies	Х	X	X	X	X	X	X	X	X
Energy and Minerals	Х				X				
Health/Bioscience/Life Sciences		Х	Х	X	Х		X	X	Х
Forestry/Wood/Paper Products		Х	Х		Х	Х		X	Х
Shipping and Logistics			Х	X	Х	Х	X	X	
Water Technologies					Х	Х			
Transportation and Autonomy		X			Х		X		
Professional Services		Х	Х		X	Х	Х	Х	Х
		Common St	trategies a	nd Goals Id	lentified				
Cluster Scale Up	Х	Х	Х	Х	Х	Х	Х	Х	Х
Sites	Х	Х	Х	Х	Х	Х		Х	Х
Talent and Workforce	Х	Х	Х	Х	Х	Х	Х	Х	Х
Technology									
Innovation/Entrepreneurship		Х	Х	Х	Х	Х	Х	Х	Х









#### The Fund

# Virginia Growth and Opportunity Fund FY22 - \$30 m

Regional Capacity Building

\$2.25 m

\$250,000/region

Provides support for administrative efforts to each regional council and may also be used towards projects Regional Per Capita Projects

\$17.57 m

Based on Regional Population

Data with \$1m floor drawn from

competitive

Region 1 - \$1,000,000

region 2 - \$1,342,34.

Region 3 - \$1,000,000

Region 4 - \$2,524,026

Region 5 - \$3,423,57

Region 6 - \$1,020,503

Region 7 - \$4,984,456

Region 8 - \$1,070,55

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Statewide Competitive Projects

\$10.18 m

Discretionary pot of funding Awarded by the GO Virginia Board on a competitive basis







## Four Investment Strategies

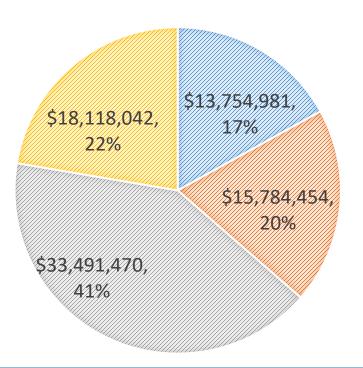
- Talent Development
- Entrepreneurship and Innovation
- Cluster Scale Up
- Sites/Infrastructure





# GO VIRGINIA GRANT AWARDS BY INVESTMENT STRATEGY





- Startup Ecosystem
- Cluster Scale-Up
- Workforce Development
- Site Development and Infrastructure





### **Talent Development**

- To build new capacity creates a larger pool of qualified workers in order to meet unmet employer demand and address the need for new/emerging skills within area talent pools
- Focus on occupations integral to the industry sectors identified in the region's Growth & Diversification Plan

Total Investments	Total Projects
\$33.5M	90





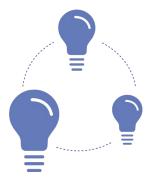




### Entrepreneurship and Innovation

- Project activities that develop or advance the necessary elements of a thriving start up ecosystem that supports the launch of new businesses and provides critical support for high growth potential early stage businesses in targeted traded clusters
- TEConomy research & recommendations
- Designation of ecosystem coordinating entity
- Opportunity Regional Entrepreneurship Initiative

Total Investments	Total Projects
\$13.8M	44









### Cluster Scale Up

- Focus on high-potential opportunities for existing firms
  within an existing industry cluster or the development of a
  nascent or emerging industry cluster.
- Cluster scale up projects ask the question "what's next?"
- They build off a foundation of capabilities and assets that support existing clusters or unique intellectual property or workforce know-how.

Total Investments	Total Projects
\$15.8M	44









#### Sites/Infrastructure

 Strengthen the regional portfolio of business ready sites available to accommodate the expansion or attraction of businesses in the regions' targeted industry sectors

•	Activities must advance sites using the Virginia Business
	Ready Sites Program tier descriptions for site readiness for
	sites of at least 25 contiguous acres.

 Demonstrated regional collaborations through cost/revenue sharing, joint workforce development efforts and/or other partnerships or agreements, such as Regional Industrial Facility Authorities (RIFAs).

