



VIRGINIA INITIATIVE FOR  
**GROWTH &  
OPPORTUNITY**  
IN EACH REGION

*GO Virginia Region 2*

## **GO Virginia Region 2 Executive Committee Meeting**

July 16, 2025, 1:00 pm-3:00 pm

[Virtual Meeting Link](#)

- |       |  |                 |
|-------|--|-----------------|
| I.    | Opening (1:00-1:05)  | Chairman Amos   |
|       | a. Roll Call   |                 |
| II.   | Financial Report (1:05-1:10)   | Alyssa McKenny  |
| III.  | Project Proposals (1:10-2:00)  | Jemma Sabokrouh |
|       | a. Virginia Tech Corporate Research Center Regional Initiatives for Startups and Entrepreneurship in the New River and Roanoke Valleys |                 |
|       | b. Lynchburg Regional Business Alliance Regional Talent Portal   |                 |
|       | c. Virginia Tech Transportation Institute Workforce Pathways Plan for ACE Technology in Region 2                                       |                 |
| IV.   | Quarterly Project Reporting (2:00-2:05)  | Emmalee Wagner  |
| V.    | Project Pipeline (2:05-2:10)   | Jemma Sabokrouh |
| VI.   | Project VITAL Update (2:10-2:15)   | Erin Burcham    |
| VII.  | Growth & Diversification Plan Update      (2:15-2:30)  | Sarah Lyon-Hill |
| VIII. | Program Updates (2:30-2:40)  | Jemma Sabokrouh |
|       | a. Planning grant allocation   |                 |
|       | b. State of the Region Event   |                 |
| IX.   | Council Business (2:40-3:00)   | Chairman Amos   |
|       | a. Council Bylaws  |                 |
|       | b. Council Membership  |                 |
|       | c. Minutes   |                 |

The meeting will adjourn at 3:00p.m.

Public comment is welcome in writing. Please submit to Emmalee Wagner, [emmaleewagner@vt.edu](mailto:emmaleewagner@vt.edu), by 7/14 at 1:00p.m.

## Region 2 Allocations

Updated 7/7/2025

### FY25 Per Capita Projects

FY25 Allocation	<b>\$1,515,210.00</b>
Transfer from FY23/24 Capacity Building Contingency	\$166,021.42
GMP CLEAN	-\$100,000.00
Artificial Intelligence State Landscape Assessment	-\$50,000.00
Region 2 GO TEC Launch in the New River Valley and Roanoke County	-\$994,213.00
<b>FY25 Remaining Balance</b>	<b>\$537,018.42</b>

### FY26 Per Capita Projects

FY26 Allocation	<b>\$1,506,951.00</b>
<b>FY25/FY26 Remaining Balance</b>	<b>\$2,043,969.42</b>

### Applications Pending Approval (Per Capita)

New River Valley Regional Commission, Site Advancement Strategy	-\$94,400.00	<i>planning - pending approval</i>
United Way of Central Virginia, Childcare & Workforce Development, Lynchburg Region	-\$101,000.52	<i>planning - pending approval</i>
Vector Space, Robotics Facility Planning, Lynchburg Region	-\$97,200.00	<i>planning - pending approval</i>

### Applications Under Consideration (Per Capita)

Virginia Tech Transportation Institute Workforce Pathways Plan for ACE Technology in Region 2	-\$100,000.00	<i>planning</i>
Lynchburg Regional Business Alliance Regional Talent Portal	-\$99,999.00	
Virginia Tech Corporate Research Center Regional Initiative for Startups and Entrepreneurship in the New River and Roanoke Valleys	-\$648,000.00	
<b>Total</b>	<b>-\$1,140,599.52</b>	
<b>Balance if All Per Capita Applications Approved</b>	<b>\$903,369.90</b>	

### FY25 Planning Cap **\$250,000.00**

<i>Planning projects approved</i>	\$150,000.00
<i>Percentage of planning cap</i>	60%
<i>Planning funds remaining</i>	\$100,000.00

### FY26 Planning Cap **\$250,000.00**

<i>Planning projects approved</i>	\$0.00
<i>Percentage of planning cap</i>	0%
<i>Planning funds remaining</i>	\$250,000.00

### FY 25 Capacity Building (Support)

FY25 Allocation	<b>\$250,000.00</b>
FY25 Drawdown	<b>-\$229,098.78</b>
<b>Current Balance</b>	<b>\$20,901.22</b>

### FY 26 Capacity Building (Support)

FY26 Allocation	<b>\$250,000.00</b>
FY26 Drawdown	<b>\$0.00</b>
<b>Current Balance</b>	<b>\$250,000.00</b>

Project Name	Funding Type & FY	Start Date	End Date	GOVA Funding Approved	GOVA Drawn Down to date	GOVA Funds Remaining	Match Funding	Match Reported to Date	Match Funds Remaining	Notes
CS/ Root	Per Capital (FY22)	10/1/2022	3/30/2025	\$175,000.00	\$150,287.55	\$24,712.45	\$175,000.00	\$155,225.88	\$19,774.12	<i>Fiscal closeout in process</i>
Center for Entrepreneurship	Per Capita (FY22)	3/14/2023	3/14/2026	\$240,192.00	\$64,224.89	\$175,967.11	\$120,096.00	\$52,481.28	\$67,614.72	
Bedford Metal Workforce Training Center	Per Capita (FY22)	8/1/2023	6/30/2025	\$99,900.00	\$13,969.30	\$85,930.70	\$201,000.00	\$420,588.50	\$0.00	
Industry 4.0 for the ACE Workforce	Per Capita (FY23)	3/1/2023	12/31/2025	\$500,000.00	\$172,054.64	\$327,945.36	\$251,300.00	\$204,009.68	\$47,290.32	
Lynchburg Beacon of Hope Career Acceleration Program	Per Capita (FY23)	8/1/2023	3/1/2026	\$540,000.00	\$295,798.39	\$244,201.61	\$352,200.00	\$136,775.37	\$215,424.63	
Falling Branch Corporate Park Regional Site Development	Per Capita (FY23)	7/1/2023	6/30/2026	\$324,000.00	\$262,897.92	\$61,102.08	\$2,810,765.60	\$824,000.12	\$ 1,986,765.48	<i>Contract extension executed extending the project end date to 6/30/2026</i>
Strengthening Entrepreneurs' Impact	Per Capita (FY23)	12/1/2023	12/1/2025	\$577,800.00	\$289,272.53	\$288,527.47	\$288,900.00	\$205,730.94	\$ 83,169.06	
ACA Classical & CTE Academy Welding	Per Capita (FY24)	7/1/2024	7/1/2026	\$565,000.00	\$170,837.55	\$394,162.45	\$538,335.85	\$133,361.32	\$ 404,974.53	
Developing IT & Cybersecurity Certification Pipeline (ITCCP)	Per Capita (FY24)	7/1/2024	7/1/2026	\$202,872.00	\$26,655.97	\$176,216.03	\$116,863.00	\$24,264.95	\$92,598.05	
Randolph College Engineering	Per Capita (FY24)	7/1/2024	7/1/2026	\$367,000.00	\$28,483.86	\$338,516.14	\$379,784.00	\$132,199.94	\$247,584.06	
Project VITAL	Per Capita (FY24) & Statewide Competitive	1/1/2025	1/1/2028	\$4,987,029.00	\$178,442.78	\$4,808,586.22	\$2,517,443.16	\$149,429.60	\$2,368,013.56	
GMP CLEAN	Per Capita (FY25)	10/1/2024	10/1/2025	\$100,000.00	\$0.00	\$100,000.00	\$50,000.00	\$0.00	\$50,000.00	
GOTEC Launch in the New River Valley and Roanoke County	Per Capita (FY25)	7/1/2025	7/1/2027	\$994,213.00	\$0.00	\$994,213.00	\$518,956.00	\$0.00	\$518,956.00	<i>Contracting in process</i>

<b>Project Status Summary</b>									
Project Type & FY	GOVA Funding Approved	GOVA Drawn Down to date	GOVA Funds Remaining	Match Funding	Match Drawn Down	Match Funds Remaining	Admin Fee	Admin Fee Draw Down	Admin Fee Remaining
Per Capita FY18 Projects:	\$1,115,382.03	\$1,086,718.14	\$0.00	\$3,252,380.71	\$2,901,110.76	\$353,216.13			
Per Capita FY19 Projects:	\$1,197,486.00	\$1,058,036.14	\$0.00	\$1,732,722.00	\$1,597,744.44	\$148,098.04			
Per Capita FY20 Projects:	\$1,782,567.00	\$1,622,794.44	\$0.00	\$1,272,290.00	\$1,171,367.18	\$141,145.26	\$27,162.00	\$27,162.00	\$0.00
ERR FY20 Projects:	\$1,110,700.00	\$1,109,141.94	\$0.00	\$566,610.00	\$570,743.57	\$0.00	\$23,598.00	\$23,598.00	\$0.00
Per Capita FY21 Projects:	\$844,157.00	\$794,295.95	\$0.00	\$695,042.00	\$669,979.51	\$25,062.49	\$62,530.00	\$58,836.99	\$3,693.01
Per Capita FY22 Projects:	\$1,442,743.00	\$1,123,409.47	\$319,333.52	\$1,080,813.00	\$1,105,984.97	\$195,296.20	\$105,369.00	\$81,711.68	\$23,657.32
Per Capita FY23 Projects:	\$2,108,467.00	\$1,186,690.48	\$921,776.52	\$3,799,832.37	\$1,465,680.13	\$2,334,152.24	\$156,182.00	\$87,902.27	\$68,279.73
Per Capita FY24 Projects:	\$1,274,231.00	\$447,452.39	\$826,778.61	\$954,934.00	\$397,652.76	\$557,281.24	\$92,350.19	\$32,515.86	\$59,834.33
TPI FY24 Projects:	\$250,000.00	\$196,940.02	\$53,059.98	\$125,029.00	\$106,346.28	\$18,682.72	\$20,000.00	\$14,588.15	\$5,411.85
Statewide Competitive Projects FY24:	\$4,987,029.00	\$178,442.78	\$4,808,586.22	\$2,517,443.16	\$149,429.60	\$2,368,013.56	\$121,634.85	\$4,220.91	\$117,413.94
Per Capita FY25 Projects:	\$1,144,213.00	\$0.00	\$1,144,213.00	\$568,956.00	\$0.00	\$568,956.00	\$63,683.00	\$0.00	\$63,683.00
<b>TOTAL:</b>	<b>\$17,256,975.03</b>	<b>\$8,803,921.75</b>	<b>\$8,073,747.85</b>	<b>\$16,566,052.24</b>	<b>\$10,136,039.20</b>	<b>\$6,140,947.88</b>	<b>\$672,509.04</b>	<b>\$330,535.86</b>	<b>\$341,973.18</b>

