

#### **GO Virginia Region 2 Council**

October 19, 2023, 2:00 p.m.-4:00 p.m.

Fralin Biomedical Research Institute, Room G-102A, 4 Riverside Circle, Roanoke, VA, 24016

- Introductions (2:00-2:05)
- Financial Report and Project Pipeline (2:05-2:15)
- Project proposals (2:15-3:00)
  - "Developing IT & Cybersecurity Certification Pipeline to Advance Cluster Growth (ITCCP)" – Radford University Economic Development
  - "Materials and Machinery Cluster Scale-Up" New River Valley Regional Commission
  - "ACA Classical & CTE Institute" Appomattox County
- Special Updates
  - Report of G&D updates (3:00-3:25)
  - Jason El Koubi, Virginia Economic Development Partnership (VEDP) (3:25-3:45)
- Council Business (3:45-4:00)
  - Quarterly project reporting
  - Minutes
- Packet Information Item
  - Match Waiver Guidance

The meeting will adjourn at 4:00p.m.



Public comment is welcome in writing. Please submit to Region 2 staff, John Provo, <u>jprovo@vt.edu</u> or Rachel Jones, <u>rachelcj@vt.edu</u> by 10/18 at 2:00p.m.

#### Region 2 Allocations Updated 10/6/2023

FY 23 Per Capita Projects	
FY 23 Allocation	\$1,527,228.00
Transfer from FY18	\$28,658.12
Transfer from FY21 Per Capita	\$506,000.00
Transfer from FY 21/22 Capacity Building	\$106,575.67
Transfer from FY22 Per Capita	\$90,203.00
Industry 4.0 for the ACE Workforce	-\$500,000.00
Expanding Welding Training Capacity & Jobs in the Roanoke Valley	-\$166,667.00
Lynchburg Beacon of Hope Career Acceleration Program	-\$540,000.00
Falling Branch Corporate Park Phase II Regional Site Development	-\$324,000.00
Strengthening Entrepreneur Impact- RAMP	-\$577,800.00
FY23 Remaining Balance	\$150,197.79
FY24 Per Capita Projects	
FY24 Allocation	\$1,520,102.00
FY24 Remaining Balance	\$1,520,102.00
Total Remaining Balance FY23/FY24	\$1,670,299.79

FY 23/24 Capacity Building (Support)	
FY23 Allocation	\$250,000.00
FY24 Allocation	\$250,000.00
FY23 Drawdown	-\$166,058.00
Current Balance	\$333,942.00
Applications Under Consideration (Per Capita)	
NRV Materials and Machinery Cluster Scale-up	-\$98,859.00
	-\$98,859.00 -\$202,872.39
NRV Materials and Machinery Cluster Scale-up	
NRV Materials and Machinery Cluster Scale-up Developing IT & Cybersecurity Certification Pipeline (ITCCP)	-\$202,872.39

FY24 Planning Cap	\$250,000.00
Planning applications	\$98,859.00
Percentage of planning cap	40%

	Project Status Summary								
	GOVA Funding	GOVA Drawn	GOVA Funds		Match Drawn	Match Funds		Admin Fee	Admin Fee
Project Type & FY	Approved	Down to date	Remaining	Match Funding	Down	Remaining	Admin Fee	Draw Down	Remaining
Per Capita FY18 Projects:	\$1,115,382.03	\$1,086,718.14	\$28,663.89	\$3,252,380.71	\$2,901,110.76	\$353,216.13			
Per Capita FY19 Projects:	\$1,197,486.00	\$1,058,036.14	\$125,192.09	\$1,732,722.00	\$1,597,744.44	\$202,637.60			
Per Capita FY20 Projects:	\$1,782,567.00	\$1,622,794.44	\$159,772.56	\$1,272,290.00	\$1,166,737.06	\$141,145.26	\$27,140.00	\$27,140.00	\$0.00
ERR FY20 Projects:	\$1,110,700.00	\$1,109,141.94	\$1,558.06	\$566,610.00	\$570,743.57	\$0.00	\$23,598.00	\$23,598.00	\$0.00
Per Capita FY21 Projects:	\$844,157.00	\$510,302.40	\$333,854.60	\$695,042.00	\$551,910.11	\$143,131.89	\$25,367.00	\$8,822.35	\$16,544.65
Per Capita FY22 Projects:	\$1,442,743.00	\$411,281.74	\$1,031,461.26	\$999,800.00	\$300,896.73	\$698,904.36	\$106,786.00	\$30,465.28	\$76,320.72
Per Capita FY23 Projects:	\$1,530,667.00	\$64,804.27	\$1,465,862.73	\$5,205,966.77	\$50,676.99	\$5,155,289.78	\$113,382.00	\$4,799.79	\$108,582.21
Per Capita FY24 Projects:									
TOTAL:	\$9,023,702.03	\$5,863,079.07	\$3,146,365.19	\$13,724,811.48	\$7,139,819.66	\$6,694,325.02	\$182,891.00	\$90,025.63	\$92,865.37

				GOVA				Match		
				Funding	GOVA Drawn	GOVA Funds		Reported to	Match Funds	
Project Name	Project Type & FY	Start Date	End Date	Approved	Down to date	Remaining	Match Funding	Date	Remaining	Notes
ELITE	Per Capita (FY20)	10/20/2020	9/30/2023	\$290,000.00	\$290,000.00	\$0.00	\$145,000.00	\$158,225.54	\$0.00	
Health Sciences Talent Pipeline	Per Capita (FY21)	10/1/2021	7/31/2023	\$100,000.00	\$85,248.01	\$14,751.99	\$106,355.00	\$103,908.75	\$2,446.25	
Project Eagle+	Per Capita (FY21)	12/15/2021	12/14/2023	\$599,437.00	\$315,443.45	\$283,993.55	\$503,687.00	\$385,617.60	\$118,069.40	
Regional Talent Strategy Implementation	Per Capita (FY22)	6/1/2022	5/31/2024	\$315,911.00	\$99,962.70	\$215,948.30	\$189,354.00	\$65,033.90	\$124,320.10	
Workforce & Entrepreneurship in a Reg. Makerspace (Vector Space)	Per Capita (FY22)	6/14/2022	6/30/2024	\$324,000.00	\$171,842.42	\$152,157.58	\$162,100.00	\$118,428.58	\$43,671.42	
CS/ Root	Per Capital (FY22)	10/1/2022	9/30/2024	\$175,000.00	\$41,736.63	\$133,263.37	\$175,000.00	\$46,183.16	\$128,816.84	
Airport Commerce Park Regional Development	Per Capita (FY22)	5/1/2023	5/1/2024	\$190,000.00	\$0.00	\$190,000.00	\$95,000.00	\$0.00	\$95,000.00	
Center for Entrepreneurship	Per Capita (FY22)	3/14/2023	3/14/2025	\$240,192.00	\$0.00	\$240,192.00	\$120,096.00	\$0.00	\$120,096.00	
Bedford Metal Workforce Training Center	Per Capita (FY22)	8/1/2023	8/1/2024	\$99,900.00	\$0.00	\$99,900.00	\$201,000.00	\$0.00	\$201,000.00	
Expanding Welding BTEC	Per Capita (FY23)	12/13/2022	12/12/2024	\$166,667.00	\$32,879.52	\$133,787.48	\$99,666.77	\$17,880.11	\$81,786.66	
Industry 4.0 for the ACE Workforce	Per Capita (FY23)	3/1/2023	2/28/2025	\$500,000.00	\$31,924.75	\$468,075.25	\$251,300.00	\$32,796.88	\$218,503.12	
Lynchburg Beacon of Hope Career Acceleration Program	Per Capita (FY23)	8/1/2023	8/1/2025	\$540,000.00	\$0.00	\$540,000.00	\$270,000.00	\$0.00	\$270,000.00	
Falling Branch Corporate Park Regional Site Development	Per Capita (FY23)	7/1/2023	7/1/2025	\$324,000.00			\$4,585,000.00	\$0.00	\$4,585,000.00	

# GO Virginia Region 2 by the numbers:

- 45 projects funded
- 29 projects completed
- \$9,749,627 total GO Virginia funds approved
- \$14,896,945 total

match committed

- 2643 5-year job estimate
- 1752 businesses served
- 744 jobs created/filled
- 836 credentials awarded
- 506 internships created
- 110 industrial acres improved

# Project Pipeline:

Proposal Title/ Focus	Applicant Organization	Grant Type	G&D Strategy	Industry Cluster
Randolph College STEM Leaders	Randolph College	Implementation	Talent	Materials & Machinery Manufacturing
Clean Tech for Advanced Manufacturing	Verge	Implementation	Cluster Scale Up	Transportation Manufacturing & Autonomy, IT & Emerging Tech
BRPHSC Implementation	Blue Ridge Partnership for Health Science Careers	Implementation	Talent	Lifesciences & Biotechnology
Makerspace in Roanoke	Hacksburg	Implementation	Entrepreneurship	IT & Emerging Tech, Materials & Machinery Manufacturing
Plan for LYH Regional NITCH (Nuclear Industry Technology Commercialization Hub)	LRBA	Planning	Cluster Scale up	Materials & Machinery Manufacturing
Feasibility Study for a Career Navigator program	LRBA	Planning	Talent	Materials & Machinery Manufacturing
Data Science Accelerator Program/ Local Government Data Project	VT BIT, ITA International	Planning	Cluster Scale-up, Talent	IT& Emerging Tech
Manufacturing Training Gap - Roanoke	Roanoke Valley- Alleghany Regional Commission	Planning	Cluster Scale-up, Talent	Materials & Machinery Manufacturing, Transportation & Autonomy Manufacturing

# GO Virginia Match Requirements (changed Oct 1, 2023)

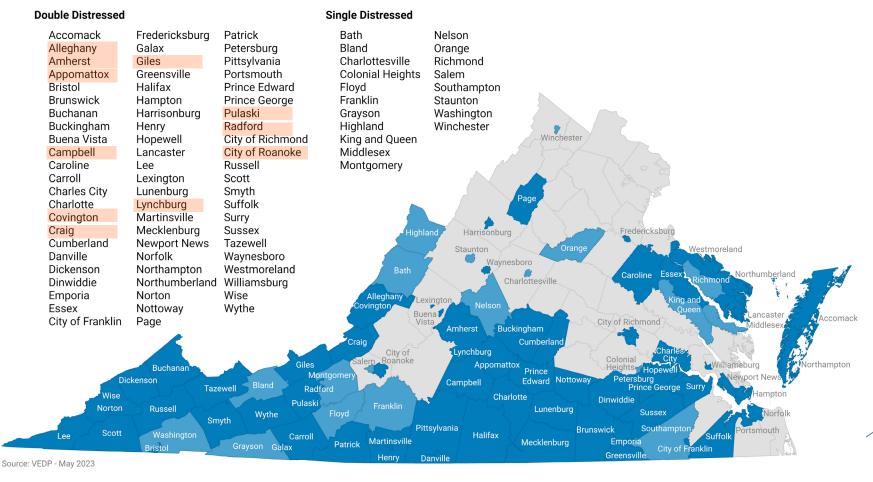
	Before	October 1, 2023	After October 1, 2023		
Project Type	Total Match	Local Match	Total Match	Local Match	
Enhanced Capacity Building (planning, pilots and feasibility studies)	1-1	No Local Match Required	1-1	No Local Match Required	
Project Implementation	1-1	20% or \$50,000, whichever is greater.	1-1	20% of Total Match	
Sites (planning)	1-1	No Local Match Required	1-1	No Local Match Required	
Broadband (planning)	2-1	No Local Match Required	2-1	No Local Match Required	
Regional Entrepreneurship Initiative (planning)	2-1	No Local Match Required	2-1	No Local Match Required	

# GO Virginia Match Waivers

Total Match	Reduce total match to 2:1
Fiscal Distress	50% or more of participating localities meet VEDP's definition for <b>Economic Distress - Double Distress</b>
Extraordinary Economic Opportunity	<ul> <li>Aligns with primary GO Virginia Program Goals</li> <li>Regional Collaboration: Local Match 50% of Total</li> <li>Industry Cluster: Industry match 50% of Total</li> <li>Job Growth Accelerator: Increase employment by at least 10% over base</li> <li>Transformational Economic Diversification: growth in new or emerging industry cluster</li> </ul>
	Aligns with the Commonwealth's InnoVAtive Framework for Economic Development

# Total Match: Double Distressed Localities

#### Commonwealth Opportunity Fund (COF) Distressed Localities



Double Distressed \$1.5MM & 15 jobs at or above 85% of the local prevailing av. wage Single Distressed \$2.5MM & 25 jobs at or above 85% of the local prevailing av. wage

General Eligibility \$5MM & 50 jobs or \$100MM & 25 jobs at the local prevailing av. wage Source: VEDP Thresholds for Localities with Above-Average Unemployment or Above-Average Poverty.