Total Investments	Total Projects
\$18.1M	31







### Program Impact

#### **Total Investment - Leverage** \$81M GOVA + \$95M in Non-state



#### **Regional Collaboration**

- 185 unique local co-funders
- 131 localities
- 30 school divisions
- 17 regional economic development organizations
- 5 RIFAs formed

#### **Committed Project Outcomes**

- 24,391 jobs created
- 13,020 businesses served
- 837 businesses created
- 420 new apprenticeships
- 2,483 newly credentialed workers
- 1,496 new internship opportunities created
- 5,630 acres characterized or advanced a tier according to the criteria established in the Virginia Business Ready Sites program







### Investment Strategy Roundtable Topic Discussions

- Given the state and regional economic development priorities what should/could GO Virginia do to further its impact?
- Why is (Investment Strategy X) important to grow traded clusters and diversify regional economies given the economic landscape?
- What would be key measures of success in this effort?





# GOVA Program Success Stories and Lessons Learned

Sara Dunnigan, Deputy Director, GO Virginia







### Entrepreneurship and Innovation Common Core Performance Measures

- Number of new businesses created
- Number of existing businesses served/scaled
- Number of jobs created
- Number of entrepreneurs engaged/trained
- Number of mentors engaged
- Total capital raise by new/served businesses
- Number of new products completed/released to production
- Revenues increased from export (out of Virginia) sales









### **Entrepreneurship and Innovation**

- Region 2- Entrepreneurship Initiative Collaborate with stakeholders throughout Region 2 to develop the Region 2 Innovation and Entrepreneurial Investment Plan. Virginia Innovation Council (VIC) mapped the regional ecosystem assets and developed strategies to attract entrepreneurship resources.
- Region 4 VSU Minority Small Business Launch Center To increase the number of scalable minority enterprises that contribute to Region 4's economy by creating a Minority Small Business Launch Center that provides a comprehensive suite of entrepreneurshipfacilitating and supportive services.











### **Entrepreneurship and Innovation**

- Region 5 757 Collab To develop new innovation and entrepreneurship programming and services to early-stage companies by bringing together an accelerator, private capital, collaborative space, and community outreach programs – four tools critical to fostering entrepreneurial activity.
- Region 8 Startup Shenandoah Valley To deliver a three prong approach to kick start a
  vibrant entrepreneurial ecosystem that will delivers dedicated staff, partnerships with regional
  assets, workspaces, connections to mentorship, and access to capital to companies with a high
  potential for growth and success.











#### Entrepreneurship and Innovation – Critical Success Factors

- Identification of a coordinating entity
- Completion of a Regional Entrepreneurship Investment (REI) strategy with next step recommendations to advance the ecosystem
- Tight focus on traded sector industries "thickness"
- Intentionality around a continuum ideation, incubation, acceleration, scale
- Holistic approach people, places, programming, mentorship, financing, etc.
- Longer term impact horizon
- Commitment to developing an ecosystem strong partnerships
- Connections to a university/research/anchor institution
- Local government support
- Sustainability strategy

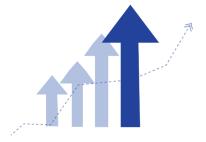




## Cluster Scale Up Common Core Performance Measures



- Number of existing businesses served/scaled
- Number of new firms created
- Number of jobs created
- Number of new products completed/released to production
- Revenues increased from export (out of Virginia) sales









#### Cluster Scale Up

Region 1 – Energy Storage & Electrification Manufacturing Jobs – To create jobs in GO Virginia Region One in the energy storage and electrification manufacturing field while attracting investments and expand the local tax base. The project will consist of a three-phased approach including targeted technical analysis, outreach and planning, and implementation to assist companies in the region and attract new companies to the region.



Region 4- Pharmaceutical Manufacturing Cluster Scale Up - To accelerate the growth of the
emerging Pharmaceutical Manufacturing cluster for Region 4 and to become an international leader in
advanced pharmaceutical manufacturing and R&D, thus grow high-paying jobs, recruitment and
expansion of companies and investment in high tech tradeable sector activity.







#### Cluster Scale Up

Region 5 – Offshore Wind Supply Chain Hub Development Program - To build an Offshore Wind
 (OSW) supply chain by targeting and attracting suppliers to relocate to the region and connecting
 existing businesses to opportunities in offshore wind.