## GO Virginia Region 2 Project Brief

### VTCRC Regional Initiative for Startups & Entrepreneurship in the New River and Roanoke Valleys

**Application Type:** Implementation

**Applicant:** Virginia Tech Corporate Research Center

**Participating Localities:** Botetourt County, City of Roanoke, Pulaski County

**Investment Strategy:** Start-up Ecosystem

**Targeted Industry Cluster(s):** Materials & Machinery Manufacturing, Manufacturing for Transportation & Autonomous Systems, and IT, Engineering Services & Emerging Technology

GO Virginia Requirements	
\$2:1 Match	Yes
Region 2 Priority Industry Cluster	Yes
Alignment with G&D Plan	Yes
Line of Sight to Implementation (Planning only)	--
Locality Participation/Match	Partial*

\*Local match waiver requested

#### Goals:

Strengthen the region's innovation ecosystem and provide critical resources to early-stage companies

#### Activities:

1. Provide a space for aspiring founders to work, collaborate, and connect and gain access to expert guidance and advanced technology
2. Deploy technical assistance and commercialization funds two times per year
3. Deliver annual workshops and facilitated training programming with multiple modules throughout the year
4. Host annual pitch events and quarterly networking events

#### Outcomes:

35 jobs created	40 businesses served
10 businesses created	10 patents awarded
40 mentors providing business assistance	20 patents filed

Budget	
GO Virginia Request	\$648,000
<i>Local Match</i>	<b>\$30,000*</b>
Total Matching Funds	\$430,000
Additional Leverage	\$2,300,000
<b>Total Project Budget</b>	<b>\$3,378,000</b>

### **Application Review Summary:**

*This project proposal was reviewed by Shannon Holland, GO Virginia Region 9; Debbie Irwin, Lighthouse Network; William Amos, GO Virginia Region 2 Council*

### **Reviewer Feedback:**

- Proposal is well-aligned with the Region 2 Growth & Diversification Plan and leverages the strong research, commercialization, and infrastructure capabilities of Virginia Tech and the VTCRC
- A local match waiver is requested. The applicant has \$30,000 in local match commitment but would need a total of \$64,800 in local match to meet the 20% requirement.
- Documentation demonstrating ecosystem collaboration is incomplete. One reviewer noted, “While Project RISE cites multiple partners and stakeholder groups, its collaboration model appears to be transactional, institutionally bounded, and top-down rather than network-driven, inclusive, or co-created.” Documented commitment from RBIA to participate, on the steering committee, for example, would support a more collaborative model which GOVA and VIPC have supported.
  - Reviewers noted that increasing the number and diversity in connections and partnerships would significantly strengthen the project. Some of their suggestions include: regional community colleges, existing companies representing target industries, additional localities across Region 2, regional workforce development boards, state programs such as Virginia’s Innovation Partnership Corporation and FastForward, SBDCs, and regional venture capital firms.
- The project is heavily centered around Virginia Tech. How will RISE attract and support non-university affiliated entrepreneurs? One reviewer commented that “A heavy dependence on the university research pipeline may limit innovation diversity and overlook other sources of entrepreneurial opportunity.”
- The project addresses a genuine, critical gap in the regional innovation ecosystem with a comprehensive approach and clear, measurable outcomes.
- It is unclear who will oversee Project RISE and be responsible for coordinating project activities, progress monitoring, data tracking, and reporting.

- Who will determine the eligibility criteria to use the ERC space and services at no or reduced cost?
- Budget requires clarification to determine eligibility for uses of funds.

## GO Virginia Region 2 Project Brief

### Lynchburg Regional Business Alliance Regional Talent Portal

**Application Type:** Implementation

**Applicant:** Lynchburg Regional Business Alliance

**Participating Localities:** City of Lynchburg, Campbell County

**Investment Strategy:** Workforce Development

**Targeted Industry Cluster(s):** Materials & Machinery Manufacturing

Requirements	
\$2:1 Match	Yes
Region 2 Priority Industry Cluster	Yes
Alignment with G&D Plan	Yes
Line of Sight to Implementation (Planning only)	--
Locality Participation/Match	Yes

#### Goals:

1. Bring awareness and access to individuals seeking regional education/training providers, services, employment opportunities, career pathways, and other resources that are available but may be challenging to navigate.
2. Support employers in accessing workforce solutions for talent attraction, retention, and upskilling.
3. Attract talent from outside of the region with customized toolkits which highlight Greater Lynchburg's quality of life, cost of living, employment opportunities, and trailing spouse support.

#### Activities:

1. Convene and collaborate with key stakeholder groups including the Regional Economic Development Team and Workforce Target Advisory Group to collect and compile assets and develop content.
2. Enhance and expand key regional workforce initiatives: Educator Workforce Academy, Worlds of Opportunity Career Exploration, Young Professionals of Central Virginia
3. Conduct feedback sessions with educators, employers and workforce partners to refine functionality of the portal.



4. Development and launch of SayYestoLYHRegion.org, a digital talent hub designed to attract, develop, and retain talent in the Greater Lynchburg Region.

**Outcomes:**

- Launch of SayYestoLYHRegion.org
- 50 job placements
- 20 businesses served

Budget	
GO Virginia Request	\$99,999
<i>Local Match</i>	\$14,390
Total Matching Funds	\$50,000
Additional Leverage	-
<b>Total Project Budget</b>	<b>\$149,999</b>

**Application Review Summary:**

*This project proposal was reviewed by Helen Cauthen and Katie Dulaney, Central Virginia Partnership for Economic Development; Doug Agner, GO Virginia Region 2 Council; Jemma Sabokrouh and Emmalee Wagner, GO Virginia Region 2 staff*

**Reviewer Feedback:**

- High engagement from manufacturing and nuclear/energy sectors
- The proposal is modeled after another successful GO Virginia Region 2 project, Regional Talent Strategy, which met similar goals in the Roanoke-Alleghany subregion.
- The proposal aims to accomplish a lot in one website. Maintaining updated information and meeting all the needs and objectives of the proposal will require significant dedicated time/resources
- High levels of collaboration and key partnerships are a noted strength
- While the proposal is clear about providing connections to career development, training, and upskilling opportunities, it is unclear to what extent the portal will offer job posting services and/or active listings
- Alignment with the Region 2 Growth & Diversification Plan and Region 2 Talent Pathways Initiative Report are strong

## GO Virginia Region 2 Project Brief

### VTTI Workforce Pathways Plan for ACE Technology in Region 2

**Application Type:** Planning

**Applicant:** Virginia Tech Transportation Institute

**Participating Localities:** Pulaski County, Roanoke County, Montgomery County

**Investment Strategy:** Workforce Development

**Targeted Industry Cluster(s):** Manufacturing for Transportation & Autonomous Systems

Requirements	
\$2:1 Match	Yes
Region 2 Priority Industry Cluster	Yes
Alignment with G&D Plan	Yes
Line of Sight to Implementation (Planning only)	Unclear
Locality Participation/Match	Yes

#### Goals:

Identify regional needs for upskilling the current workforce with technical credentials for electric vehicle and automated vehicle (EV/AV) manufacturing and related jobs

#### Activities:

1. Develop a core competency model by reviewing applicable literature and EV/AV workforce programs to identify current and future skill needs, job families, and relevant credentials.
2. Interview subject matter experts about current workforce challenges, gaps, and future needs.
3. Identify regional gaps and opportunities to scale up EV and AV jobs and create a lattice of stackable credentials that maps career progress to mid-level jobs and lateral movement for high-wage positions with skills overlap

#### Outcomes:

**D2D Workforce Pathways Program for ACE Technologies** – a strategic plan for a regional technical training implementation program to retain, attract, and train workers to meet the needs of advancing ACE (Automated-Connected-Electrified) technologies

Budget	
GO Virginia Request	\$100,000
Local Match	\$5,065
Total Matching Funds	\$57,369
Additional Leverage	--
Total Project Budget	<b>\$157,369</b>

### **Application Review Summary:**

*This project proposal was reviewed by Randall Rose, Community Economic Development at UVA Wise; Nancy Grden, GO Virginia Region 5; Paul Denham, GO Virginia Region 2 Council*

### **Reviewer Feedback:**

- This proposal integrates multiple areas of priority; Advanced Material Manufacturing, IT Engineering services & Emerging Technology as well as Manufacturing for Transportation, Energy & Autonomy.
- There is strong support from the NRV and Roanoke subregions. This includes non-profit and Industry partners showing strong support with both in-kind and real matching dollars.
- One reviewer suggested including partnership with community colleges in the gap analysis and planning of the project.
- The line of site to implementation is unclear. What organization will implement the workforce development program? Is VTTI an appropriate organization to manage an educational facility/program?
- Suggest the applicant meets with the Industry ACE 4.0 project team to discuss barriers that have arisen and prepare and plan accordingly.
- What considerations have been made in the planning of this project in light of industry layoffs that have recently occurred?