[Link]

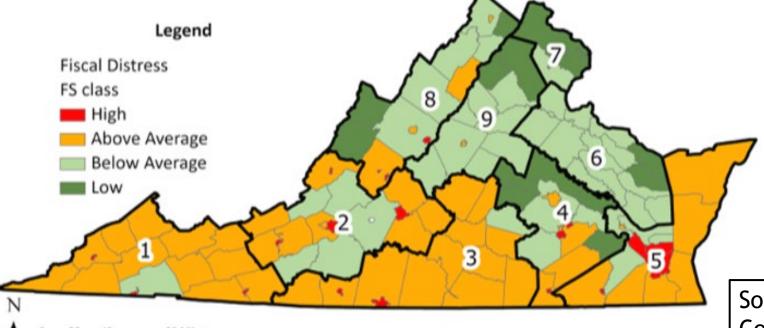
# GO Virginia Match Waivers

Local Match	Reduce or eliminate local match
Fiscal Stress	50% or more of participating localities experience <b>High or Above Average on the Fiscal Stress Index</b>
Demonstrated inability to contribute	Letter of support from each locality, verifying inability to contribute.

# Local Match: Fiscal Stress Index

#### Region 2 Localities:

- Alleghany
- Amherst
- Appomattox
- Campbell
- Covington
- Giles
- City of Lynchburg
- Montgomery
- Pulaski
- City of Radford
- City of Roanoke
- Roanoke
- City of Salem



Source: DHCD Comparative Revenue Capacity, Revenue Effort, and Fiscal Stress of Virginia's Cities and Counties, FY2020

[Link]

#### **Per Capita Application**

Developing IT & Cybersecurity Certification Pipeline to Advance Cluster Growth (ITCCP)

Applicant: Radford University Division of Economic Development and Corporate Education

**Participating Localities:** Montgomery County (in-kind match), Pulaski County (in-kind match), Radford City (in-kind match)

**Investment Strategy:** Talent Development, Attraction and Retention

**Targeted Industries:** Information Technology and Emerging Tech (primary), Transportation and Autonomy Cluster (secondary), Life Sciences & Healthcare (secondary), and Materials and Machinery Cluster (secondary)

Type of Project: Per Capita Implementation

**Project Goal(s):** Increase the number of professionals with IT and cybersecurity certifications that will support the growth of critical in-demand higher wage occupations in Region 2's IT & Emerging Tech cluster as well as other priority clusters that utilize similar talent.

**Project Description:** The project will 1) enhance coordination and communication among higher education partners (Radford University, Virginia Tech, New River Community College) and regional employers to align certification pipeline with cluster needs; 2) develop a pipeline of talent from partnering institutions with IT and cybersecurity certifications through on-campus outreach; and 3) connect regional employers to the pipeline of credentialed professionals to fill in-demand occupations as well as educating them on the benefits of upskilling incumbent workers through certifications. The project will also establish a Peason VUE testing center at the Hub at Radford to make certification testing for IT and cybersecurity certifications more accessible to students and incumbent workers in the New River Valley. GO Virginia funds will be used for salaries and fringe benefits for Radford University staff for work related to this project, travel time for staff, testing center setup and equipment, software subscriptions, outreach costs for events organized and hosted for project activities, program promotional materials, office supplies, indirect costs, and the GO Virginia support organization administrative fee.

#### **Project Budget:**

\*Applicant has requested a match waiver to reduce both the total match (to 2:1) and local match (to amount committed).

Type of Funds	Totals
GO Virginia Request	\$202,872.39
Matching Funds	\$116,863.00
Local Match	415,363 (13%)
Additional Leverage	-

Total Project Budget	\$319,735.39
Total Toject Baaget	4013,703.03

Developing IT & Cybersecurity Certification Pipeline to Advance Cluster Growth (ITCCP)

#### **Products:**

• Establish a Peason VUE testing center at Radford University

#### **Outcomes:**

- **104 Credentials awarded** (including but not limited to CompTIA, Cisco, AWS, Microsoft, and Lynix)
- **10 Businesses Served** (receiving an intern, new hire, or enrollment of an incumbent working in a training course)

#### **Application review:**

Application reviewed by Greg Feldmann, Region 2 Council Member; Quina Weber-Shirk, Region 2 support staff; Dr. Phillip Huff, University of Arkansas Little Rock

Requirements				
\$1:1 Match Requirement	NO – total match reduction to 2:1 requested			
Traded Sector	YES			
High-wage Job Creation Potential	YES			
3-year ROI (positive)	YES (44%)			
5-year ROI (positive)	YES (260%)			
Alignment with G&D Plan	YES			
Grant Management Capacity	YES			
Sustainable after GOVA Funds	YES			

#### **Planning Application**

#### NRV Materials and Machinery Cluster Scale-Up

**Applicant:** New River Valley Regional Commission

**Participating Localities:** City of Radford (in-kind match), Counties of Floyd (in-kind match), Giles (in-kind match), Montgomery (in-kind match), and Pulaski (in-kind match).

**Investment Strategy:** Talent development, resource development for business start-ups and scale-ups.

Targeted Industries: Materials and Machinery (primary) and Transportation and Autonomy (secondary).

Type of Project: ECB/Planning

**Project Goal(s):** Convene regional partners and develop a 10-year roadmap for supporting materials and machinery scale-up in the NRV.

**Project Description:** The project will develop a 10-year roadmap for supporting materials and machinery scale-up in the NRV. This process will include:

- 1. Building and strengthening the capacity of the coalition of NRV stakeholders interested in growing this cluster through regular discussions and planning around the cluster.
- 2. Mapping out assets and resources that could support industry scale up in the NRV. This mapping would include not only entities in the NRV but also those in the Roanoke, Lynchburg, and Danville metro and micropolitan areas as a way of better understanding how those resources connect to the NRV cluster.
- 3. Identifying and prioritizing unique projects that could support ecosystem growth and transformation of the cluster. The final roadmap will also scope out and detail 2-3 of these prioritized projects; designating regional champions for advancing those projects, identifying possible funding sources for those projects, and proposing steps for advancing those projects.

#### **Project Budget:**

Type of Funds	Totals
GO Virginia Request	\$98,859
Matching Funds	\$99,000
Local Match	\$35,000 (35%)
Additional Leverage	\$10,000
Total Project Budget	\$207,859

#### NRV Materials and Machinery Cluster Scale-Up

#### **Products:**

• Develop a 10-year roadmap for supporting materials and machinery scale-up in the NRV.

#### **Application review:**

Application reviewed by Paul Denham, Region 2 Council Member; Bryan David, Program Director – GO Virginia Region 3

Requirements	
\$1:1 Match Requirement	YES
Traded Sector	YES
High-wage Job Creation Potential	YES
Alignment with G&D Plan	YES
Grant Management Capacity	YES
Sustainable after GOVA Funds	YES



September 22, 2023

John Provo GO Virginia Region 2 1900 Kraft Dr. Blacksburg, VA 24061

Dear John:

I am writing to request a Partial Waiver Match and Total Waiver Match for the Developing IT and Cybersecurity Certification Pipeline to Advance Cluster Growth (ITCCP) application, submitted on September 22, 2023. It is our understanding that on October 1, 2023 the requirements for per capita project implementation grants will be shifting to a 1:1 match and requiring at least 20% local match. Prior to October 1, 2023, the requirements extended by Board Policy #11 allowed for a 2:1 total match and no local match. Although the submission deadline for this round of applications was September 22, 2023, we were recently informed that the project must meet the new requirements set for enactment on October 1, 2023. The ITCCP project meets the match requirements before October 1, 2023, but not after.

Based on the guidelines approved by the GO Virginia State Board on September 12, 2023, the ITCCP project meets the eligibility criteria to request both a Total Match Waiver and a Local Match Waiver. Fifty percent of the localities participating in this project meet the Virginia Economic Development Partnership's definition for Economic Distress – Double Distress (Pulaski County and Radford City), the eligibility criteria to request a Total Match Waiver. The majority of participating localities participating are also categorized as having "high" or "above average" levels of fiscal stress in the Commission on Local Government's Fiscal Stress Index (Montgomery County, Pulaski County, Radford City), the eligibility criteria to request a full or partial Local Match Waiver. The participating localities are providing a partial match for the project (13%) and have requested the waiver in their financial support letters.

Thanks you for your time and consideration of this request.

Sincerely,

Charlie Jewell

Director of Economic Development

& Community Engagement

Radford University

## 2023

# GROWTH & DIVERSIFICATION PLAN





### Introduction

GO Virginia's objectives, as set by the state, are simple and provide a clear path for action. The program seeks to grow jobs that pay higher than the regional average wage, primarily through investment that is new to Virginia. This requires a focus on industries with high growth potential, featuring indemand occupations with higher wages.

The 2023 Growth and Diversification Plan Review provides a roadmap for utilizing GO Virginia funding for projects across Region 2, which includes the Lynchburg, New River Valley, and Roanoke-Alleghany sub-regions. Each of these areas has a strong history of local cooperation, and some experience with interregional collaboration, primarily between the New River and Roanoke Valleys. Together, they all share many economic similarities: traditional industry strengths in manufacturing, transportation, and agriculture; emerging technology sectors such as green energy and automation; mixed urban and rural characteristics; and higher education and healthcare as economic and employment drivers.

This plan documents the socio-economic trajectory of this region, particularly the concentration of different industries across this footprint, their job growth rates compared to the nation, their contributions to gross regional product, the number of higher-than-average wage jobs available in these industries, and assets unique to the region that drive opportunity. The analysis of that data identifies four target "clusters"—or geographic concentrations of businesses with common markets, suppliers, technologies, and workforce needs. These four interrelated clusters offer the greatest potential for sustainable, scalable, future growth in the region.

#### Priority Industry Clusters

- Transportation and Autonomy Manufacturing
- · Materials and Machinery Manufacturing
- Life Sciences and Biotechnology
- · IT, Engineering, and Emerging Tech

# Types of development work we fund:





Entrepreneurship







## **Summary of Target Clusters**

#### 2022 Wages by Target Cluster and Urbanization<sup>1</sup>

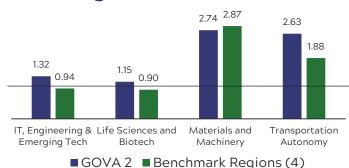
The average wage for workers in GOVA Region 2 is \$24.85. Urban areas have higher wages than rural areas with average wages of \$25.63 and \$22.74, respectively. All target clusters have higher average wages than the regional average, with a combined average of \$34.18.

Cluster	Entire Region	Urban	Rural
All Industries	\$24.85	\$25.63	\$22.74
Materials Machinery	\$38.28	\$34.21	\$44.96
Transportation Autonomy	\$33.77	\$33.95	\$33.49
Life Sci and Healthcare	\$31.83	\$33.24	\$23.32
IT, Engineering, & Emerging Tech	\$39.85	\$39.88	\$39.64

2022 GOVA Region 2 Target Industry Clusters<sup>2</sup>

Transportation and Autonomy	Materials and Machinery	Life Sciences and Biotechnology	IT, Engineering, & Emerging Tech
10,448 Jobs	9,830 Jobs	26,414 Jobs	13,349 Jobs
<ul> <li>Vehicles (eg. Trucks)</li> <li>Vehicle Parts</li> <li>Automation (Sensors, Controls, Displays)</li> </ul>	<ul><li>Chemicals</li><li>Plastics</li><li>Metalworking and Machinery</li></ul>	<ul> <li>Biopharma and Medical Devices</li> <li>Life Sciences R&amp;D</li> <li>Living Lab: Healthcare System</li> </ul>	<ul> <li>IT &amp; Cybersecurity</li> <li>Computer and         Electrical Component         Manufacturing</li> <li>Engineering Services</li> </ul>

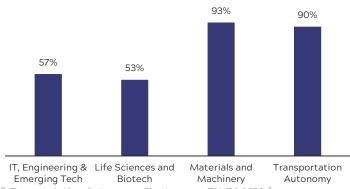
#### 2022 Target Cluster Location Quotients<sup>3</sup>



Location Quotient (LQ) measures the concentration of cluster jobs compared to the nation. Values of 1.2 or above indicate greater concentration and a comparative advantage in the specific cluster. Our existing manufacturing clusters remain strong. Our two emerging clusters, Life Sciences and IT, have demonstrated growth in LQ since 2017. In 2017, GOVA Region 2 also identified peer regions<sup>4</sup> for each target cluster, based on similar economic indicators and assets. Today, the region has higher LQ levels than most prominent peer regions.

#### 2022 Exported Sales by Cluster<sup>5</sup>

The GOVA program places large emphasis on traded industries of the economy, those with higher levels of exported sales. Exported sales are valuable because they bring new capital into the economy thereby promoting growth. As shown to the right, more than 50% of sales for GOVA 2 target clusters are exported; however, these clusters also include many supply chain industries that support the cluster through their in-region production and skill-aligned workforce.