Region 6 - Launching a Coastal Resilience and Adaptation Economy - The approach: 1) Builds resilience entrepreneurship through RISE's proven business plan competition and accelerator services, including a product performance validation in Region 6's network of real world R&D test sites (i.e. Resilience Innovation Center) as an expansion of the Hampton Roads resilience living laboratory; and 2) Forms a multi-stakeholder, business—focused Region 5-6 Consortium to engage the broader business community in education about the risks and economic impacts of seal level rise, and builds capacity for adoption of resilient practices.









#### Cluster Scale Up— Critical Success Factors

- Identification of an existing cluster (pivot) or high growth potential nascent/emerging cluster
- Catalyst investment from one or more private sector partners
- Unique technology or intellectual property
- Involvement of regional economic development partner or other trusted industry intermediary
- Knowledge of global market place and regulatory environment
- Asks the question "what's next"





# Sites/Infrastructure Common Core Performance Measures



- Number of acres advanced to higher tier per Virginia Business Ready Sites
   Program (VBRSP)
- Number of acres positively impacted
- Number of increased locality engagement in establishing a RIFA/revenue sharing agreement
- Number of linear feet of sewer infrastructure
- Number of linear feet of water infrastructure
- Number of linear feet of gas infrastructure
- Number of prospects (active company visits)
- Number of businesses attracted







#### Sites/Infrastructure

• Region 2 - Wood Haven Water & Sewer - To improve the site readiness and marketability of an industrial site near the intersection of Routes 81 and 581 that will accommodate a 52-acre pad and a 20-acre pad. This site is owned by the Western Virginia Regional Industrial Facility Authority (RIFA) – Roanoke County, Roanoke City and the City of Salem.



Region 5 - Hampton Roads Economic Development Sites Readiness Program - To advance a portfolio of three existing sites along the Virginia Business Readiness Scale to a Tier IV. The due diligence work advances a total of 495 acres to a Tier IV, located in Isle of Wright, Nev News, and Virginia Beach.







#### Sites/Infrastructure

- Region 8 Shenandoah Valley Sites Enhancement To elevate six sites totaling 1,112
  acres in Region 8 to the next Tier on the VEDP Site Characterization scale by completing
  all due diligence work associated with the sites.
- Region 9 Regional Business Park Phase 2 Site Readiness (Tier 3) To complete the Phase II due diligence work for an approximately 700 acre new regional business park and advance the development status to a Tier 3 site on the Virginia Business Ready Site Program (VBSRP). This phase of due diligence includes topographic and boundary surveys, traffic impact assessment, preliminary engineering reports (PER), geotechnical survey, cultural resource summary, and completion of the master plan.











#### Sites/Infrastructure — Critical Success Factors

- Market driven sites are developable and marketable
- Relevant/trusted/accurate data
- Ownership/cost/revenue sharing
- Regional site portfolio approach
- Small number of regionally significant sites
- Site control
- Connection to a executable marketing and business recruitment strategy
- Share commitment to building adjacent assets



#### Program Impact



#### **Regional Collaboration**

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### Adjournment









#### Welcome

Todd Stottlemyer, CEO of CNSI and GO Virginia

Board Vice Chair







# Talent Pathways Initiatives – Investment Priorities and Measures of Success

Sara Dunnigan, Deputy Director, GO Virginia





- To build new capacity creates a larger pool of qualified workers in order to meet unmet employer demand and address the need for new/emerging skills within area talent pools
- Focus on occupations integral to the industry sectors identified in the region's Growth & Diversification Plan

Total Investments	Total Projects
\$33.5M	90







#### Talent Development **Common Core Performance Measures**



- Number of individuals trained
- Number of new training programs implemented
- Number of credentials awarded
- Number of jobs created/filled
- Number of businesses served
- Number of new internships created
- Number of new apprenticeships created







Region 2- Central Virginia Community College CTE Academy – Aligns 26 existing under the Academy framework and develops 4 additional credential and/or certificate programs. The CTE Academy is focused on one or more of the Region's targeted industry clusters. The skills-based training will enable students to pursue career pathways to obtain higher paying jobs through stackable credentials and certifications. Each of the pathways include a dual enrollment option based on existing programs offered through the 5 regional public high school divisions, which includes 10 total high schools.