# GO Virginia Region 2 Quarterly Report

Period: April - June 2025

## Program to Date Metrics

Total Projects Funded	Totals Funds Allocated	Jobs Created	Matching Funds Allocated
54 (41 Projects Completed)	\$17,397,100	892	\$18,938,130

### Stoplight Report Project Status Key

Project completed quarterly milestone(s) and is on track to complete outcomes by contracted end date.
Project did not complete one or more quarterly milestone(s) but has a plan in place to complete outcomes by contracted end date.
Project did not complete one or more quarterly milestone(s) and a plan for completing outcomes by contracted end date is not in place

Project Status, Details, GOVA Funds	Total Metrics Achieved (Committed)	Q2 Reporting from Staff
<b>Industry 4.0 for the Automated-Connected- Electrified (ACE) Workforce</b> Workforce Development <i>Implementation</i> 2/28/23-12/31/25* \$500,000	23 Businesses Served (35) 55 Students Trained (530)	1/3 milestones met. Project is not on track to meet committed metrics. Subgrantee continues to make efforts toward meeting project goals and collecting participation metrics from industry but lack of engagement and participation continues to be a barrier to achieving targeted milestones. <b>Staff is meeting with project lead 7/24.</b>
<b>ACA Classical &amp; CTE Institute</b> Workforce Development <i>Implementation</i> 6/30/24-6/30/26 \$565,000	0 Student Trained (54) 0 Credentials Awarded (70)	1/2 milestones met; project is about 6 months behind due to space leasing arrangements that inhibited milestone completion. Issues have since been resolved and no barriers exist at this time. The project is on track to begin classes in August. Subgrantee plans to request a contract extension.
<b>Center for Entrepreneurship</b> Startup Ecosystem <i>Implementation</i> 3/14/23-3/14/26* \$240,192	5 jobs created (42) 40 businesses served (20) \$0 capital raised (\$400k)	1/6 milestone met, primarily due to staffing issues and delay in physical space being ready.
<b>Falling Branch Corporate Park</b> Site Development <i>Implementation</i> 7/1/23-6/30/26* \$324,000	0 acres elevated from Tier 4 to Tier 5 on VBRSP scale (35) 0 feet of sewer line constructed (1,004) 2,800 feet of waterline constructed (2,800)	1/4 milestone met; May 2025 was a wet month which caused delays in construction. The road is rough graded. The sewer pump station is in design review. Main Street Builders (MSB) continues to grade the 20 acre site. Water line is complete and in testing. <b>DHCD approved no-cost extension for project in June, 2025.</b>
<b>Project VITAL</b> Cluster Scale Up <i>Statewide Competitive</i> 1/01/25-1/01/28 \$4,987,029	0 Employees Upskilled (42) 6 Jobs Created/Filled (406) 33 Businesses Served (100) 6 Entrepreneurs Engaged (55) 5 Mentors Engaged (15) \$5.4 Capital Raised (\$50M)	10/22 milestones met; delay in hiring Director of Operations for the Center of Human Factors (HF) Lab at Carilion Clinic has resulted in the delay of several additional project milestones. If hiring process is still delayed, Director of Business Strategy will complete these milestones. This quarter focused on planning, mentorship, and infrastructure development across partners. RBIA advanced programming for the legal coaching, the FBRI Speaker Series, and led bootcamp activities while supporting fellows and startups through commercialization. Carilion Clinic Innovations refined their regulatory strategies with consultant support, while HF worked through hiring and space planning. VWCC engaged in student-focused planning efforts, and VT LLL expanded proof-of-concept funding, mentorship, and cross-institutional collaboration to strengthen commercialization pathways.

Project Status, Details, GOVA Funds	Total Metrics Achieved (Committed)	Q2 Update from Subgrantee
<b>Bedford Metal Workforce Retention Center</b> Workforce Development <i>Planning</i> 7/31/2023-6/30/25* \$99,900	NA	The final Feasibility Plan, order of magnitude estimate, project summary sheet, and launch communications have been received. The Plan shows areas of use for various aspects of programming and space usage. Exterior renderings are included that would visually articulate the Metal Center. The Town EDA has a Plan to provide to potential partners for developing the Bedford Metal Workforce Training Center.
<b>Developing IT and Cybersecurity Certification Pipeline</b> Workforce Development <i>Implementation</i> 7/01/24 - 7/01/26 \$202,872	43 Credentials Awarded (104) 4 Businesses Served (15)	Spring Connector event was held in April. Additional outreach was conducted in the quarter. A joint meeting of all stakeholders was held.
<b>Educating Engineers for the Region 2 Workforce</b> Workforce Development <i>Implementation</i> 7/01/24 - 7/01/26 \$367,000	0 Students Trained (40) 20 Internships Created (40)	Our focus this quarter has been on finalizing some major equipment purchase, having equipment installed, and getting the machine shop and research lab into a good working order for student training. We have six students working in the labs this summer. Another major focus has been assessment, since we all went to the ABET assessment conference and are starting the three-year process toward assessment.
<b>GMP Clean</b> Cluster Scale Up <i>Planning</i> 10/01/24-10/01/25 \$100,000	2 Businesses Served (3)	"Procurement has been our major focus- we have acquired the cleanroom and 3 of the 4 major pieces of equipment. Much of the work has been in working with VT on sourcing and procurement of equipment. We have completed all other milestones."
<b>Lynchburg Career Accelerator</b> Workforce Development <i>Implementation</i> 7/31/23-3/01/2026* \$540,000	259 internships completed (112) 90 certificates awarded (44) 59 businesses served (24)	We focused on workforce development for opportunity youth and 18+ populations, continuing targeted internship programming for over 70 students and career readiness training in a variety of industries, including manufacturing and machining. Additional milestones include 100% completion of the Women in Machining cohort, 42 college graduates supported through additional credential or degrees and job placement, and groundwork laid for targeted 2Gen outreach and employer engagement in GOVA Region 2 industries.
<b>Strengthening Entrepreneurs Impact</b> Start Up Ecosystem <i>Implementation</i> 12/01/23-8/30/26* \$577,800	72 jobs created/filled (70) 24 existing businesses expanded (35) 3 new businesses created (8) 56 businesses served (58) 101 entrepreneurs engaged (58) 57 mentors engaged (50)	Through On RAMP, six entrepreneurs engaged and served by the Innovation Studio Director through ENP consultations (six early-stage coaching hours). An ESO task force of region 2 accelerator program partners (RAMP, CCI, and FBRI) met in May to share entrepreneurial resources and startup referrals, who need additional ecosystem assistance and resources. RAMP hosted its second 2025 virtual Pitch & Polish session on April 29th for two startups and a successful On RAMP cohort in the month of April for four groups of entrepreneurs. For Exit RAMP, a Core Legal Concepts Workshop and follow-up 1:1 training sessions was provided for six RAMP alumni. GOVA funds supported the purchase of 31 tickets for RAMP alumni to attend TechNite (5/29), and RAMP's Demo Day (6/5).
Q2 Closed Project Details, GOVA Funds	Final Outcomes	Closeout Reporting from Subgrantee
<b>CS/root</b> Start Up Ecosystem <i>Implementation</i> 10/01/22-3/30/25* \$350,000	8 jobs created/filled 5 new businesses created 325 entrepreneurs engaged 18 mentors engaged	CS/root provided computer science-focused startups with the resources and support to found innovative companies, resulting in five new businesses. The VT Department of Computer Science has exciting momentum encouraging students and community members to consider founding tech companies. Department secured \$67,500 in philanthropic gifts to sustain operations beyond the grant.
<b>NRV Materials &amp; Machinery Cluster Scale-Up</b> <i>Planning</i> 10/19/23-2/19/25* \$98,859	Supported recently awarded GOTECH Launch in Region 2 grant application; 10-year Roadmap for Support Materials and Machinery Scale-Up in the NRV.	The project team has produced one 10-year Roadmap for Support Materials and Machinery Scale-Up in the NRV, has identified more than 10 implementation projects, and has developed a stronger, more capable coalition of 20+ partners through four work sessions and 20+ one-on-one meetings.
<b>Manufacturing Workforce Strategy Development for the Lynchburg Region</b> <i>Planning</i> 3/01/24-3/01/25 \$40,500	Educator Workforce Academy (successful pilot year) and Hickey Global Nuclear Technology & Workforce Analysis (skills gap analysis and student assessment, with input from Framatome, Delta Star, and BWXT).	Our project strengthened connections between education and industry to support workforce development in the Lynchburg region and reiterated the importance of these connections to develop our future workforce. Through the Educator Workforce Academy and the Hickey Global Nuclear Technology & Workforce Analysis, we facilitated collaboration between educators and employers, providing valuable insights and actionable strategies to better prepare students for local career pathways, and attract and retain talent within the region.