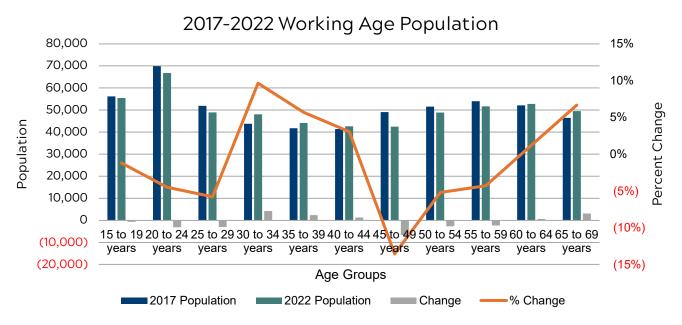


(4) Peer regions: Greenville-Anderson SC MSA for Materials and Machinery & Transportation Autonomy; Chattanooga TN-GA MSA for

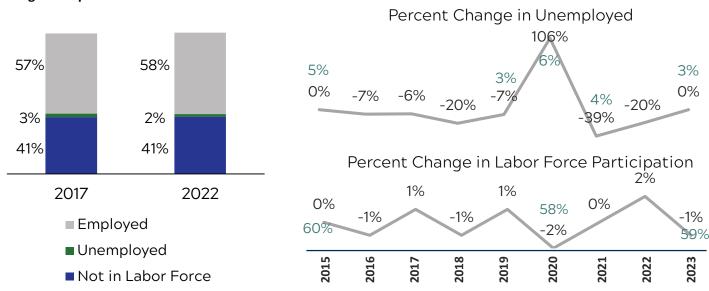
IT and Emerging Tech; and Birmingham-Hoover AL MSA for Biotech-Life Sciences

# State of the Regional Economy Demographics

As of 2022, GOVA Region 2's population has experienced a modest increase of 0.2% since 2017, equivalent to a growth of 1,461 individuals. This growth is slower that state and national rates, which were 6% and 5% respectively. Looking ahead, projections suggest that the population will continue to grow at the same rate through 2027, suggesting some need to attract working age adults and families if the region is to significantly grow demographically and economically.



Early-to-mid career adults in their 30s represent the highest proportional increase of among age groups, at 7-10%. This growth may be fueled by the region's expanding higher education institutions and technology-forward industry growth. The second highest increase aligns with national trends, an over 5% increase in seniors age 65+ years since 2017. This demographic shift brings unique challenges and opportunities related to healthcare, social services, and senior living industries. However, the region also experienced a decrease in the number of mid-to-late career residents, those in their 40s and early 50s. This dip of about 13% indicates a **possible workforce gap in supervisory and middle management positions**.

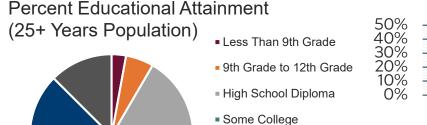


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Year-to-Year Percent Change Unemployment/Participation Rates

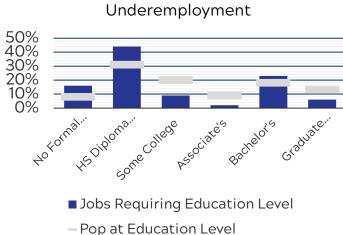
# State of the Regional Economy Demographics

The region has witnessed an increase in the proportion of residents with post-secondary degrees. However, this demographic data may misrepresent the proportion of available workers, as many with bachelor degrees and higher may be attending one of the region's many higher education institutions. Interestingly, when looking at underemployment, there is distinct need to fill jobs that require no formal education or only a high school degree. These tend to be entry-level jobs but may require some degree of technical skills related to IT and math. Currently, there is very little incentive among typical entry-level workers to fill these lower wage jobs.





Graduate Degree and Higher



Educational attainment in urban counties is relatively close to the national average, with 20.7% of residents possessing a bachelor's degree (0.1% below the national average) and 8.9% holding an associate degree (0.1% above the national average). Educational attainment levels within the rural counties show a greater difference when compared to national percentages, as 14.2% of residents possess a bachelor's degree (6.6% below the national average), while 10.2% hold an associate degree (1.4% above the national average).

#### Key Workforce Challenges Inhibiting Economic Growth

The key factor that seems to be preventing greater economic growth and development in the Region 2 is limited access to a full-time skilled workforce. Industry stakeholders agree that if Region 2 is to enhance its economic vibrancy, we must address challenges that prevent existing workforce from participating in the economy and that dissuade potential workers from coming to the area.



Average childcare for infants and toddlers in GOVA2 costs \$7.8-\$10.3K per child annually. That is 10-13% of median family income needed per child.<sup>5</sup> Organizations advocating for quality and affordable early childcare include New River Valley Community Services and United Ways of SWVA and Roanoke Valley.



Twelve percent of households face overcrowding or lack of plumbing/kitchen facilities.<sup>6</sup> Twenty-one percent have rents at 50% or more of their incomes.<sup>7</sup> Active affordable and quality housing organizations include Habitat for Humanity, Total Action for Progress, New River Valley Community Action, and United Way of SWVA.



#### Behavioral Health

The national ratio of people per mental health provider is 340:1. All GOVA2 counties and independent cities except Montgomery County and the City of Roanoke have higher ratios, ranging 423:1 to 3964:1.6 Blue Ridge Behavioral Healthcare and New River Valley Community Service are just two organizations providing services.

<sup>5</sup> US Dept of Labor. 2023 National Database of Childcare Prices

<sup>6</sup> University of Wisconsin. County Health Rankings and Roadmap 2023

## Shared Occupations<sup>1</sup>

Shared occupations are occupations which are in high demand across different industries. The table below lists the top 15 shared occupations across GOVA Region 2. Average annual openings and turnover rate are good measures of how much demand there is for each respective occupation.

The highlighted rows draw special attention to (a) occupations which don't require a four-year bachelor's degree but rely more on technical skills and (b) occupations which highlight the demand for supervisory or managerial skills. This region is losing age groups and talent that would take middle management jobs. We compared adjusted cost of living (COL) hourly wages between GOVA2 and other 10 other MSAs such as Raleigh NC, Charlottesville VA, Richmond VA, and Jacksonville FL. Adjusted COL wages for white collar middle management jobs in GOVA2 are paid \$2-\$4 less per hour compared to other MSAs. Blue collar middle management positions are paid \$1-\$2.30 less per hour compared to other MSAs.

Technical Skills Managerial Occupations

Description	2021 Jobs	2021-2028 % Job Change	Avg. Annual Openings	2022 Turnover Rate
Registered Nurses	7,946	9%	619	27%
General and Operations Managers	5,567	14%	633	46%
First-Line Supervisors of Office and Administrative Support Workers	3,818	(0%)	428	56%
Accountants and Auditors	2,754	5%	272	41%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,559	15%	335	38%
First-Line Supervisors of Production and Operating Workers	2,262	12%	290	44%
Industrial Machinery Mechanics	1,904	9%	210	32%
Electricians	1,830	8%	243	52%
First-Line Supervisors of Mechanics, Installers, and Repairers	1,605	5%	168	44%
Human Resources Specialists	1,577	9%	179	68%
Software Developers	1,564	27%	182	30%
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1,500	13%	202	64%
Computer User Support Specialists	1,478	7%	138	42%
Machinists	1,399	8%	187	42%



# Life Sciences & Biotechnology

The area Life Sciences and Biotechnology cluster is rooted in a history of research, development, and entrepreneurship. The work focuses on disease prevention and treatment, health and aging, veterinary medicine, and plant sciences. The cluster is nestled on a strong foundation of higher education research assets such as the Fralin Life Science Institute with over 120 affiliated faculty, Fralin Biomedical Research Institute at Virginia Tech Carilion with over 500 faculty, students, and staff, and Radford University Carilion. With these and other assets including the City of Roanoke's Biotech Project, Roanoke Innovation Corridor, RAMP, VTC Ventures, and workforce programs like that at Virginia Western Community College, the cluster has drawn large businesses interests to the region, such as Johnson & Johnson, and has fostered as many as eight new life science startups since 2010. From this research and through partnerships, the region has built a private cluster employing over 27,000 individuals with average earnings of \$80,710 per job and contributing \$2.8 billion to GRP. This cluster comprises 1) pharmaceutical, biological product, and medical device manufacturers; 2) private research and development firms in life sciences, bio- and nanotechnology; and 3) a living laboratory for public and private research and education entities across the healthcare system; these include primarily hospitals and nursing and continuing care facilities that serve those in the region but also draw over fifty percent of their users from outside GOVA region 2. Companies include but are not limited to Abbot Laboratories, Acomhal Research, Bauch & Lomb, BEAM Diagnostics, Carilion Clinic Innovations, CytoRecovery, Intuit Surgical, Landos Biopharma, Luna Innovations, Novozymes Biological, Solstas Lab Partners, P1 Technologies, and Tiny Cargo.

#### Cluster and Subcluster Performance

Life Sciences & Biotechnology is the largest of the target clusters in terms of GRP (\$2.80B). There were a total of 363 payroll businesses with the vast majority (276) being found in Living Laboratories / Healthcare Systems and R&D.



#### Cluster and Subcluster Jobs

R&D

Manufacturing

Subcluster	2017 Jobs	2022 Jobs	2028 Jobs	Job Change 2017-2022	Projected Change 2022-2028
Living Laboratory/ Healthcare System	23,365	23,619	26,010	1.1%	10.1%
Manufacturing	1,309	1,562	1,971	19.3%	26.2%
R&D	933	1,234	1,350	32.3%	9.4%

Manufacturing

R&D

Living

Laboratory/

Healthcare System Manufacturing

R&D

Living

Laboratory/

Healthcare

Living

Laboratory/

Healthcare



# Life Sciences & Biotechnology

#### Top Ten In-Demand Occupations

Compared to other MSAs, most of these occupations pay \$1-\$4.50 less in hourly adjusted COL wages. This is particularly true for Industrial Engineers and Chemists. GOVA2 does pay higher adjusted COL wages for Biological and Medical Scientists.

SOC	Description	Jobs in Region (2022)	Jobs Change (22-28)	Avg. Annual Openings	2022 Turnover Rate	Avg. Earnings	Workers Over 55 (2022)	Typical Entry Level Education
49-9041	Industrial Machinery Mechanics	2,239	13.0%	304	35%	\$57,090	32.1%	HS diploma or equivalent
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,680	8.5%	256	64%	\$48,221	32.6%	HS diploma or equivalent
17-2112	Industrial Engineers	1,203	14.3%	122	26%	\$94,350	30.7%	Bachelor's
29-2018	Clinical Laboratory Technologists and Technicians	1,119	7.0%	119	36%	\$50,809	24.6%	Bachelor's
19-4021	Biological Technicians	469	8.3%	82	56%	\$48,232	16.2%	Bachelor's
51-9011	Chemical Equipment Operators and Tenders	267	12.1%	56	36%	\$56,195	23.2%	HS diploma or equivalent
17-3026	Industrial Engineering Technologists and Technicians	360	7.7%	55	44%	\$63,361	30.2%	Associate's
19-1029	Biological Scientists, All Other	283	-1.8%	39	36%	\$95,537	20.0%	Bachelor's
19-1042	Medical Scientists, Except Epidemiologists	213	24.3%	26	26%	\$99,232	19.3%	Graduate
19-2031	Chemists	170	13.9%	23	40%	\$79,546	26.4%	Bachelor's

#### **Needed Skill Sets**

#### In-Demand Occupations without enough annual program completions

Industrial Machinery Mechanics, Chemical Equipment Operators and Tenders, Inspectors, Testers, Sorters, Samplers, and Weighers

Top Knowledge	Top Skills	Top Abilities
<ul><li>Mathematics</li><li>Chemistry</li><li>English Language</li><li>Engineering and Technology</li><li>Mechanical</li></ul>	<ul><li>Critical Thinking</li><li>Reading     Comprehension</li><li>Monitoring</li><li>Science</li><li>Writing</li></ul>	<ul><li>Oral Comprehension</li><li>Oral Expression</li><li>Written Comprehension</li><li>Inductive Reasoning</li><li>Problem Sensitivity</li></ul>

# Top Certificates or Credentials

- •Nursing: Nurse Aid, LPN, RN
- •LIMS and SAP software
- ASCP Certification
- •CAD Software
- •CDL and Forklift Certification

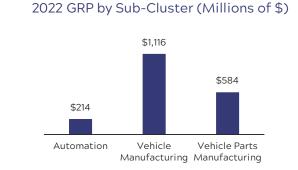


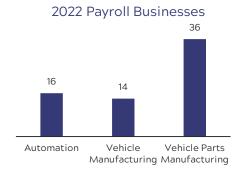
## Transportation & Autonomy

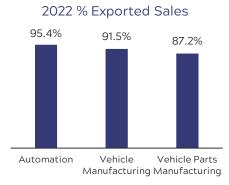
Today's economy relies on rapid delivery of goods, as evidenced by strained supply chains during the COVID pandemic, which cost manufacturers between \$10,000 and \$100,000 per minute of unplanned production stoppage.¹ Truck freight demand grew 6.0% in 2020, fueled by the shift to E-commerce.² The World Economic Forum projects freight demand to triple by 2050.³ GOVA Region 2 is situated to address this growing demand, boasting one of the largest collections of truck manufacturing plants nationally (Mack, Volvo, and Morgan-Olsen) with a collection of regional parts manufacturers and growing expertise in automation and alternative fuels/energy. Volvo, one of the three largest truck manufacturers, has its flagship facility here, where they manufacture full-size electric trucks. Daimler, another Big 3 truck manufacturer, purchased the region's largest autonomy firm, TORC Robotics, to spur development of autonomous trucks. This region hosts the only commercial drone delivery service in the U.S. by Wing, supplier firms like Eldor Powertrains, and innovative startups like TROVA, specializing in truck battery conversion. Other companies helping to innovate this cluster include CAC Tech Services Inc, Inmotion, Luna Innovations and Moog.