• Region 3 – GOTEC - To build the regional Great Opportunities in Technology and Engineering Careers (GOTEC) program for careers in IT and advanced manufacturing. GOTEC is a partnership between six higher-education centers and the K-12 school systems in their service areas. GOTEC will give students hands-on exposure to in-demand career pathways starting in middle school. Areas of focus are precision machining, welding, information technology and cybersecurity, robotics, automation, and mechatronics, and advanced materials.





Region 5 - Virginia Digital Shipbuilding - To create a regional and statewide program curriculum and co-lab facility to train approximately 8,500 current and future workers to work in the new digital manufacturing environment. The project will support Hampton Roads' existing advanced manufacturing and shipbuilding clusters, with impacts to the supply-chain throughout the Commonwealth.





Region 8 - BRCC Cyber Security Workforce Development - To initiate a new cybersecurity workforce development program focused on producing new industry credentials (CompTIA Security+) that will attract cybersecurity jobs to the Shenandoah Valley. BRCC arranged internship opportunities with regional employers and established an advisory council of Managed Security Service Providers (MSSP) who developed the curriculum and provided onthe-job training opportunities.







## VIRG

#### Talent Development – Critical Success Factors

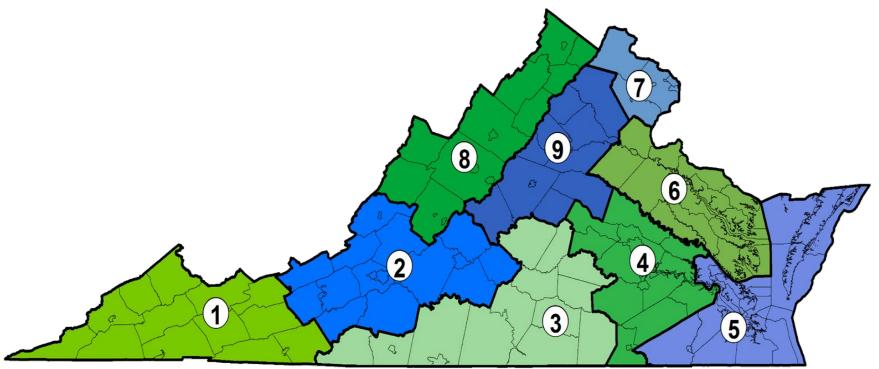
- Targeted cluster focus
- Employer engagement
- Actionable labor market Information
- Strong regional collaboration (labor shed approach)
- Commitment to the pathway development
- Employer-driven solutions

















	Region									
Cluster	1	2	3	4	5	6	/	8	9	
Manufacturing and Advanced										
Manufacturing	Х	Х	X	Х	Х	X		Х	X	
Agriculture/Beverage/Food										
Manufacturing	Х	Х	Х		X	Х		Х	X	
Information and Emerging										
Technologies	X	X	X	X	X	X	X	X	X	
Energy and Minerals	X				X					
Health/Bioscience/Life Sciences		X	X	X	X		X	X	X	
Forestry/Wood/Paper Products		X	X		Х	X		X	X	
Shipping and Logistics			X	X	X	X	X	X		
Water Technologies					Х	X				
Transportation and Autonomy		X			X		X			
Professional Services		X	X		Х	X	X	X	X	
Common Strategies and Goals Identified										
Cluster Scale Up	Х	Χ	Х	Х	Х	Х	Х	Х	Х	
Sites	Х	Χ	Χ	Χ	Χ	Х		Χ	Χ	
Talent and Workforce	Х	Χ	Х	Х	X	Х	Х	Х	Χ	
Technology										
Innovation/Entrepreneurship		Х	Х	Х	Х	Х	Х	Х	Х	





#### Wrap Up Discussion and Next Steps

Roundtable Discussion







#### Talent Pathways Initiative – What's Next?

- How can GO Virginia provide leadership and an alignment framework to move forward?
- Who should be on "the team"?
- Can we make changes to our existing program guidance today align our efforts?



#### Adjournment