VIRGINIA INITIATIVE FOR  
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*GO Virginia Region 2*

## **GO Virginia Region 2 Executive Committee Meeting Minutes**

**April 16, 2025 1:00p.m.- 3:00p.m.**

**Roanoke Higher Education Center, Room 701A, 108 N Jefferson Street, Roanoke, VA, 24016.**

Executive Committee members in attendance: Eddie Amos (Chair), Paul Denham (Vice-chair), Richmond Vincent

Executive Committee members in virtual attendance: Whitney Czelusniak

Staff in attendance: John Provo, Scott Tate, Sarah Lyon-Hill, Jemma Sabokrouh, Alyssa McKenney, Emmalee Wagner.

Public in attendance: Megan Atkinson, Katie Boswell, Matthew Dunleavy, Leo Priddy, Kim Soerenson, Elise Spontarelli

The meeting convened at 1:00p.m. and adjourned at 2:39p.m.

### ***Financials Review***

Alyssa McKenney reviewed the financial reports included in the board packet. Council has a remaining balance of \$1,489,702 in FY25 per-capita funds. Alyssa then reviewed FY 25 Capacity Building balance (\$187,498). Alyssa also highlighted three GOVA projects are in fiscal closeout process (Regional Talent Strategy, Workforce & Entrepreneurship in a Reg. Makerspace (Vector Space) and Region 2 Talent Pathways Planning Initiative). Two projects have executed contract extensions (Industry 4.0 for the ACE Workforce and Lynchburg Beacon of Hope Career Acceleration Program). Finally, Project VITAL's contract was executed on 1/31/2025.

### ***Project Proposals***

#### ***New River Valley Regional Commission, Site Advancement Strategy***

Scott Tate reviewed the planning project application for the New River Valley localities, submitted in partnership from the New River Valley Planning Commission and Onward New River Valley, requesting \$94,400 in GOVA funding. The project aims to address the shortage of shovel-ready sites, targeting industries such as materials, transportation, autonomy, and manufacturing. Leo Priddy and Katie Boswell, representing the applicants, responded to the executive committee's inquiries. Dr. Eddie Amos asked if the consultant had been selected and if so, the scope of the consultant's work; applicants shared the consultant had not been selected yet. They would like the localities to have a voice in that process. Paul Denham emphasized the importance of industry engagement in this project.

#### ***Vector Space, Robotics Facility Planning, Lynchburg Region***

Scott Tate reviewed the Vector Space Robotics Facility Planning proposal. The project is requesting \$97,200 in GOVA funding. The project intends to explore the need for a robotics education and training facility, primarily for



high school students, in the Lynchburg region. The project's deliverables would include a market analysis, equipment considerations, design plans, revenue sources, and sustainability and budget plans. Elise Spontarelli was available to answer questions from the executive committee. The executive committee asked about the level of engagement there currently is with this program and how much more engagement the program could have. Elise explained there has only been one pilot year for the robotics program in Lynchburg. Increasing engagement and conducting surveys on interest would be a part of the planning grant.

### ***United Way of Central Virginia, Childcare & Workforce Development, Lynchburg Region***

Scott Tate reviewed the planning grant application submitted by United Way of Central Virginia, titled Childcare & Workforce Development, requesting \$99,639 in GOVA funding.

The project aims to develop a regional childcare model and a model for a childcare center, with deliverables including a business plan, employer engagement models, demand analysis, marketing materials, and a resource/funding plan. Kim Soerenson provided details about the proposed childcare center and its operational plans. Executive committee members discussed the feasibility of this project securing GOVA funding if the application does not strongly tie its purpose and outcomes to the GOVA program. Executive committee members emphasized the final application to the GOVA state board should clearly show how the proposed childcare center would intersect with target sector employers.

### ***Region 2 GO TEC Launch in the New River Valley and Roanoke County***

Scott Tate reviewed the implementation grant application titled GO TEC Launch, submitted by Montgomery County Public Schools, requesting \$994,212 in GOVA funding. Megan Atkinson and Matt Dunleavy were available to answer questions.

Eddie Amos asked if there is a strong pathway for the middle school students who would participate in the GO TEC program to high school and college. Megan Atkinson clarified there are aligned CTE courses which each of the GO TEC modules for interested students to pursue. Paul Denham asked if there is industry support for the program in this region. Megan responded that the application has received Letters of Support from major companies in the New River Valley and Roanoke region, but the project team continues to pursue industry engagement. The executive committee suggested the applicant ensures the existing education pathway and industry engagement is strongly highlighted in the final application to the state board.

### ***Approved for Full Council***

The executive committee decided to forward all the projects to the full council. Due to the limited planning funds left for FY25, the executive committee decided to stack rank how they would suggest the full council vote to approve the planning projects. The executive committee took into consideration information from the applications on how a delay in funding would affect the project. Each executive committee member ranked the planning projects in order (in terms of need for funding) from highest priority to lowest priority. The outcome was to suggest to the full council to prioritize sending to the state board in the following order: 1- United Way of Central Virginia, Childcare & Workforce Development, 2- New River Valley Regional Commission, Site Advancement Strategy, 3- Vector Space, Robotics Facility Planning.





Eddi Amos motioned to move the Region 2 GO TEC Launch in the New River Valley and Roanoke County implementation project to the full council; Richmond Vincent seconded. All were in favor and none opposed.

## ***Administrative Updates***

### ***Quarterly Project Reporting***

Jemma Sabokrouh reviewed active project status, noting there is one current project listed in red, meaning they did not meet quarterly milestones, and staff is meeting with the sub-grantee. Due to unforeseen financial circumstances of the building owner, the project has restructured aspects of space and equipment ownership. This has taken priority or stalled work for Q1 2025. The subgrantee is committed to continue with the project and staff are in close communication with the subgrantee.

Three current projects are listed in yellow, meaning they did not meet one or more Quarter 1 2025 milestones and staff is monitoring. ACE workforce received a no-cost extension through December 31<sup>st</sup>, 2025, but is still behind on milestones and students trained metric. The Bedford Metal Workforce Training Center is behind on Quarter 1 2025 milestones, but they plan to complete them next quarter. This project received a no-cost extension through June 30<sup>th</sup>, 2025. The Educating Engineers in the region 2 workforce is also behind on Quarter 1 milestone. GOVA Region 2 staff will set up meeting with all these projects to check-in and support where possible. Lastly, the CS/root project ended March 30<sup>th</sup>, 2025. This project did not complete its last quarter milestones. Staff will discuss final deliverables and reporting.

All other active projects are listed in green, meaning they have met quarterly milestones and are on track with their current deliverables.

### ***Speakers' Bureau***

Emmalee Wagner reviewed previous and upcoming schedule GOVA Region 2 Speakers' Bureau and expressed gratitude to council members who are participating.

### ***G&D Plan 2025 Process***

Sarah Lyon-Hill reviewed the formal Region 2 Growth & Diversification Plan 2025 update, sharing the scheduled employer workgroup roundtables. She also emphasized the importance of the 2025 Impact Survey that will be an important part of the final plan. The final updated plan is due to state staff by October 31, 2025.

### ***AI Statewide Landscape Assessment Update***

John Provo highlighted that the consultant for the AI Statewide Landscape Assessment will be attending a few of the upcoming Virginia Chamber of Commerce AI events. Two events will be held in Region 2: in Roanoke on April 30, 2025, and in Lynchburg on May 7, 2025.





### ***Board Policy #10 Helene Business Recovery Initiative***

John Provo reviewed the GOVA state board policy # 10, Eligible communities, that were in the Governor's declaration and the Supplemental Declaration, impacted by Hurricane Helene. This would include all Region 2 localities in the New River Valley, except for Floyd County. Provo reviewed what ways the emergency funds can be allocated under GOVA policies and shared which NRV organizations Region 2 staff has been talking to that could point to where the businesses need help. June 30<sup>th</sup> is the deadline to submit for funding under Board policy #10.

### ***Minutes***

The committee reviewed minutes from the Region 2 Executive Committee Meeting held on October 10, 2024 and December 5, 2024. Chairman Amos asked if there were any corrections, additions, or questions regarding the minutes; there were none.

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

The meeting adjourned at 2:39 p.m.

# 2025 GROWTH AND DIVERSIFICATION PLAN



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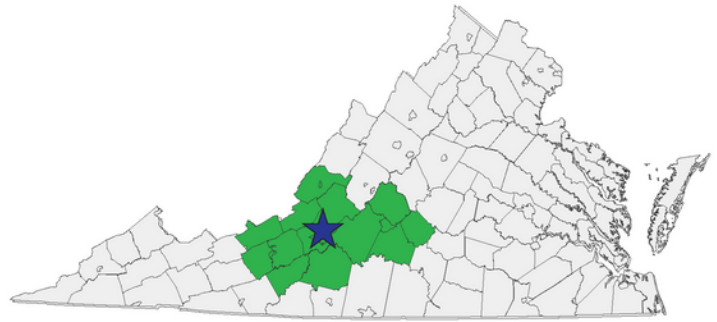
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# INTRODUCTION

Virginia's Initiative for Growth and Opportunity (GO Virginia or GOVA) was created to grow jobs that pay higher than the regional average wage and attract additional investments to stimulate economic growth in the Commonwealth. This requires a focus on industries with high growth potential. The 2025



Growth and Diversification Plan provides a roadmap for using GOVA funding in Region 2, which is comprised of counties, cities, and towns in the New River Valley, Roanoke-Alleghany region, and the Greater Lynchburg Area.