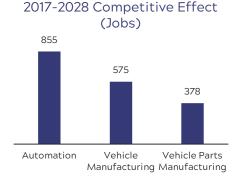
#### Cluster and Subcluster Performance

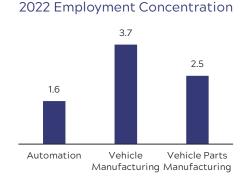
Transportation & Autonomy is the 2<sup>nd</sup> largest of the target clusters in terms of GRP (\$1.91B). There were a total of 65 payroll businesses with the majority (36) being found in Vehicle Parts Manufacturing.











#### Cluster and Subcluster Jobs

Subcluster	2017 Jobs	2022 Jobs	2028 Jobs	Job Change 2017-2022	Projected Change 2022-2028
Automation	947	1,488	1,803	57.2%	21.2%
Vehicle Manufacturing	2,981	4,228	4,734	41.8%	12.0%
Vehicle Parts Manufacturing	4,058	4,732	4,877	16.6%	3.1%

<sup>1</sup> Thanou, E & A. Matopoulos (2021). "Improving efficiency of material flows in an automotive assembly plant: A case study." CIRP Journal of Manufacturing Science and Technology 35 (2021) 959-967.

<sup>2</sup> FTR Transportation Intelligence (September 2021). "C-Suite Synopsis for September 2021." State of Freight Insights. Retrieved from: https://today.ftrintel.com.

<sup>3</sup> Thanou, E & A. Matopoulos (2021). "Improving efficiency of material flows in an automotive assembly plant: A case study." CIRP Journal of Manufacturing Science and Technology 35 (2021) 959-967.



## Transportation & Autonomy

#### Top Ten In-Demand Occupations

Engineering, Buyers and Purchasing Agents, and Managers are paid \$5-\$11 less in hourly adjusted COL wages in GOVA2 compared to other MSAs like Raleigh NC. Middle-skilled workers tend to be paid about \$1 less in adjusted hourly wages.

SOC	Description	Jobs in Region (2022)	22-'28 Jobs Change	Avg. Annual Openings	2022 Turnover Rate	Avg. Earnings	'22 Workers Over 55	Typical Entry Level Education
51-4121	Welders, Cutters, Solderers, and Brazers	1,518	11.3%	233	44%	\$49,439	21.8%	HS diploma or equivalent
53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	1,456	7.7%	221	68%	\$54,541	27.5%	HS diploma or equivalent
13-1111	Management Analysts	1,466	12.4%	182	33%	\$115,674	38.2%	Bachelor's
47-2152	Plumbers, Pipefitters, and Steamfitters	1,152	-0.3%	153	49%	\$50,571	23.3%	HS diploma or equivalent
13-1028	Buyers and Purchasing Agents	1,149	1.4%	139	46%	\$63,753	35.3%	Bachelor's
17-2112	Industrial Engineers	1,203	14.3%	122	26%	\$94,349	30.7%	Bachelor's
43-5061	Production, Planning, and Expediting Clerks	735	12.5%	106	52%	\$51,768	28.7%	HS diploma or equivalent
17-2141	Mechanical Engineers	635	11.3%	59	24%	\$82,003	26.7%	Bachelor's
11-3051	Industrial Production Managers	482	17.2%	54	25%	\$115,985	32.6%	Bachelor's
13-1081	Logisticians	332	23.4%	47	34%	\$72,330	21.6%	Bachelor's

#### Needed Skill Sets

#### In-Demand Occupations without enough annual program completions

Logistician, Production/Planning/Expediting Clerk, Machinery Maintenance Worker, Millwright, Foundry Mold and Coremaker, Tool and Die Maker, Welder, First-Line Supervisors of Transportation and Material Moving Workers

Top Knowledge	Top Skills	Top Abilities
<ul><li>•Math</li><li>•Design</li><li>•Engineering</li><li>&amp; Technology</li><li>•Mechanical</li><li>•Admin &amp; Management</li></ul>	•Critical Thinking •Reading Comprehension •Active Listening •Monitoring •Judgement & Decision Making	•Oral Comprehension •Oral Expression •Deductive Reasoning •Written Comprehension •Near Vision

# Top Certificates or Credentials

- •AutoCAD
- •SAP Manufacturing
- •Program Language (Java, C+, SQL)
- •CDL License
- Certified
- Welding Inspector
- •Fork Lift Cert.



# IT, Engineering, & Emerging Tech

GOVA Region 2's IT, Engineering, and Emerging Tech cluster has strengths in IT services, manufacturing of computer and electrical components, and professional engineering services. Much of these private sector strengths are supported by public sector, particularly university, strengths. These industries support the maintenance and development of emerging software and hardware technologies from cybersecurity and blockchain to artificial intelligences, machine learning, alternative energy, and component systems. Not only do these businesses and related occupations develop and grow this cluster, but they also support the growth of other target clusters and industries across Region 2. Companies include but are not limited to 1901 Group, AECOM, Apex Systems, BAE Systems, Biznet Technologies, Bullish, CAC Tech Services, Corning, Exelaration, GE Digital, Harris Corporation, Hurt & Proffitt, Innovation Wireless Tech, KlariVis, MicroHarmonics, MODEA, MOVA Technologies, New River Computing, Peraton, and TRC.

#### Cluster and Subcluster Performance

IT and Emerging Tech is the 3rd largest of the target clusters in terms of GRP (\$1.87B). There were a total of 998 payroll businesses with the vast majority (737) being found in IT and Cyber Security.



Computer and

Electrical

Component

Manufacturing

Engineering

Services

IT and Cyber

Security

#### Cluster and Subcluster Jobs

Engineering

Services

Computer and

Electrical

Component

Manufacturing

Sub-Cluster	2017 Jobs	2022 Jobs	2028 Jobs	2017-2022 Change	2022-'28 Projected Change
IT and Cyber Security	5,334	5,604	6,037	5.1%	7.7%
Computer and Electrical Component Manufacturing	3,996	4,579	5,099	14.6%	11.3%
Engineering Services	3,469	3,166	3,015	-8.7%	-4.7%

IT and Cyber

Security

Computer and

Electrical

Component

Manufacturing

Security

Engineering

Services



## IT, Engineering, & Emerging Tech

#### Top Ten In-Demand Occupations

Other than Computer User Support Specialist, most listed IT positions are paid \$3-\$4.50 less in adjusted COL hourly wages. Systems Managers and Mechanical Engineers are paid \$7-\$11 less in adjusted hourly wages compared to other MSAs like Raleigh NC, Richmond VA, and Charlottesville VA.

SOC	Description	Jobs in Region (2022)	Jobs Change (22-28)	Avg. Annual Openings	2022 Turnover Rate	Avg. Earnings	Workers Over 55 (2022)	Typical Entry Level Education
15-1252	Software Developers	1,935	17.6%	217	33%	\$108,626	16.0%	Bachelor's
51-4041	Machinists	1,353	10.7%	193	43%	\$53,667	33.2%	HS diploma or equivalent
15-1232	Computer User Support Specialists	1,463	8.9%	149	42%	\$57,113	17.7%	Some college, no degree
17-2112	Industrial Engineers	1,203	14.3%	122	26%	\$94,349	30.7%	Bachelor's
15-1211	Computer Systems Analysts	1,023	7.3%	106	34%	\$93,587	22.3%	Bachelor's
15-1244	Network and Computer Systems Administrators	762	4.6%	65	35%	\$86,423	17.9%	Bachelor's
11-3021	Computer and Information Systems Managers	569	21.0%	65	31%	\$138,297	23.7%	Bachelor's
17-3023	Electrical and Electronic Engineering Technologists and Technicians	401	5.6%	60	39%	\$62,167	34.9%	Associate's
17-2141	Mechanical Engineers	635	11.3%	59	24%	\$82,003	26.7%	Bachelor's
17-2051	Civil Engineers	526	7.7%	51	24%	\$88,969	31.7%	Bachelor's

#### **Needed Skill Sets**

In-Demand Occupations without enough annual program completions

Machinist

Top Knowledge	Top Skills	Top Abilities
<ul> <li>Computers     &amp; Electronics</li> <li>Engineering     &amp; Technology</li> <li>Math</li> <li>Design</li> <li>Customer and     Personal Service</li> </ul>	<ul> <li>Reading     Comprehension     Critical Thinking</li> <li>Active Listening</li> <li>Complex Problem     Solving</li> <li>Math</li> </ul>	<ul> <li>Oral Comprehension</li> <li>Oral Expression</li> <li>Written Comprehension</li> <li>Deductive Reasoning</li> <li>Inductive Reasoning, Near Vision, Written Expression</li> </ul>

# Top Certificates or Credentials

- AutoCAD
- CompTIA Cert.
- Programming Languages (C+, Java, SQ, Python)
- Cisco
  - Network Professional Cert.
- Project Management Professional (PMP) Certification

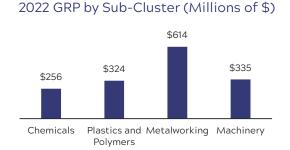


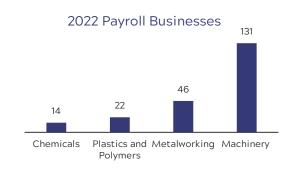
# Materials and Machinery Manufacturing

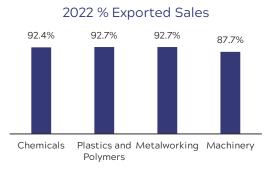
Three important trends have highlighted the need for advanced materials and machinery manufacturing in the United States: 1) the decades-long calls for reshoring manufacturing through more automation, 2) the COVID-19 pandemic's exposure of the fragility of the nation's manufacturing supply chain, and 3) increasing calls for lighter, sustainable, and eco-friendly materials. GOVA Region 2 has a long history of producing materials, parts and machinery for their downstream manufacturing partners both in and outside the region. From creating new polymers that offer lightweight materials that reduce fuel costs in transportation, food packaging that preserves freshness and reduces waste, and membranes that reduce energy consumption in water and air purification, to applying 3D printing technologies in machine shop work to save on time and material costs, advancing this industry poses a distinct opportunity for significant regional growth and industry leadership. Subclusters of regional significance include: 1) Chemical, 2) Plastics and Polymers, 3) Metalworking, and 4) Machinery Manufacturing. Examples of cluster companies are AkzoNobel, Bentech, Belvac Production Machinery, Celanese, Cooper Steel, Framatome, Hollingsworth & Vose, Liebehr, MELD, Mersen, P1 Technologies, Patrick Enterprises, Precision Steel Manufacturing Corp, Steel Dynamics, TekniPlex, Tessy Plastics, Thomas Industrial Fabrication, and Wolverine Industrial Materials.

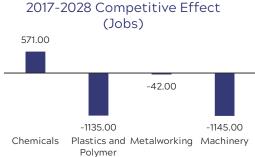
#### Cluster and Subcluster Performance

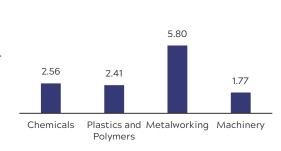
Materials and Machinery Manufacturing is the smallest of the target clusters in terms of GRP (\$1.52B). There were a total of 212 payroll businesses with the vast majority (131) being found in Machinery Manufacturing.











2022 Employment Concentration

#### Subcluster Jobs

Sub-Cluster	2017 Jobs	2022 Jobs	2028 Jobs	Job Change 2017-2022	Projected Change 2022-2028
Chemicals	309	726	959	135.4%	32.0%
Plastics and Polymers	3,483	2,633	2,758	-24.4%	4.8%
Metalworking	3,617	3,690	3,905	2.0%	5.8%
Machinery Manufacturing	3,624	2,781	3,036	-23.3%	9.2%



# Materials and Machinery Manufacturing

#### Top Ten In-Demand Occupations

Many of the listed occupations are paid better or on par compared to other MSAs. There is a \$1-\$2/hr difference among supervisors, welders, mechanics, and clerks, where GOVA2 workers are paid relatively less. Buying and Purchasing Agents are paid \$4.50/hr less in adjusted COL wages.