Since its inception in 2017, GO Virginia's Region 2 has invested in projects that support high-growth industries. During this time, the region has experienced the advancement of automated and smart technologies, growing demand for high-skilled and experienced labor, and instances of economic instability. During the COVID-19 Pandemic, this region had layoffs in manufacturing, early retirements, and closures of service businesses that contributed to regional quality of life. With the growth of remote work, commercial buildings saw increased vacancies, regional internet infrastructure expanded, and the region became more attractive to remote workers from urban regions with higher costs of living. Today, the region faces another kind of challenge with cuts to federal spending that have historically supported many of the higher education and healthcare research and development enterprises as well as workforce development in the region. These activities have often served as the backbone to much of the region's private industry growth and prosperity. Regardless, GO Virginia funding generates positive activity. This report reviews that activity to date and proposes strategies to the future.

## Goals of the Growth and Diversification Plan and GO Virginia Region 2

**Fund Local Public and Nonprofit Entities to Support Private Sector Growth**



Region 2 receives **\$1.5 million annually** in state funds to support projects that foster growth in targeted industry clusters. Local government entities, organizations working on their behalf, non profit organizations, and workforce/education institutions may apply for these funds to support initiatives that **cultivate high wage jobs and private investment in these target clusters.**

**Identify and Grow Target Industry Clusters**



Region 2's economic strategy is anchored in four high-potential industry clusters that reflect the region's competitive advantages and growth opportunities:

- 1) Life Sciences and Biotechnology;**
- 2) Manufacturing for Transportation, Energy, & Autonomy;**
- 3) Advanced Materials Manufacturing; and**
- 4) IT, Engineering Services, and Emerging Technology.**

**Grow Clusters through Four Strategic Activity Areas**



GO Virginia strategic investments may include one or more of the following activities that support target cluster growth:

- 1) Site development and infrastructure;**
- 2) Talent development, attraction, and retention;**
- 3) Start-up ecosystem development; and**
- 4) Business scale-up.**



## Region 2 Target Industry Clusters

### Life Sciences & Biotechnology

Region 2's Life Sciences and Biotechnology cluster is rooted in a long history of research, development, and entrepreneurship, focusing on key areas such as disease prevention and treatment, health and aging, veterinary medicine, and plant sciences. The cluster is supported by a strong foundation of higher education research assets such as the Fralin Biomedical Research Institute, providing essential resources, talent, and collaborative opportunities to accelerate scientific discoveries and technological advancements. The growth of this cluster manifests in commercialization of new therapies, enhancement healthcare delivery systems, and manufacturing of new medical devices.

### Manufacturing for Transportation, Energy & Autonomy

Manufacturing for Transportation, Energy & Autonomy focuses on producing components, systems, and technologies for modern mobility, energy solutions, as well as smart and connected manufacturing processes. This includes the design and fabrication of vehicles (larger-scale automotive, aerospace, rail), electric and autonomous transportation systems, machinery manufacturing for nuclear and other energy generation, energy storage, and related infrastructure. Manufacturers in this cluster often have expertise in machining and motor-control systems and tend to produce large-scale capital and consumer goods.

### Advanced Materials Manufacturing

Advanced Materials Manufacturing in GO Virginia Region 2 involves the design, development, and production of high-performance materials used across multiple industries such as aerospace, automotive, defense, and energy. Chemical, packaging, and other material manufacturers develop and process composites, nanomaterials, lightweight metals, and polymers that enhance product strength, durability, and efficiency. With R&D assets such as Virginia Tech's Macromolecules Innovation Institute and a network of manufacturers and technical training programs, Region 2 is positioned to grow a hub for advanced materials innovation and production.

### IT, Engineering Services & Emerging Technology

IT, Engineering Services and Emerging Technology refers to businesses that design and develop machines, materials, instruments, structures, processes, and/or systems to enable businesses to improve performance and stay competitive in a rapidly evolving digital economy. Knowledge services include advanced digital systems, including software engineering, cloud computing, AI, cybersecurity, and data analytics; architectural and engineering service to promote innovative and sustainable infrastructure across industries such as manufacturing and healthcare; and other consulting services that creating tailored solutions to enhance productivity and data-driven decision-making.

## Investment Strategies

#### Site Development & Infrastructure

Supporting the development and growth of sites and infrastructure used to support properties to meet the needs of priority industry clusters.

#### Workforce Development

Addressing the need for talent development, attraction, & retention in higher-than median-wage jobs.

#### Start-up Ecosystem

Promoting access to capital, mentorship, and training programs to support entrepreneurial activity and business development.

#### Cluster Scale-up

Addressing technical and business support to accelerate the promotion and development of innovative clusters.

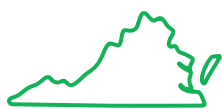
# GO VIRGINIA IMPACTS TO-DATE

as of September 30<sup>th</sup>, 2025

The GO Virginia Region 2 Council, comprised of 29 industry representatives and industry-support partners, oversees one of the most active GO Virginia regions in the Commonwealth. According to the Virginia's Department of Housing and Community Development Dashboard, Region 2 has the second highest number of *completed* projects; however the region is likely to have the highest total number of projects. The data below provides metrics that illustrate the activities, outputs, and outcomes that have contributed to the overall growth of the regional economy in general and Region 2's target clusters specifically. To gauge public opinion of GO Virginia's impacts on Region 2, the GOVA Region 2 Council requested industry, nonprofits, government and other organizations to complete a 5-minute online survey. As part of this assessment and to plan for future GO VA Region 2 funding, the Regional Council also held four 2-hour workshops in locations across Region 2.



**53**  
Funded  
Projects



**\$16.2 M**  
GO Virginia  
Funds granted



**\$17.9M**  
Matching Funds  
contributed



**892**  
Jobs Created  
or Filled



**181**  
Partners  
Engaged

## Workforce Development



**1,881**  
Credentials  
Awarded

**2926**  
People Trained  
or Upskilled



**656**  
Apprenticeships  
or Internships  
Created



**553**  
Students  
Dual Enrolled



**287**  
Acres  
Advanced



**4,370**  
Linear feet of  
Infrastructure  
Constructed



**333**  
Acres  
Impacted



**10**  
Prospective  
Site Visits

## Start-up Ecosystem



**54**  
Businesses  
Created



**642**  
Entrepreneurs  
Served



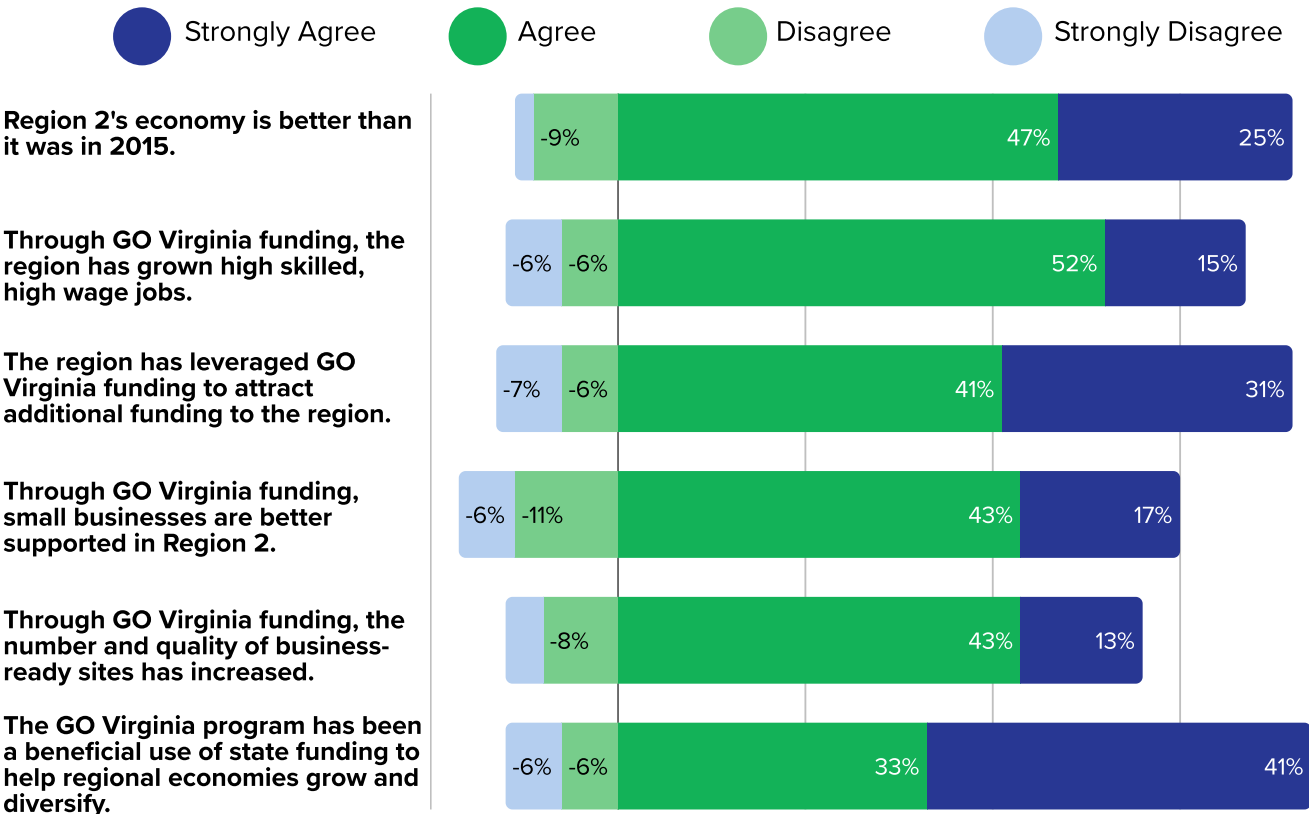
**241**  
Mentors  
Engaged



**\$5.4 M**  
Capital  
Raised

# Is Region 2 Better?

In a survey distributed through the GO Virginia Region 2 listserv, regional economic development organization listservs, other partner listservs, and four GOVA strategy development workshops, 56 organizations provided their input: 35% private businesses, 25% government, 28% nonprofits, and 12% individuals. While many respondents noted that the programming and infrastructure developed through GOVA funding has yet to fully manifest larger impacts on target industry clusters, many agreed that key outcomes include more physical infrastructure for business development and attraction, a more robust workforce pipeline, greater private-public partnerships contributing to economic and workforce development, and a stronger start-up ecosystem.