SOC	Description	Jobs in Region (2022)	22-'28 Jobs Change	Avg. Annual Openings	2022 Turnover Rate	Avg. Earnings	'22 Workers Over 55	Typical Entry Level Education
49-9071	Maintenance and Repair Workers, General	3,707	10%	443	49%	\$44,456	35%	HS diploma or equivalent
51-1011	First-Line Supervisors of Production and Operating Workers	2,374	12%	307	43%	\$66,801	30%	HS diploma or equivalent
49-9041	Industrial Machinery Mechanics	2,239	13%	260	35%	\$57,090	32%	HS diploma or equivalent
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,680	8%	243	64%	\$48,221	33%	HS diploma or equivalent
51-4121	Welders, Cutters, Solderers, and Brazers	1,518	11%	207	44%	\$49,439	22%	HS diploma or equivalent
51-4041	Machinists	1,353	11%	178	43%	\$53,667	33%	HS diploma or equivalent
51-9111	Packaging and Filling Machine Operators and Tenders	1,020	10%	143	69%	\$41,394	22%	HS diploma or equivalent
13-1028	Buyers and Purchasing Agents	1,149	1%	123	46%	\$63,754	35%	Bachelor's degree
43-5061	Production, Planning, and Expediting Clerks	735	13%	103	52%	\$51,769	29%	HS diploma or equivalent
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	578	8%	71	46%	\$45,349	21%	HS diploma or equivalent

#### **Needed Skill Sets**

#### In-Demand Occupations without enough annual program completions

Maintenance and Repair Worker, First-Line Supervisors of Production and Operating Workers, Industrial Machinery Mechanic, Welder, Machinist, Production/Planning/Expediting Clerk, Tool and Die Maker

Top Knowledge	Top Skills	Top Abilities		
<ul> <li>Math</li> <li>Design</li> <li>Engineering &amp; Technology</li> <li>Mechanical</li> <li>Admin &amp; Management</li> </ul>	<ul> <li>Critical Thinking</li> <li>Reading     Comprehension</li> <li>Active Listening</li> <li>Monitoring</li> <li>Judgement &amp;     Decision Making</li> </ul>	<ul> <li>Oral Comprehension</li> <li>Oral Expression</li> <li>Deductive Reasoning</li> <li>Written Comprehension</li> <li>Near Vision</li> </ul>		

#### Training and Credentials

- Welding, Certified Welding Inspector
- HVAC
- Construction Trades
- Industrial Technology/Technician programs
- CDL License
- AutoCAD
- SAP Manufacturing
- Program Language (Java, C+, SQL)

1 Lightcast Datarun 2023.2 PAGE 13



# Life Sciences & Biotechnology









GOALS	<ul> <li>Talent development, retention and attraction</li> <li>Scale up cluster through advanced technologies, firm growth, and ecosystem development</li> <li>Encourage entrepreneurship and business development</li> <li>Invest in site and infrastructure development</li> </ul>		
PRIORITIZED STRATEGIES AND ACTIVITIES	<ul> <li>Implement talent retention and attraction and managerial professions, centered on lead currently draw talent from this region (e.g.)</li> <li>Promote better regional and national mand biotechnology cluster identity</li> <li>Develop clear career pathways from entrillustrate a lifetime of career opportunitie</li> <li>Increase technician and non-degree train</li> <li>Identify, implement, and support innovative</li> <li>Develop accessible and affordable childed participation in industry cluster</li> <li>Catalyze technology adoption and develops software, diagnostic software and devices</li> <li>Develop Entrepreneur-In-Residence and life sciences to grow and attract knowledged Identify and implement programming that beginning life science businesses; for examunderused lab spaces that could serve as a flexible configurations or developing new</li> <li>Building/attract regulatory expertise in the</li> </ul>	North Carolina)  arketing for the region's life science  by through senior level employment to as in the region's life sciences cluster.  Ining  we strategies for worker retention care programming to increase talent  by pment among cluster businesses (e.g. a, biopharmaceuticals and therapies).  Investment Seminar programs for the ge and expertise in the region.  I reduces the cost of entry for mple, mapping existing unused and subsidized labs and workspaces with we affordable spaces	
COMMON OUTCOME AND IMPACT METRICS	# of jobs created/filled  # of businesses served  # of students trained  # of new internships created  # of credentials awarded  # of new apprenticeships created  # of upskilled employees  # of students in dual enrollment programs  # of new programs/credentials implemented  # of new businesses created  # of mentors engaged  # of entrepreneurs engaged  # of existing businesses expanded  # of jobs created/filled  # of businesses served  # of new internships created  # of existing jobs retained	# of acres advanced to higher tier per Virginia Business Ready Sites Program # of acres impacted/developed # of linear feet of water infrastructure # of linear feet of gas infrastructure # of linear feet of sewer infrastructure # of prospects (active company visits) # of miles of middle mile broadband completed # of businesses attracted # of businesses retained # rotal capital raised # of existing businesses expanded # of jobs created/filled # of businesses served # of new internships created # of jobs retained # of businesses attracted # of businesses attracted # of pobs retained # of businesses attracted # of businesses attracted # of businesses attracted	



# Life Sciences & Biotechnology

PARTNERS FOR COLLABORATION	Life Science & Biotechnology Programs Community colleges and universities Blue Ridge Partnership for Health Science Careers (BRPHSC) Carilion Clinic Central Virginia Community College Health Science programs City of Roanoke Biotech Project Fralin Biomedical Research Institute at Virginia Tech Carilion Fralin Life Sciences Institute Lewis-Gale Radford University Carilion The Central Virginia Community College CTE Academy VA Bio Virginia Western Community College Health Science programs Virginia Tech Carilion Virginia Tech Corporate Research Center  Economic and Workforce Development Organizations: Local and county economic developers and workforce boards Lynchburg Regional Business Alliance Onward New River Valley Regional Entrepreneurship Initiative Roanoke Regional Partnership - Recovery Project Roanoke Regional Small Business Development Center Roanoke-Blacksburg Technology Council (RBTC) The Advancement Foundation (TAF) VA Small Business Development Center Verge Alliance: RBTC and RAMP Veteran Support Network Virginia Economic Development Partnership VTOP, Alliance, and other support organizations
GOVA REGION 2 PROJECTS	<ul> <li>Amherst LYH Region Site Readiness</li> <li>Building a Regional Health Sciences Talent Pipeline</li> <li>Capital Ecosystem Development</li> <li>Developing a Destination for Talent</li> <li>Flexible Laboratory Space Assessment</li> <li>GO Virginia Region 2 Talent Collaborative</li> <li>Lynchburg Site Readiness</li> <li>Project Eagle+</li> <li>Regional Accelerator and Mentoring Program (RAMP)</li> <li>Strengthening Entrepreneur's Impact</li> <li>Talent Pathways Initiative</li> <li>Wood Haven Road Water and Sewer Infrastructure Enhancement</li> <li>Workforce Training and Regional Capacity for Rapid High Throughput COVID-19 Testing</li> </ul>



# Transportation & Autonomy









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GOALS	<ul> <li>Talent development, retention and attraction</li> <li>Scale up cluster through advanced technologies, firm growth, and ecosystem development</li> <li>Invest in site and infrastructure development</li> <li>Encourage entrepreneurship and business development</li> </ul>				
PRIORITIZED STRATEGIES AND ACTIVITIES	<ul> <li>Develop <u>clear career pathways from entry through senior level employment</u> to illustrate a lifetime of career opportunities in the region.</li> <li>Increase <u>technical</u>, <u>engineering and industry-driven training</u> among in-demand occupations. Connect with programs advocating for industry recognized credentials (e.g. VDOE CTE Curriculum)</li> <li>Identify, implement, and support innovative strategies for <u>worker retention</u></li> <li>Prioritize <u>upskilling programs in electrification and automation</u></li> <li>Create a <u>corridor strategy</u> for cluster development</li> <li>Strengthen and <u>diversify the cluster supply chain</u> to mitigate business cycle effects</li> <li>Catalyze <u>technology commercialization and adoption</u> among cluster businesses (e.g. automation and electrification).</li> <li><u>Attract additional heavy vehicle manufacturing</u> to the region.</li> <li>Encourage adoption of automation technology among transportation and logistics companies, especially automated driving</li> <li>Develop <u>testing facilities</u> beyond the VTTI Smart Road and other infrastructure to support technology and business development</li> </ul>				
OUTCOME AND IMPACT METRICS	# of jobs created/filled  # of businesses served  # of students trained  # of new internships created  # of credentials awarded  # of new apprenticeships created  # of upskilled employees  # of students in dual enrollment programs  # of new programs/credentials implemented  # of new businesses created  # of mentors engaged  # of entrepreneurs engaged  # of existing businesses expanded  # of jobs created/filled  # of businesses served  # of new internships created  # of existing jobs retained	<pre># of acres advanced to higher tier per Virginia Business Ready Sites Program # of acres impacted/developed # of linear feet of water infrastructure # of linear feet of gas infrastructure # of linear feet of sewer infrastructure # of prospects (active company visits) # of miles of middle mile broadband completed # of businesses attracted # of businesses retained Revenues increased # of existing businesses expanded # of jobs created/filled # of businesses served # of new internships created # of jobs retained # of jobs retained # of businesses attracted</pre>			



# Transportation & Autonomy

<u></u>	
	<ul> <li>Transportation &amp; Autonomy Programs:</li> <li>Community colleges and universities</li> <li>ASE Auto Servicing Excellence (credentialing body for auto technicians)</li> <li>Advanced Vehicle Dynamics Lab</li> <li>Center for Automotive Fuel Cell Systems</li> <li>Center for Energy Research and Education (CERE) Industry Labs</li> <li>MidAtlantic Aviation Partnership (MAAP)</li> <li>Mountain Gateway Community College</li> <li>Virginia Smart Road</li> <li>Virginia Tech Transportation Institute (VTTI)</li> </ul>
PARTNERS FOR COLLAB ORATION	Economic and Workforce Development Organizations:  Lynchburg Regional Business Alliance  Onward New River Valley  Regional Entrepreneurship Initiative  Roanoke Regional Partnership - Recovery Project  Roanoke Regional Small Business Development Center  Roanoke-Blacksburg Technology Council (RBTC)  The Advancement Foundation (TAF)  VA Small Business Development Center  Verge Alliance  Veteran Support Network  Virginia Business Ready Sites Program (VBRSP)  Virginia Economic Development Partnership  Virginia Tech Corporate Research Center  V-TOP, Alliance, and other support organizations  Workforce boards
GOVA REGION 2 PROJECTS	<ul> <li>Amherst LYH Region Site Readiness</li> <li>Capital Ecosystem Development</li> <li>Developing a Destination for Talent</li> <li>Enhancing the Region through New Technology for Unmanned Systems</li> <li>GO Virginia Region 2 Talent Collaborative</li> <li>Helping Local Employers Prepare the Existing and Future Workforce for Industry 4.0</li> <li>Lynchburg Site Readiness</li> <li>Regional Accelerator and Mentoring Program (RAMP)</li> <li>Strengthening Entrepreneur's Impact</li> <li>Talent Pathways Initiative</li> <li>The Central Virginia Community College CTE Academy</li> <li>Wood Haven Road Water and Sewer Infrastructure Enhancement</li> </ul>



IT, Engineering, & Emerging Tech









	<ul> <li>Talent development, retention and at</li> </ul>	traction				
	<ul><li>Encourage entrepreneurship and busi</li></ul>	iness development				
GOALS	<ul> <li>Scale up cluster through advanced technologies, firm growth, and</li> </ul>					
	ecosystem development					
	O Invest in site and infrastructure devel	opment				
PRIORITIZED STRATEGIES AND ACTIVITIES	<ul> <li>Develop <u>clear career pathways from entry through senior level employment</u> to illustrate a lifetime of career opportunities in the region.</li> <li>Identify and implement strategies for <u>attracting and retaining remote workers</u> in the region.</li> <li>Identify, implement, and support innovative strategies for <u>worker retention</u>.</li> <li>Implement <u>talent retention and attraction programs</u> centered on local universities and regions currently drawing talent from this region.</li> <li>Catalyze <u>technology adoption and development</u> among cluster businesses (e.g. Al, machine learning, augmented and virtual realities, cobots, data sciences and analytics).</li> <li>Identify <u>cluster needs among SBIR Phase I and II recipients</u> in the region.</li> <li>Streamline methods of <u>commercializing university intellectual property</u>.</li> <li>Increase <u>technical</u>, <u>engineering and industry-driven training</u> among in-demand occupations.</li> <li>Improve <u>IT career awareness and advanced level computer science programming</u> among K-12 students, particularly in underserved communities.</li> <li>Increase amount or accessibility to <u>quasi-industrial</u>, <u>flexible spaces</u> for small cluster businesses</li> <li>Have higher education institutions prioritize or <u>highlight regional employers in their career fairs</u> and other employment events.</li> </ul>					
OUTCOME AND IMPACT METRICS	# of jobs created/filled  # of businesses served  # of students trained  # of new internships created  # of credentials awarded  # of new apprenticeships created  # of upskilled employees  # of students in dual enrollment programs  # of new programs/credentials implemented  # of new businesses created  # of mentors engaged  # of entrepreneurs engaged  # of existing businesses expanded  # of jobs created/filled  # of businesses served  # of new internships created  # of existing jobs retained	<pre>  # of acres advanced to higher tier per     Virginia Business Ready Sites Program   # of acres impacted/developed   # of linear feet of water infrastructure   # of linear feet of gas infrastructure   # of linear feet of sewer infrastructure   # of prospects (active company visits)   # of miles of middle mile broadband completed   # of businesses attracted   # of businesses retained   Revenues increased   # of existing businesses expanded   # of jobs created/filled   # of businesses served   # of new internships created   # of jobs retained   # of businesses attracted</pre>				