## Remaining Challenges

Survey respondents and 35 workshop attendees agreed that progress has been made, but additional work and an increase in the sheer volume of resources is needed to accelerate target cluster growth. These regional voices emphasized growing existing businesses through technology adoption, process improvements, workforce training and attraction, and supply-chain and market development; engaging start-ups in more employment growth opportunities; and spreading resources more broadly across Region 2 to more rural counties and beyond existing GOVA grantees.

<div style="background-color: #28a745; color: white; padding: 5px; text-align: center; font-weight: bold;">Life Sciences &amp; Biotech</div> <ol style="list-style-type: none"> <li>1. New start-ups</li> <li>2. New resources to support cluster businesses</li> <li>3. Employment growth</li> </ol>	<div style="background-color: #fd7e14; color: white; padding: 5px; text-align: center; font-weight: bold;">Manufacturing</div> <ol style="list-style-type: none"> <li>1. Growing existing businesses</li> <li>2. Employment growth</li> <li>3. New resources to support cluster businesses</li> </ol>	<div style="background-color: #28a745; color: white; padding: 5px; text-align: center; font-weight: bold;">IT &amp; Engineering Services</div> <ol style="list-style-type: none"> <li>1. New start-ups</li> <li>2. New technology adoption &amp; process innovations</li> <li>3. Employment growth</li> </ol>
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## Since 2015...

### Population

775,500 (2015) → 783,500 (2025)  
1.03%

Region 2's population has seen **minimal growth, concentrated in the 30-40 age group or millennials (+11,000) and 70+ age group or baby boomers (+25,000)**. Virginia and the U.S. have seen growth in similar age groups; however, overall state and national population growth between 2015 and 2025 have been stronger, at 5.19% and 5.40% respectively.

### Cluster Employment

62,005 (2015) → 68,209 (2024)  
10%

Total regional employment has remained relatively stagnant in Region 2 since 2015, with the exception of the New River Valley with an 8% growth rate comparable to the state. Target industry cluster employment, however has experienced **10% growth since 2015**. While this lags behind the state (14%) and nation (15%), this growth **reflects the strength and investments made in these four GOVA Region 2 industry clusters**.

### Unemployment

5.20% (2015) → 3.25% (2024)  
-3.8%

Region 2's unemployment rate is **approaching close to full-employment**. Unemployment may increase if a recession occurs in the coming year, particularly for retail and manufacturing. Already, manufacturers such as Volvo have laid off workers in preparation for a possible economic downturn. Meanwhile, **labor force participation was 60.4% in 2024, lower than Virginia and the U.S.**, possibly due to the **higher proportion of eligible workers with only a high school diploma or lower**. Many of these service workers left the labor force during the COVID-19 Pandemic.

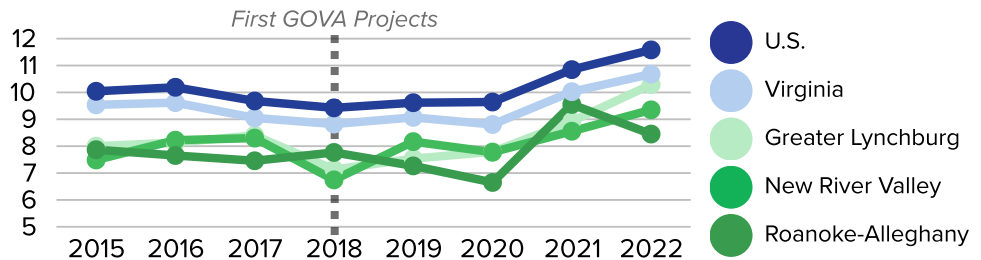
### Average Earnings

\$47,896 (2015) → \$66,360 (2024)  
39%

Region 2's average earnings gradual increases between 2015 and 2019, but saw significant increases after COVID-19. Although, regional trends do align with state and national trends over time, Region 2 did see **faster wage growth after COVID-19 (26.6%) than the state (26.0%) and nation (23.9%)**. Traditionally, the region's earnings are lower than Virginia (\$89,078 in 2024) and the U.S. (\$85,779 in 2024).

### Start-Ups

**Establishment Birth Rates** have increased much faster than the state and U.S. in the New River Valley and Greater Lynchburg Region since 2018.



### Region 2 Sites

Of the 193 industry, commercial, and R&D sites, ## have an "industry-ready" score of 4 or higher. Region 2 has a need for more ready sites and land for megasite development. More site information is in the Appendix.

Sub-Region	Number of Sites	Total Acreage of Sites	Average Acreage per Site
Greater Lynchburg	84	4,526	55
Roanoke-Alleghany	98	4,464	46
New River Valley	11	2,471	224
<b>Total</b>	<b>193</b>	<b>11,461</b>	<b>108</b>

Sources: Lightcast Dataset 2025Q2, lightcast.io; Census Business Dynamics Statistics, bds.explorer.ces.census.gov; Virginia Economic Development Partnership, Site Selection, vedp.org/site-selection.



# TOP 10 CROSS-CLUSTER IN-DEMAND OCCUPATIONS

All four target industry clusters were in need of workers with skills outside the subject matter domain of the four target clusters. These occupations tend to focus on administrative, IT and managerial work. See below...

■ High School to 2 Year Degree
 ■ Bachelor's Degree
 ■ Graduate(s) Degree

Occupation		2015 Jobs in Region	2025 Jobs in Region	Job Change 2015-2025	Average Annual Openings	Position Titles
<span style="color: blue;">■</span>	General and Operations Managers	3,888	6,739	73%	701	Chief Financial Officer, Finance Director
<span style="color: blue;">■</span>	Finance Manager	725	1,163	60%	112	Operations Manager, Business Manager
<span style="color: blue;">■</span>	Human Resources Specialists	1,143	1,918	68%	220	HR Generalist, Talent Acquisition Specialist, Benefits Associate
<span style="color: blue;">■</span>	Accountants and Auditors	2,634	2,972	13%	284	Certified Public Accountant, Internal Auditor, Accounts Associate
<span style="color: blue;">■</span>	Computer Systems Analysts and Information Security Analysts	809	1,411	30%	147	Business Systems Analyst, IT Systems Analyst, Cyber Security Specialist
<span style="color: green;">■</span>	Computer User Support Specialists	1,242	1,298	5%	125	Help Desk Technician, IT Support Specialist
<span style="color: blue;">■</span>	Network and Computer Systems Administrators	851	713	(16%)	56	Network Administrator, Computer Repair
<span style="color: green;">■</span>	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	3,279	2,487	(24%)	285	Territory Sales Representative, Inside Sales Representative
<span style="color: green;">■</span>	First-Line Supervisors of Office and Administrative Support Workers	3,724	3,176	(15%)	379	Office Supervisor, Administrative Team Lead
<span style="color: green;">■</span>	Bookkeeping, Accounting, and Auditing Clerks	4,365	3,623	(17%)	502	Accounts Payable Clerk, Payroll Clerk

Source: Lightcast, Occupation Table, Staffing Patterns, Dataset 2025Q2

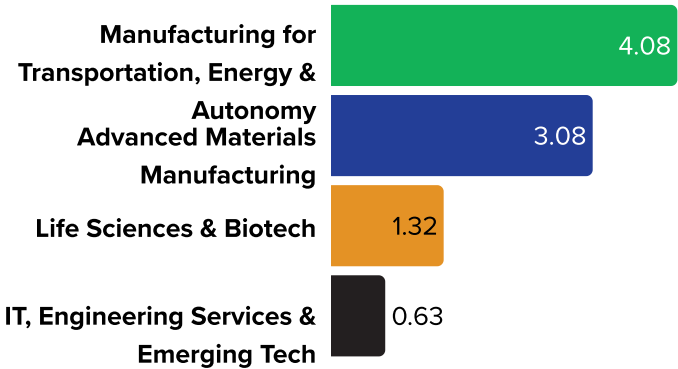
# SUMMARY OF TARGET CLUSTERS

## Average Hourly Wage in GO Virginia Region 2

Cluster	Entire Region	Urban	Rural
All Industries	\$26	\$27	\$24
Advanced Materials Manufacturing	\$37	\$36	\$38
Manufacturing for Transportation, Energy & Autonomy	\$36	\$35	\$38
Life Sciences & Biotechnology	\$32	\$34	\$24
IT, Engineering Services & Emerging Technology	\$42	\$47	\$38