### Target Cluster Strategies



	<ul> <li>IT, Engineering, &amp; Emerging Tech Programs:</li> <li>Community Colleges and universities</li> <li>Additive Materials Manufacturing Partnership Labs (AMPL)</li> <li>Center for Energy Research and Education (CERE) Industry Labs</li> <li>Center for Intelligent Material Systems and Structures (CIMSS)</li> <li>Center for Packaging and Unit Load Design (CPULD)</li> <li>Commonwealth Cyber Initiative SWVA</li> <li>CS/ROOT (supporting computer science entrepreneurs)</li> <li>Exelaration</li> <li>GMU Mason Enterprise</li> <li>VA Small Business Development Center</li> <li>VT Foundry Institute for Research and Education (VT FIRE)</li> <li>XLR8 STEM Academy</li> </ul>
PARTNERS FOR COLLABORATION	<ul> <li>Economic and Workforce Development Organizations:</li> <li>Local economic developers and workforce boards</li> <li>APEX Center for Entrepreneurship</li> <li>Advancement Foundation</li> <li>Blacks in Technology SWVA</li> <li>Lynchburg Regional Business Alliance</li> <li>Onward New River Valley</li> <li>Regional Entrepreneurship Initiative</li> <li>Roanoke Regional Partnership - Recovery Project</li> <li>Roanoke Regional Small Business Development Center</li> <li>Roanoke-Blacksburg Technology Council (RBTC)</li> <li>The Advancement Foundation (TAF)</li> <li>Verge Alliance: RBTC, RAMP</li> <li>Veteran Support Network</li> <li>Virginia Business Ready Sites Program (VBRSP)</li> <li>Virginia Economic Development Partnership</li> <li>Virginia Tech Corporate Research Center</li> <li>V-TOP, Alliance, and other support organizations</li> </ul>
GOVA REGION 2 PROJECTS	<ul> <li>Amherst LYH Region Site Readiness</li> <li>Capital Ecosystem Development</li> <li>Central Virginia Training Center</li> <li>Developing a Destination for Talent</li> <li>Experiential Learning in Tech Employment (ELITE)</li> <li>GO Virginia Region 2 Talent Collaborative</li> <li>Helping Local Employers Prepare the Existing and Future Workforce for Industry 4.0</li> <li>Lynchburg Site Readiness</li> <li>Regional Accelerator and Mentoring Program (RAMP)</li> <li>Strengthening Entrepreneur's Impact</li> <li>The Central Virginia Community College CTE Academy</li> <li>Wood Haven Road Water and Sewer Infrastructure Enhancement</li> <li>Workforce and Entrepreneurship Initiatives in a Regional Makerspace</li> </ul>

### **Target Cluster Strategies**



# Materials and Machinery Manufacturing

# of new internships created

# of existing jobs retained





# of jobs retained

# of businesses attracted





- 🗘 1	Manuracturing	
GOALS	<ul> <li>Talent development, retention and attract</li> <li>Scale up cluster through advanced technology</li> <li>development</li> <li>Encourage entrepreneurship and business</li> <li>O Invest in site and infrastructure development</li> </ul>	ologies, firm growth, and ecosystem s development
PRIORITIZED STRATEGIES AND ACTIVITIES	<ul> <li>Implement talent retention and attraction engineering and middle management proportion and regions that may currently draw talent.</li> <li>Develop clear career pathways from entillustrate a lifetime of career opportunities.</li> <li>Identify, implement, and support innovations.</li> <li>Increase technical, engineering and industrials.</li> <li>Develop and market a cluster identity.</li> <li>Strengthen and diversify the cluster support effects.</li> <li>Catalyze technology adoption among clumaterials, additive manufacturing technotechnologies).</li> </ul>	refessions, centered on local universities of from this region (e.g. North Carolina) ry through senior level employment to es in the region.  The strategies for worker retention ustry-driven training among in-demand apply chain to mitigate business cycle uster businesses (e.g. innovative
OUTCOME AND IMPACT METRICS	# of jobs created/filled  # of businesses served  # of students trained  # of new internships created  # of credentials awarded  # of new apprenticeships created  # of upskilled employees  # of students in dual enrollment programs  # of new programs/credentials implemented  # of new businesses created  # of mentors engaged  # of entrepreneurs engaged  # of existing businesses expanded  # of jobs created/filled  # of businesses served	<ul> <li># of acres advanced to higher tier per Virginia Business Ready Sites Program</li> <li># of acres impacted/developed</li> <li># of linear feet of water infrastructure</li> <li># of linear feet of gas infrastructure</li> <li># of linear feet of sewer infrastructure</li> <li># of prospects (active company visits)</li> <li># of miles of middle mile broadband completed</li> <li># of businesses attracted</li> <li># of businesses retained</li> <li>Revenues increased</li> <li>Total capital raised</li> <li># of existing businesses expanded</li> <li># of jobs created/filled</li> <li># of businesses served</li> <li># of new internships created</li> </ul>

### **Target Cluster Strategies**



# Materials and Machinery Manufacturing

#### Materials and Machinery Manufacturing:

- Community colleges and universities
- Additive Materials Manufacturing Partnership Labs
- Center for Energy Research and Education (CERE) Industry Labs
- Center for Intelligent Material Systems and Structures (CIMSS)
- Center for Packaging and Unit Load Design (CPULD)
- Kroehling Advanced Materials Foundry
- · Liberty University
- Onward NRV Manufacturing Leadership Summit (twice a year)
- The Central Virginia Community College CTE Academy
- VT Foundry Institute for Research and Education (VT FIRE)

#### PARTNERS FOR COLLABORAT ION

#### Economic and Workforce Development Organizations:

- GO Virginia Region 2 Talent Collaborative
- Lynchburg Regional Business Alliance
- Onward New River Valley
- Regional Entrepreneurship Initiative
- Roanoke Regional Partnership Recovery Project
- Roanoke Regional Small Business Development Center
- Roanoke-Blacksburg Technology Council (RBTC)
- The Advancement Foundation (TAF)
- VA Small Business Development Center
- Verge Alliance
- Veteran Support Network
- Virginia Business Ready Sites Program (VBRSP)
- Virginia Economic Development Partnership
- Virginia Tech Corporate Research Center
- VTOP, Alliance, and other support organizations
- Workforce boards

#### GOVA REGION 2 PROJECTS

- Amherst LYH Region Site Readiness
- Capital Ecosystem Development
- Central Virginia Training Center
- Developing a Destination for Talent
- Helping Local Employers Prepare the Existing and Future Workforce for Industry 4.0
- Lynchburg Site Readiness
- Regional Accelerator and Mentoring Program (RAMP)
- Strengthening Entrepreneur's Impact
- Wood Haven Road Water and Sewer Infrastructure Enhancement
- Workforce and Entrepreneurship Initiatives in a Regional Makerspace

#### PROJECT DEVELOPMENT

Every Region 2 project recommended by the Region 2 Council and approved by the GO Virginia state board should be consistent with the strategies and goals outlined by the Region 2 Growth and Diversification Plan. Creating an easily understandable guide is a priority with the 2023 Growth and Diversification Plan Review, for both GO Virginia applicants to design and submit fundable projects and for the Region 2 Council to assess projects. This plan review centers the four priority industry clusters in Region 2 and emphasizes the current GO Virginia projects and future opportunities through the strategies of talent development and attraction, collaborative development of sites and buildings, entrepreneurship and business development, and industry cluster scale-up.

#### **Current GO Virginia Projects**

During this process, GOVA Region 2 staff reviewed existing and past projects list in the cluster strategies section of this report. Current projects seem to complement prioritized strategies and address prioritized challenges from past growth and diversification plans. As with past plans, the four main categories that projects align with are talent, cluster scale up, entrepreneurship, and site and infrastructure development.

#### **Opportunities for new TPI Planning Funding**

In September 2023, Region 2 was awarded a TPI planning grant to support a 12-month talent pathways planning process for the Life Sciences and Biotechnology and Transportation Manufacturing and Autonomy clusters. The following priorities and goals were identified could be addressed through TPI efforts.

#### Life Sciences & Biotechnology:

- Develop <u>clear career pathways from entry through senior level employment</u> to illustrate a lifetime of career opportunities in the region's life sciences cluster.
- Implement <u>talent retention and attraction programs</u>, particularly for scientists and middle management professions, centered on local universities and regions that may currently draw talent from this region
- · Increase technician and non-degree training

#### **Transportation Manufacturing & Autonomy:**

- Develop <u>clear career pathways from entry through senior level employment</u> to illustrate a lifetime of career opportunities in the region.
- Implement <u>talent retention and attraction programs</u>, particularly for engineering and middle management professions, centered on local universities and regions that may currently draw talent from this region
- Increase <u>technical</u>, <u>engineering</u> and <u>industry-driven</u> training among in-demand occupations

#### FUTURE PLANNING/G&D PLAN EFFORTS:

The 2023 Growth and Diversification Plan Review is an opportunity for the Region 2 Council to reflect on the 2021 plan, restate a commitment to the four priority industry clusters, plan goals and strategies, and update regional economic data, so that this living document contributes to strong project development. This plan review builds on the success of the past six years with the GO Virginia program. The plan continues to offer a case for action grounded in a thoroughly researched and deliberated understanding of the economy and labor markets in Region 2.

Between June – October 2023, Region 2 support staff facilitated the plan review through three main actions: 1) analysis of changes in regional and industry cluster economic data through secondary sources (Lightcast, O\*NET, US DOL, American Community Survey), 2) engagement and input from with industry cluster leaders and regional stakeholders through focus groups, and 3) integration of priorities from industry cluster leaders and review by Region 2 Council Members.

#### Analysis of Changes in Regional and Industry Cluster Economic Data

Between June-August 2023, the support organization led a data analysis of regional economic data and industry cluster data. Particular attention was paid to updating wage data, skills gap analyses, and regional trends impacting workforce participation. Region 2 council members were involved in the plan review throughout the process. Region 2 council members reviewed updated regional economic data at the July 24th council meeting. This 2023 revised analysis saw most socioeconomic, labor, and industry data reverting to pre-COVID levels or continuing on the same trend trajectory from before COVID. One newer trend observed was the population demographics by age. Where the region previously lost professionals in the late 20s and 30s, that demographic group has seem increases. Meanwhile, early to mid-20s and mid-career professionals (40-55 years) are leaving the region.

#### **Engagement with Industry Cluster Leaders and Regional Stakeholders**

In September 2023, four focus groups were held in Fairlawn (Pulaski County), Lynchburg, and Roanoke to solicit feedback from industry cluster leaders and regional stakeholders. Each focus group was co-chaired by 2 regional council members. In total, 68 participants registered to share feedback through the focus groups. Focus groups were facilitated in a hybrid format, with the option to participate either in-person or via Zoom. Focus group participants were asked to identify high-impact priorities for GO Virginia projects within their industry cluster. These priorities were integrated into a survey which was circulated in October 2023 for additional stakeholder input.

#### Integration of Priorities and Review by Region 2 Council Members

Stakeholder input led to revisions and strengthening of the industry cluster descriptions, and identification of the industry cluster strategies and partners for collaboration outlined on pages 15-22 of this plan review. Region 2 council members reviewed a final draft of this plan review at the Oct 19 council meeting.

### How to apply for a GO Virginia Region 2 grant

#### **STEP 1:** BRAINSTORM IDEAS

Gather together friends, neighbors, colleagues, and fellow innovators to brainstorm ideas that could generate prosperity in our region. Find and review formal application at https://cece.vt.edu/GOVAR2/RequestforProposals.html

#### **STEP 2:** PRIORITIZE

1. Does the project fit within one of these four growth industries?



IT and Emerging Technology



**Transportation and Autonomy** 



Materials and Machinery Manufacturing



Life Sciences and Healthcare

- 2. Does it have the potential to bring high-paying jobs to the region?
- ☐Yes ☐ No

- 3. What is the budget for your idea?
- 4. What kind of return on investment would your community or the state expect to see?
- 5. Does our region have an already skilled workforce to fill those jobs? Is there training locally to create a skilled workforce?