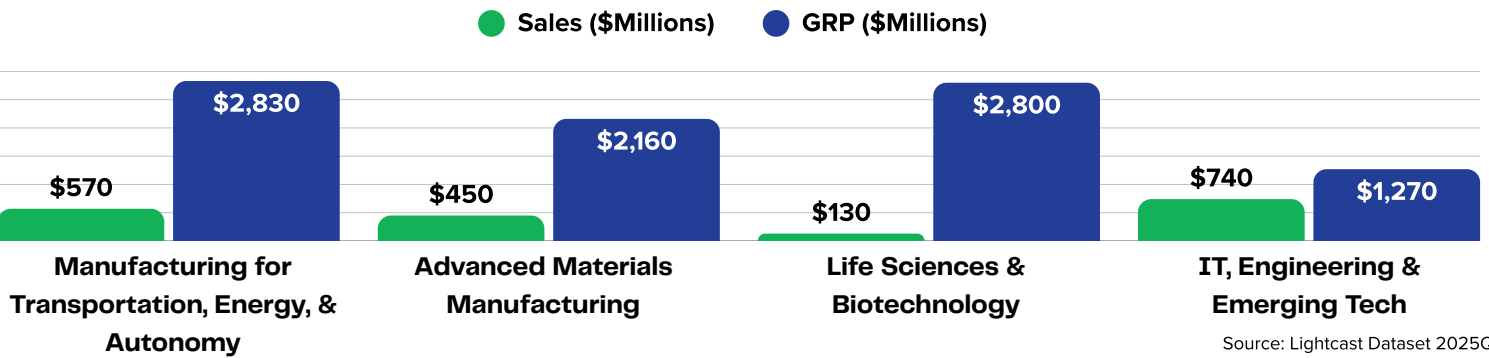
## 2025 Target Cluster Location Quotients

Location Quotient (LQ) measures the workforce concentration in a region compared to the national average. The Manufacturing for Transportation, Energy & Autonomy cluster is a powerhouse in this region, employing roughly four times more workers than the national average. IT, Engineering Services & Emerging Technology is lower than the national average. However, the workforce in this cluster also has similar essential IT and engineering workers in all other clusters across industry sectors, indicating a need for cluster growth if our region is going to have the best workers.



## 2025 Exported Sales by Cluster

The data shows that each industry cluster in GO VA Region 2 contributes significantly to both sales and gross regional product, with some clusters generating high economic output despite lower sales figures. Notably, sectors like life sciences and advanced materials show strong GRP performance relative to their sales, highlighting their strategic economic importance.



Source: Lightcast Dataset 2025Q2

# LIFE SCIENCES & BIOTECHNOLOGY

Region 2’s Life Sciences and Biotechnology cluster is rooted in a long history of research, development, and entrepreneurship, focusing on key areas such as disease prevention and treatment, health and aging, veterinary medicine, and plant sciences. The cluster is supported by a strong foundation of higher education research assets, providing essential resources, talent, and collaborative opportunities to accelerate scientific discoveries and technological advancements. This ecosystem promotes innovation and commercialization of new therapies, enhances healthcare delivery systems, and strengthens the region’s economic development efforts.

### Sub-Cluster Summary

**Research & Development** - Drives discovery and progress in life sciences

- 120 Payroll Businesses

**Manufacturing** - Transforms biotech innovations into tangible products

- 78 Payroll Businesses

**Living Laboratory/Healthcare System** - Provides real-world settings for testing biotech solutions in healthcare.

- 135 Payroll Businesses

biotherapeutics  
1800 Kraft Drive, Suite 100 Blacksburg, VA, 24060

Johnson & Johnson

Abbott

United Therapeutics CORPORATION

Emtech Laboratories, INC

INTUITIVE SURGICAL®

Centorox

Integer®

nanosonics  
Infection Prevention. For Life.

TECHLAB®

CytoRecovery®

AMERICAN BIOSYSTEMS

bacchus therapeutics

OrthoVirginia

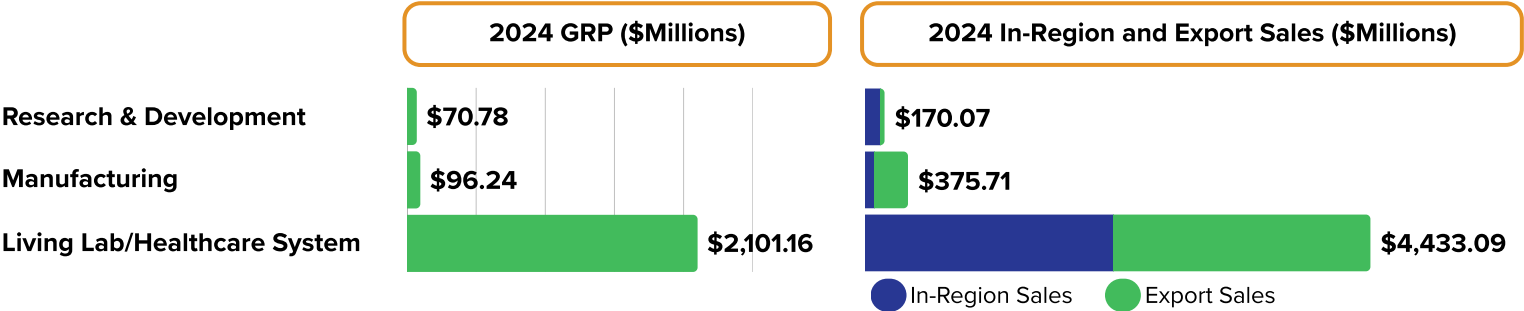
SOLSTAS LAB PARTNERS

CARILION CLINIC RESEARCH AND DEVELOPMENT

Skyphas

Source: Lightcast, Industry Table, Q2, 2025

The cluster has over 27,000 jobs, has seen 11.1% job growth since 2015 (greater than the national average), and has a workforce concentration above the national average (LQ 1.32), all of which indicates regional competitiveness and specialization compared to similar sized U.S. regions. Key industries that drive export sales in this cluster include Pharmaceutical Preparation, Surgical Appliances Manufacturing, Hospitals, Nursing and Continuing Care Facilities. The growth of this cluster relies on an ecosystem of assets including but not limited to the Fralin Biomedical Research Institute at Virginia Tech Carilion, the Roanoke-Blacksburg Innovation Alliance VITAL Program, the Blue Ridge Partnership for Health Careers, and life science education programs like those at Virginia Western Community College. Manufacturing in this cluster has shown job declines in recent years, highlighting a possible opportunity for support and intervention through GO Virginia funding.



Source: Lightcast, Industry Table, Q2, 2025

Subcluster	2017 Jobs	2024 Jobs	Job Change 2017-2024	Projected 2030 Jobs	Projected Job Change 2024-2030
Research & Development	652	737	13%	746	1%
Manufacturing	1,060	975	-8%	995	2%











Living Laboratory Healthcare System	22,615	25,300	12%	27,126	7%
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Source: Lightcast, Industry Table, Q2, 2025

# Top 10 Life Sciences and Biotechnology In-Demand Skilled Occupations

Several of the in-demand occupations in the Life Sciences and Biotechnology Cluster are technicians and technologists that support life science research and healthcare labs. Others include the medical, veterinary, and other science professionals that serve as principle investigators and managers of research and development labs in addition to applied healthcare and veterinary services. In most of these cases, retaining these workers in region is a challenge. Below are the cluster’s top “skilled” occupations with higher than average wages.

 High School to 2 Year Degree     Bachelor's Degree     Graduate Degree(s)

Occupation	2025 Jobs in Region	Job Change 2015-2025	Average Annual Openings	Position Titles
 Clinical Laboratory Technologists	600	2%	92	Laboratory Tech, Medical Tech, Family Medicine Physicians
 Radiologic Technologists	483	37%	60	Radiology Tech, Lead CT Tech, X-Ray Tech
 Medical & Health Services Managers	488	40%	112	Healthcare Admin, Clinical Manager, Nursing Home Director
 Veterinary Technologists	303	72%	44	Veterinary Laboratory Technician, Animal Health Technician, Surgical Veterinary Technician
 Veterinarians	275	7%	22	Small Animal Veterinarian, Veterinary Surgeon, Large Animal Veterinarian
 Phlebotomists	227	(2%)	58	Mobile Phlebotomist, Laboratory Phlebotomy Technician, Phlebotomy Team Lead
 Magnetic Resonance Imaging Technologists	129	(7%)	26	MRI Technologist, MRI Clinical Applications Specialist, Lead MRI Technician
 Medical Scientists, Except Epidemiologists	114	207%	33	Clinical Research Scientist, Biomedical Scientist, Pharmaceutical Researcher
 Medical Equipment Repairers	65	49%	21	Biomedical Equipment Technician, Field Service Engineer (Medical Devices), Medical Instrumentation Technician
 Biological Technicians	61	36%	66	Laboratory Research Assistant, Microbiology Technician, Environmental Biology Technician

High-Demand Occupations that Lack a Sufficient Number of Annual Graduates from Training Programs

- Veterinary Technologists and Technicians
- Licensed Practical & Licensed Vocational Nurses
- Magnetic Resonance Imaging Technologist

### Specialized Skills

- Radiology
- Magnetic Resonance
- Imaging
- Phlebotomy
- Trauma Care

### Core Competencies

- Communication
- Teaching
- Management
- Research
- Leadership

### Software Skills

- Microsoft Office
- Microsoft Excel
- Amazon Web Services
- Python
- Epic EMR

### Top Credentials

- Security Clearance
- CPR Certification
- Registered Nurse
- Life Support Certification
- Certified Ethical Hacker

Source: Lightcast Dataset 2025Q2

# Life Sciences and Biotechnology Cluster Assets

## Existing Programs

- Blue Ridge Partnership for Health Science Careers
- Central Virginia Community College CTE Academy and Health Science programs
- City of Roanoke Biotech Project
- Fralin Biomedical Research Institute at VTC
- Fralin Life Sciences Institute at Virginia Tech
- Project VITAL
- Radford University Carilion
- Regional Accelerator & Mentoring Program (under RBIA)
- Virginia Western Community College Life Science program
- Virginia Tech Carilion (VTC)