#### STEP 3: CHOOSE WHICH GRANT TYPE IS RIGHT FOR YOU

**Planning Grant** 

Regional focused planning project, groundwork for a Per Capita grant

- Funding: \$100,000
- Total Match: 1:1 \*
- Partner Engagement: 2+ localities
- Duration of Project: 1 year

Per Capita Implementation Grant Regionally focused implementation

> Funding: Over \$100,000

>> Total Match: 1:1 \*

projects

> Local Match: 20% of total match\*

>>> Partner Engagement: 2+ localities

Duration of Project: 2 years

**State Competitive Grant** 

Multi-region implementation projects between 2 or more GO Virginia regions

- Funding: Over \$1,000,000
- Total Match: 1:1
- >>> Partner Engagement : 2+ regions
- Local match: Required. 2+ localities
- Duration of project: 2 years

\*Match waivers are available to request a reduction of Total Match and a reduction or waiver of Local Match

#### STEP 4: BE PREPARED TO SHOW THE FOLLOWING IN YOUR APPLICATION

lack Collaboration

Applicant Eligibility

Matching Funds

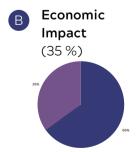
Return on Investment Estimate

Public/private entities can show evidence of financial participation by collaborating with localities and must meet a minimum threshold. Grant funds should offer broad community benefits and are not to be used as economic development incentive payments or to promote the activities of a single entity.

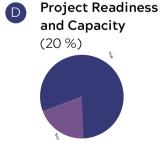
#### STEP 5: KEY CONSIDERATIONS FOR YOUR APPLICATION

Threshold Components

Make sure your project covers all five points.











### **STEP 6: SUBMIT YOUR APPLICATION**

For questions and assistance on project development, email Quina Weber-Shirk (quina@vt.edu).

Letters of interest should be submitted via email to Quina Weber-Shirk (quina@vt.edu).

To access the application form, visit https://cece.vt.edu/GOVAR2/RequestforProposals.html.



For more information, please contact:

Quina Weber-Shirk Program Manager, <u>GO Virginia Region 2</u> Virginia Tech Center for Economic and Community Engagement <u>quina@vt.edu</u>

Period: July-September 2023

Total Projects Funded	Total Funds Allocated	Jobs Created to Date	External Investment Generated
45 (29 Projects Completed)	\$9,749,627	744	\$7,816,844

### Area One: Talent development, attraction, and retention

	Talent: Aggreg	ated Metrics (f	rom beginni	ng of proje	ct – present	)			
	Project Title		Metrics						
Status	(grey indicates closed project)	Internships completed	Business es served	New jobs created	Jobs retained	Students trained	Upskilled employees	Credentials awarded	Dual enrollment
	ELITE Internship Program	62	17	17	-	-	-	-	-
	Project Eagle + - also see entrepreneurs hip metrics	N/A	4	-	-	N/A	-	N/A	N/A
	Regional Talent Strategy Implementatio n	N/A	19	42	-	42	89	-	N/A
	Workforce & Entrepreneurs hip Initiatives in a Regional Makerspace – also see	N/A	62	7	-	93	-	N/A	N/A

Period: July-September 2023

entrepreneurs								
hip metrics								
Expanding	N/A	-	-	-	-	-	-	N/A
Welding								
Training								
Capacity &								
Jobs in the								
Roanoke								
Valley								
Industry 4.0	N/A	-	-	-	-	N/A	N/A	N/A
for the								
Automated-								
Connected-								
Electrified								
(ACE)								
Workforce								/.
Lynchburg	89	30	6	-	-	-	4	N/A
Career								
Acceleration								
CVCC-CTE		123	-	-	2,655	-	466	587
Academy	10	4			4.70		120	120
Classrooms to	10	4	-	-	168	-	129	130
Careers Blockchain		85	4		2/5		46	
	-	85	4	-	365	-	40	-
Ecosystem								
Catalyst		34	75		500			
AMPL (also in	-	34	/5	-	300	-	-	-
sites)								

Period: July-September 2023

Developing a Destination for Talent	217	52	150	-	217	-	-	-
Ignite Internship Expansion (ECB)	12	6	-	-	12	-	-	-
Drone Zone	7	4	2.5	0	7	0	0	17
Talent Collaborative	-	45	-	-	-	141	-	-
CERE	N/A	78	98	-	-	-	-	-
Current Project Totals	397	563	401.5		4,059	230	645	734

#### **ECB Progress Notes:**



**BRPHSC- Carilion:** The Regional Situational Assessment and Analysis has been completed. A second annual Health Sciences Career Advisory Conference is scheduled for October 19, 2023, additional details can be found <a href="https://example.com/here">here.</a>. Established a Diversity Committee as part of the BRPHSC. Project has entered closeout phase.



**Bedford Metal Workforce Retention Center:** Completed draft RFP framework for future procurement process. Project did not meet Q3 milestones due to a delay in closing on the Winoa property. Revised closing date will take place in October. Staff is monitoring.

#### Implementation Progress Notes:



**Project Eagle +:** The Blacksburg site's ribbon-cutting ceremony was held on September 5, 2023, with approximately 80 attendees. The BIO Takeover event held in Roanoke on September 6, 2023, as part of Game Changer Week, featured J&J Investor networking opportunities. The event included presentations from resident companies at J&J Innovation – JLABS at Washington, DC. Dr. Sally Allain from J&J also spoke at

Period: July-September 2023

the event highlighting projects and resources focused on biotechnology in the Roanoke-Blacksburg region. As part of the Quick-Fire Challenge, J&J Innovation, in collaboration with Carilion Clinic Innovation, Verge Alliance and Virginia Tech Corporate Research Center, invited innovators to submit applications aimed to transform patient outcomes in oncology; 43 applications were received and 16 applications have been selected as finalists. Awardees will be announced at a special event on October 25, 2023. JLABS continues to support/mentor four existing cohorts. The conversion from BSL1 to BSL2 has been successful resulting in 4 potential new members and 10 applications still under review.

Expanding Welding Training Capacity & Jobs in the Roanoke Valley: Project did not meet Q3 milestones due to a delay in installation of equipment and cancellation of Fall 2023 adult welding class. Adult welding class expected to be held in Spring 2024. BTEC reports four welding booths have been purchased. 2/3 ventilation bids have been received, awaiting a third estimate. Interior electric contract has been approved and install is scheduled for December 2023; AEP cannot place a transformer to accommodate this work for upward of 24 months, therefore, BTEC is developing the scope of trench exterior electrical conduit to another transformer. Scope and build details are TBD, however, this may likely result in a significant added cost to the project that is beyond the GO Virginia budget of \$250,000. Adult welding classes are being promoted, but there were not enough enrolled participants for the Fall 2023 semester to hold a class. Registration for the Spring 2024 semester is scheduled for November, this will involve high school students. Region 2 staff has scheduled a meeting with the project team.

Industry 4.0 for the Automated- Connected- Electrified (ACE) Workforce: The Project Technical Advisory has been formed, with members in Blacksburg, Roanoke, Dublin, Lynchburg, Botetourt County, and Franklin County. Of which, seven are industry, four are educational, and three are economic development. The first meeting was held on August 25, 2023 at Hotel Roanoke. The Chair was selected. The next meeting is scheduled for November 17. The pre-college outreach activity was held July 18-21, 2023. We welcomed 60 rising 7/8 graders for hands-on learning and friendly competition to bolster teamwork and an interest in STEM. The project was the Alternative Energy Fuel Cell Challenge through SAE. Participants were guided to assemble a toy that uses Proton Exchange Membrane (PEM) fuel cells and electrolysis to power the motor that drives the toy. After the friendly competition, the students participated in a group discussion designed to assess what they learned. The online resource portal has been created and updated this quarter to include our Network Navigator. Networking event to be held in early 2024.

Period: July-September 2023

Regional Talent Strategy Implementation: Project did not meet Q3 milestones due to a delay in holding the second convening of the Talent Advisory Council, which is expected to take place in Q4. Meetings with the Experience Committee continue to occur led by the Roanoke Regional Partnership. Staff from RRP travelled to the Tom Tom Festival and the group plans to replicate the event for an Annual Experience Conference to be held in early May 2024. Roanoke College has now expressed an interest in conducting an annual talent summit and the RRP, GRWDB, and RBTC have joined forces to not duplicate efforts. Roanoke College has secured confirmation from the Governor's office for the Governor to be the keynote speaker, with the next steps being to secure the date around his schedule. Dates are being floated for late February or early March 2024. Staff is monitoring.

#### **Area Two: Collaborative Sites and infrastructure**

	Collaborativ	e Sites and Ir	nfrastructure	Implement	ation Projec	ts: Aggregated Met	trics			
			Metrics							
S	Dunciant	Acres	Increased	Prospects	Businesses	Linear feet of	Acres			
Status	Project	advanced	locality		attracted	sewer/water/gas	developed			
St			engagement							
	Amherst	N/A	-	N/A	N/A	N/A	N/A			
	Site									
	Readiness									
	Airport	-	-	N/A	N/A	N/A				
	Commerce									
	Park									
	Falling	-	-	N/A	N/A	-	-			
	Branch									
	Corporate									
	Park									
	AMPL- see	N/A	Yes	Yes	4	N/A	N/A			
	talent									
	metrics									

Period: July-September 2023

CERE – see talent metrics						
Woodhaven	110	Yes	20	0	1150/375/0	110
Lynchburg Due Diligence	6 sites	Yes				
Totals	Unknown	Yes	20+	4	Unknown	110+

#### Implementation Progress Notes:

- Amherst Site Readiness: Work is complete for both Amelon and Brockman sites. Project has entered closeout phase.
- Airport Commerce Park: Phase I environmental site assessment, cultural resources review, and review of threatened and endangered species are all complete. Preliminary geotechnical exploration and report completed. Waters of the US delineation and determination completed. Boundary and topographic survey in progress.
- **Falling Branch Corporate Park:** Montgomery County contracted with H&P to revise the grading plans and Stormwater management for the site. The revised plans were submitted to the Town of Christiansburg on September 21, 2023. Permits to be obtained in Q4.

Period: July-September 2023

### **Area Three: Entrepreneurship and Business Development**

	Entrepreneurship: Aggreg	gated Meti	rics from Im	olementation	Projects	<del></del>	
					Metrics		
Status	Project Name	Jobs created	Existing businesses expanded	New businesses created	Businesses served	Entrepreneurs engaged	Mentors engaged
	Workforce &	7	N/A	4	62	N/A	N/A
	Entrepreneurship						
	Initiatives in a Regional						
	Makerspace – also see						
	talent metrics						
	Project Eagle + - also see	-	-	N/A	4	N/A	N/A
	talent metrics						
	CS/root	-	-	3	-	525	15
	Center for	-	-	-	-	N/A	N/A
	Entrepreneurship						
	VIC-REI	-	-	-	-	-	-
	TAF – Increasing the Birth	19	-	-	50	22	30
	Rate of High Growth						
	Companies 2						
	TAF - Increasing the Birth	-	17	-	51	51	29
	Rate of High Growth						
	Companies						
	RAMP	210	13	2	45	36	93
	Roanoke SBDC	66	-	27	-	-	-
	Pivot and RAMP Up	-	TBD	TBD	24	11	72
	Project Totals	302	30	36	236	634	239

Period: July-September 2023

#### Implementation Progress Notes:

**Center for Entrepreneurship:** Regional advisory board has been created and met for the first time on August 29<sup>th</sup>. Developed an evaluation and communications plan. Center advisory board members and staff participating with Co.Starters Accelerator program to create a plan for entrepreneurial ecosystem mapping. Currently working to recruit and train mentors. The Center's new website is listed here.

#### **Projects in Process of Contracting:**

Strengthening Entrepreneurs' Impact



#### **GO Virginia Region 2 Council Meeting Minutes**

July 24, 2023, 2:00p.m.- 4:00p.m.

#### Via Zoom Webinar.

Council members in attendance: Eddie Amos (Chair), Michelle Austin, Nathaniel Bishop, John Capps, Kenneth Craig, Janice Crawford, Whitney Czelusniak, Beverley Dalton (Vice-chair), Sandy Davis, Paul Denham, Greg Feldmann, Mike Friedlander, Don Halliwill, Vince Hatcher, Pat Huber, Bif Johnson, Fourd Kemper, Kim Payne, Debbie Petrine, John Putney, Amy Sebring, Ray Smoot, Luke Towles, Cathy Underwood, Richmond Vincent, Jacob Wright, Justin Yalung.

Council members not in attendance: Mike Hamlar, Marty Muscatello.

Staff in attendance: John Provo, Scott Tate, Sarah Lyon-Hill, Quina Weber-Shirk, Rachel Jones, Alyssa McKenney.

Public in attendance: Cody Anderson, Jason Ferguson, Laura Hamilton, Macey Normyle, Sarah Spotswood, Altan Mitchell, Ashley Posthumus, Billy Gammel, Central Virginia Planning District Commission, Danielle Murray, Kathy Hodges, Kristen Costello, Lane Guilliams, Marilyn Herbert-Ashton, Pam Bailey, Ruth Caul, Tommy Miller, Valleys Innovation Council, Erin Burcham, Appomattox County, Alec Brebner, Johnnie Roark, Bruce Boone.

The meeting convened at 2:01p.m. and adjourned at 4:00p.m.

#### Financials Review

Alyssa McKenney reviewed the financial reports included in the board packet. Council has a remaining balance of \$2,248,099 in per-capita funds. If the two proposals before council is approved, there will be a remaining balance of \$995,609.

#### **KPI Template**

Quina Weber-Shirk shared a proposed template for KPI data highlights. Reviewed in KPI data highlights included a project pipeline overview, Region 2 project metrics, as well as jobs reported/committed across all grants awarded through GO Virginia Region 2.

#### **Project Proposals**

#### Strengthening Entrepreneurs' Impact

Scott Tate offered a brief overview of the new project proposal, "Strengthening Entrepreneurs' Impact", submitted by VERGE. Erin Burcham, VERGE, shared project deliverables and answered questions from the council. Ray Smoot requested more information about the companies VERGE will be accelerating. Erin Burcham stated the companies moving through the accelerator will be newly established



companies, meaning they will not posses an LLC. This project would help more companies progress out of a higher ed "lab" space, where they're still in R&D phase, and into a commercialized space.

VERGE's request totaled \$577,800 in Region 2 per-capita funds, with a match of \$288,900.

Members recusing from the vote include John Capps, Eddie Amos, Pat Huber, Justin Yalung, and Michael Friedlander.

Debbie Petrine motioned to approve this proposal, and Richmond Vincent seconded. All were in favor and none opposed.

#### **ACA Classical & CTE Institute**

Scott Tate offered a brief overview of the new project proposal, "ACA Classical & CTE Institute", submitted by Appomattox County. Alec Brebner, Central Virginia Planning District Commission, shared project deliverables and answered questions from the council. Chairman Amos requested staff clarify the negative 3-year ROI. Scott Tate responded by stating the negative 3-year ROI is due to the lower average wage projection in comparison to the high allocation request. The average wage for an individual fresh out of the training program is estimated to be around \$40,000, with wages increasing as experience is garnered. The applicant has augmented the ROI with some upskill training, however, it can take some time for this to be reflected by the actual salary projections. Sandy Davis requested if the lower average wages of \$40,000 is due to the student's readiness to join the workforce following the program. Alec Brebner responded by stating the applicant team assessed entry level salaries throughout the greater Lynchburg region from Jobs EQ to determine that projected salary of around \$40,000, with hopes that their new facility will help raise the average entry level projections.

Appomattox County's request totaled \$565,000 in Region 2 per-capita funds, with a match of \$429,969.

Council members recusing from the vote include John Capps.

Pat Huber motioned to approve this proposal, and John Putney seconded. All were in favor and none opposed.

#### **Special Updates**

#### Preliminary Report of G&D Plan Updates

Sarah Lyon-Hill provided a detailed overview of 2023 updates to the GO Virginia Region 2 Growth & Diversification Plan. Information reviewed includes the goals of the G&D plan updates, regional data highlights, skills gap analysis, and next steps for final submission in October. The finalization of the draft will take place in July-September, with assistance from regional stakeholder engagement sessions to be held in August. The final draft of the plan will be presented to the GO Virginia Region 2 Council at its next meeting on October 19<sup>th</sup>, with final submission to the state on October 31<sup>st</sup>. Region 2 support staff are requesting council volunteers to chair each regional stakeholder engagement session. Michael Friedlander requested clarification on changes within the life science industry sector, particularly in the



technical space for what he refers to as staff scientists, or individuals trained in technical skills as needed instrumentation for federally and privately funded research projects. Sarah stated when completing the skills gap analysis, most of the healthcare occupations overturn life science occupations, shadowing them in many ways. When reviewing skillsets existing in in-demand occupations in both healthcare and the life sciences sectors, secondary data suggests healthcare overshadows life sciences. Ray Smoot requested clarification on whether or not regional growth in Region 2's industry clusters is less than the national averages. Sarah stated the clusters of IT & Emerging Tech and Transportation and Autonomy are slowly growing compared to the nation.

#### Project Spotlight: Lynchburg Beacon of Hope

Laura Hamilton and Macey Normyle presented final outcomes of their planning grant, Lynchburg Beacon of Hope. A major deliverable for the grant was a Playbook for Future Centers, a programmatic guide for operations of the high school future center, a template for hiring the director of each future center, as well as a professional development and training module for effective Future Centers. The project team presented both an interactive web-based playbook, as well as their pdf version to council.

## State Updates- Virginia Department of Housing & Community Development

Cody Anderson, Virginia Department of Housing & Community Development (DHCD), provided an overview of state updates regarding the matching fund requirements for future project applications. The GO Virginia State Board voted to end the local match waiver and return to original total match requirements of 1:1 matching funds for implementation projects, with reinstated local match requirements, but eliminating the \$50,000 minimum. Planning grants will return to a required 2:1 matching funds, with no local match required. Other changes include a total and local match waiver request process. Total match waiver requests will be processed for localities who are identified as under fiscal distress or state funding could lead to an extraordinary economic opportunity. Local match waiver requests will be processed based on localities' ability to financially contribute.

#### **Council Business**

#### **Membership Reappointments**

Chairman Amos confirmed the following council members have agreed to serve an additional 3-year term: Janice Crawford, Vince Hatcher, and Luke Towles.

#### **Outline for Celebrate Success Event**

Quina Weber-Shirk reviewed staff's recommendations and options for an upcoming Celebrate Success event to be held in the Fall of 2023. Chairman Amos encouraged council members to provide feedback to regional staff over email correspondence at any time during the planning process.

#### **Quarterly Project Reporting**



Rachel Jones reviewed active project status, noting there is one current project listed in yellow, meaning they did not meet one or more quarter 2 milestones and staff is monitoring. All other active projects are listed in green, meaning they have met quarterly milestones and are on track with their current deliverables.

Rachel Jones then provided an overview of the packet information item: Region 2's Electronic Meeting Authorization.

#### **Minutes**

Council reviewed minutes from the Region 2 Council Meeting held on April 28, 2023. Chairman Amos asked if there were any corrections, additions, or questions regarding the minutes; there were none.

Richmond Vincent motioned to approve the minutes, with John Putney seconding. All were in favor and none opposed.

The meeting adjourned at 4:00p.m.



#### Memorandum

**TO:** GO Virginia Board Members

FROM: DHCD Staff

RE: GO Virginia Match Waiver Administrative Guidance

**DATE:** 09/12/2023

**BACKGROUND:** On June 30, 2023, the modified match requirements for Per Capita implementation grants expired and the Board approved a plan to return to the minimum total project match required by state law. The Board also took action to amend the local match requirement.

Pursuant to § 2.2-2489 of the Code of Virginia, any grant awarded from the Virginia Growth and Opportunity Fund shall require matching funds at least equal to the grant. However, the GO Virginia State Board has the authority to reduce the match requirement to half of the grant upon a finding of fiscal distress or an exceptional economic opportunity in a region.

The Board directed DHCD to develop administrative guidance to implement the new match policy, including objective criteria, in collaboration with regional council support organization staff.

The documents following this memo include the guidance and the templates to request a waiver of Total Match requirement as well as Local Match requirement.

**RECOMMENDATION:** DHCD staff recommends the approval of the administrative guidance and related templates.



#### Match Waiver Request Guidelines

#### I. Overview

Pursuant to § 2.2-2489 of the Code of Virginia, any grant awarded from the Virginia Growth and Opportunity Fund shall require matching funds at least equal to the grant. However, the GO Virginia State Board has the authority to reduce the match requirement to half of the grant upon a finding of fiscal distress or an exceptional economic opportunity in a region. At the June 2023 State Board meeting, Board members directed DHCD staff to develop a formal process for how the Board will review these requests.

#### II. Total Match Waiver

Projects requesting a reduction of the total match required for a project must meet the criteria established in state code of demonstrating either fiscal distress or an extraordinary economic opportunity. The Board has established one (1) criterion to demonstrate fiscal distress and three (3) primary criteria to demonstrate exceptional economic opportunity.

To become eligible for a waiver under the fiscal distress criterion, at least 50% of the participating localities meet the Virginia Economic Development Partnership's definition for Economic Distress – Double Distress. (A locality with an unemployment rate above the average statewide unemployment rate and with a poverty rate above the statewide average poverty rate.)

To become eligible for a waiver under the exceptional economic opportunity criteria, applicants may select of more of the following:

- 1. The application demonstrates strong alignment with primary GO Virginia program goals.
  - Regional Collaboration Majority of the match being contributed is local match (cash or in-kind).
  - Industry Cluster Engagement Majority of match contributions for this effort are being contributed by industry partners.
  - Job Growth Accelerator This project will increase employment in the targeted industry cluster by at least 10% over a base (see most recent G&D plan for baseline numbers).
  - Transformational Economic Diversification This project will lead to growth in a new or emerging industry cluster with the potential to significantly diversify the regional



economy.

2. This application aligns with the Commonwealth's InnoVAtive Framework for Economic Development and will support the expansion of the knowledge sector, manufacturing, or logistics industry.

This application will enable the subgrantee to leverage this award to pursue a nonstate funding opportunity in an amount at least two times the amount of this grant request. This award decision on the nonstate funding opportunity must be made within 12 months of the State Board approving the project.

#### III. Local Match Waiver

Projects requesting a full or partial waiver of the local match required for an implementation project should demonstrate that localities are unable to provide the required contribution, either through the majority of localities being categorized as having "high" or "above average" levels of fiscal stress in the Commission on Local Government's <u>Fiscal Stress Index</u>, or a demonstration of effort to solicit support from the participating localities and supporting letters explaining why they are unable to support the project.

#### IV. Process

GO Virginia Regional Councils must submit any match waiver request(s) on behalf of the applicant when submitting the application. The match waiver request form(s) must be submitted as part of the application package and final determination will be made by the GO Virginia State Board.

DHCD is unable to administratively approve applications which include a match waiver request. All waiver requests must be reviewed and approved by the GO Virginia State Board.



#### **Total Match Waiver Request**

{Date}

Attn: GO Virginia State Board

The GO Virginia Region {number} Council is requesting a state board waiver of the total match requirement on behalf of {subgrantee} for {project name}. This project is performed on behalf of the following participating localities {list here}.

We are requesting a waiver in the amount of {\$amount} under the following conditions (please check all that apply) and are submitting a project budget aligned with our request. This project represents **fiscal distress and/or exceptional economic opportunity** under one or more of the following criteria (please select all that apply):

$\sqcup$ At least 50% of the participating localities meet the Virginia Economic Development Partnership's	
definition for Economic Distress – Double Distress. (A locality with an unemployment rate above the	
average statewide unemployment rate and with a poverty rate above the statewide average poverty	
rate.)	

☐ This application demonstrates strong alignment with primary GO Virginia program goals check all that apply).

- a. Regional Collaboration Majority of the match being contributed is local match (cash or in-kind).
- b. Industry Cluster Engagement Majority of match contributions for this effort are being contributed by industry partners.
- c. Job Growth Accelerator This project will increase employment in the {industry cluster name as stated in the regional G&D Plan} by at least 10% over a base (see most recent G&D plan for baseline numbers).
- d. Transformational Economic Diversification This project will lead to growth in a new or emerging industry cluster {industry cluster name as stated in the regional G&D Plan} with the potential to significantly diversify the regional economy.

☐ This application aligns with the Commonwealth's InnoVAtive Framework for Economic Development and will support the expansion of the knowledge sector, manufacturing, or logistics industry.
☐ This application will enable the subgrantee to leverage this award to pursue a nonstate funding opportunity in an amount at least two times the amount of this grant request. This award decision on
the nonstate funding opportunity must be made within 12 months of the State Board approving the project.

Please briefly describe the non-state source and timing of that funding decision.

{Regional Council Chair Signature}



{Date}
Attn: GO Virginia State Board
The GO Virginia Region {number} Council is requesting a state board waiver of the local match requirement on behalf of {subgrantee} for {project name} This project is being performed by the subgrantee on behalf of the following participating localities: {list here}.
We are requesting a local match waiver in the amount of {\$amount} under the following conditions (please check one) and are submitting a project budget aligned with our request.
$\square$ 50% or more of the participating localities have fiscal stress rated as High or Above Average as measured by the Fiscal Stress Index published by the Commission on Local Government and are unable to support this project.
OR
$\Box$ 50% or more of the participating localities do NOT meet the above criteria for fiscal stress, however, the applicant has attempted to solicit the local contribution and they are unable to provide it.
Please describe why the participating localities have been unable to provide the local contribution as wel as a letter of support from each describing how they will meaningfully participate in the project.
{Regional Council Chair Signature}