## Industry Players

- Carilion Clinic
- Centra Health, Inc.
- Lewis-Gale
- Local economic developers and workforce boards
- Lynchburg Regional Business Alliance
- Onward, New River Valley
- Roanoke-Blacksburg Innovation Alliance (formerly Verge)
- Roanoke-Blacksburg Technology Council (RBTC)
- Regional Entrepreneurship Initiative
- Roanoke Regional Partnership
- The Advancement Foundation
- VA Bio
- VA Small Business Development Center (Greater Roanoke & NRV and Lynchburg offices)
- Veteran Support Network
- Virginia Economic Development Partnership
- Virginia Talent + Opportunity Partnership (V-TOP), Veteran Support Network, and other support organizations

## GOVA Project Spotlight

Virginia Innovations and Technology Advancements in Life Sciences (VITAL), (2025-2027),

GOVA funding: \$4,987,029

Project VITAL will establish new research cores, expand workforce development programs, and create a collaborative network connecting Virginia Tech and other academic institutions with industry partners across the commonwealth's biotechnology corridor. The Roanoke Blacksburg Innovation Alliance (RBIA), an organization focused on growing the region's technology and biotechnology sectors, will collaborate with Virginia Tech and Carilion Clinic to lead the Region 2 effort. Project VITAL will direct \$4.9 million to strengthen the region's position at the forefront of fields such as medical devices, oncology therapeutic research, and neurotechnology. Project VITAL aims to create 1,315 jobs over five years and lead to a total economic impact of \$40.8 million. The funding will lend crucial enhancements to strengthen the innovation corridor in Southwest Virginia, including through a proof-of-concept program and support for innovation fellowships facilitated through LAUNCH: Center for New Ventures at Virginia Tech, both of which are specifically designed to encourage biomedical startups out of the university. Virginia Western Community College, the Roanoke Blacksburg Technology Council, and the Blue Ridge Partnership Health Science Careers will work to boost the biotechnology talent pipeline in the region.

Virginia Commonwealth University and Activation Capital will lead similar efforts in Region 4 around Richmond/Petersburg, and the University of Virginia and CvilleBioHub will lead Region 9 in Charlottesville.

*Credit Dianne Deffenbaugh*



# Life Sciences and Biotechnology Growth Strategies and Activities

The following activities and project ideas were gathered during one-on-one engagements with industry and GO VA partners as well as one two-hour workshop. They represent ideas and priorities for cluster growth in the coming years. GO Virginia Region 2 applicants are encouraged to align proposal activities with this list.

Prioritized Activities and Projects	Investment Area(s)	Common Outcome Metrics
Strategize and implement ways of attracting private and alternative funding for research and start-up growth	Start-Up and Scale-Up	
Create more opportunities for start-up collisions and mentorship	Start-Up	
Increase start-ups' regional prominence and voice by integrating them into organizational boards	Start-Up	
Encourage affordable lab and production space (e.g. subsidies, identifying and refurbishing unused spaces)	Start-Up and Infrastructure	
Implement innovative talent retention and attraction programs, particularly for scientists and managerial professions, centered on local universities and regions that may currently draw talent from this region (e.g. North Carolina)	Talent	
Expand entrepreneur-in-residence activities to draw expertise from outside region and accelerate technology commercialization	Start-Up and Scale-Up	
Grow and build connections to regulatory expertise	Start-Up	
Conduct a competitive market analysis to hone in on market needs, refine life science and biotech cluster, and develop strategies for distinguishing the region's cluster nationally	Scale-Up	
Develop clear career pathways from entry through senior level employment to illustrate a lifetime of regional career opportunities in the life sciences and biotech cluster	Talent	
Catalyze technology adoption and development among cluster businesses (e.g. software, diagnostic devices, biopharmaceuticals, and catalogued university IP)	Scale-Up	

\*Other identified needs and activities that may not be fundable through GOVA: market this region as a life science hub, more affordable and accessible child care workers, create a K-16 life science dedication school, grow the STEM-H teacher pipeline, align K-12 curriculum for life sciences



# MANUFACTURING FOR TRANSPORTATION, ENERGY & AUTONOMY

Manufacturing for Transportation, Energy & Autonomy focuses on producing components, systems, and technologies for modern mobility, energy solutions, as well as smart and connected manufacturing processes. This includes the design and fabrication of vehicles (larger-scale automotive, aerospace, rail), electric and autonomous transportation systems, machinery manufacturing for nuclear and other energy generation, energy storage, and related infrastructure. Manufacturers in this cluster often have expertise in machining and motor-control systems and tend to produce large-scale capital and consumer goods.

### Sub-Cluster Summary

**Machinery Automation** - Smart, autonomous manufacturing.

- 73 Payroll Businesses

**Transportation** - Making autonomous, green mobility.

- 50 Payroll Businesses

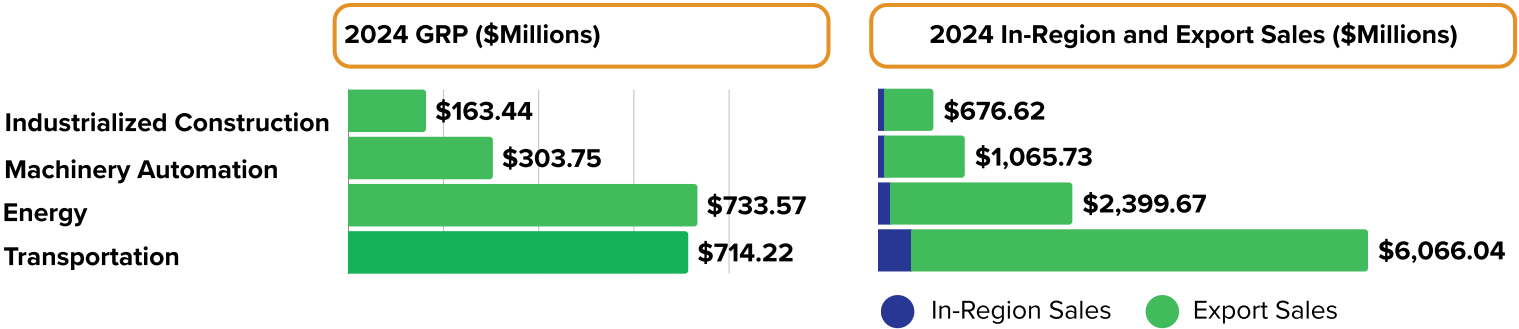
**Energy** - Clean power for transport and industry.

- 43 Payroll Businesses

**Industrialized Construction** - Efficient builds for energy and mobility

- 37 Payroll Businesses

The Manufacturing for Transportation, Energy, and Autonomy cluster in GO Virginia Region 2 currently supports over 20,400 jobs and shows a strong regional advantage, with a location quotient of 4.08—indicating higher workforce concentration than the national average. From 2019 to 2024, the region saw the most job growth in machinery automation, while energy and industrialized construction experienced modest increases and transportation declined. Looking ahead to 2030, employment in machinery automation and energy is projected to continue growing, with little change expected in transportation and industrialized construction. Key industries driving this cluster include Motor Vehicle Parts Manufacturing, Battery and Electrical Equipment Production, and Autonomous Systems Development.



Subcluster	2017 Jobs	2024 Jobs	Job Change 2017-2024	Projected 2030 Jobs	Projected Change Projected Job Change 2024-2030
Industrialized Construction	2,921	2,553	-13%	2,584	1%
Machinery Automation	2,568	2,971	16%	3,249	9%
Energy	5,947	6,454	9%	6,819	6%
Transportation	6,638	7,775	17%	7,967	2%

Source: Lightcast Dataset 2025Q2











# Top Ten Manufacturing In-Demand Skilled Occupations

While a handful of in-demand occupations require a stronger pipeline of workers completing certifications and degrees, filling and retaining workers in these occupations more often requires greater career opportunity awareness and problem solving skills from youth graduating from high school. Occupations requiring degree holders is often an issue of worker retention and attraction to the region. Below are the cluster's top "skilled" occupations with higher than average wages.

 High School to 2 Year Degree

 Bachelor's Degree

 Graduate Degree(s)

Occupation	2025 Jobs in Region	Job Change 2015-2025	Average Annual Openings	Position Titles
 First-Line Supervisors of Production and Operating Workers	1,301	11%	271	Production Supervisor, Shift Supervisor, Manufacturing Team Lead
 Welders, Cutters, Solderers, and Brazers	1,157	42%	289	MIG Welder, Fabrication Specialist, Soldering Technician
 Industrial Machinery Mechanics	884	(1%)	227	Maintenance Mechanic, Machinery Technician, Equipment Repair Specialist
 Industrial and Mechanical Engineers	1,041	13%	163	Manufacturing Engineer, Process Improvement Engineer, Mechanical Systems Engineer
 Machinists	622	(15%)	151	CNC Machinist, Tool and Die Maker, Precision Machinist
 Sales Reps, Wholesale and Manufacturing	533	15%	284	Territory Sales Representative, Technical Sales Consultant, Account Manager
 General and Operations Managers	498	46%	897	Operations Director, Business Operations Manager, Plant Manager
 Maintenance and Repair Workers	415	2%	403	Facilities Maintenance Technician, Building Maintenance Worker, General Repair Technician
 Chemical Equipment Operators and Tenders	342	156%	84	Chemical Process Operator, Reactor Technician, Production Technician
 Industrial Production Managers	341	43%	64	Manufacturing Manager, Plant Production Supervisor, Operations Manager

## High-Demand Occupations that Lack a Sufficient Number of Annual Graduates from Training Programs

- First-Line Supervisors of Production and Operating Workers
- Machinists
- Welders, Cutters, Solderers, and Brazers
- Chemical Equipment Operators and Tenders
- Industrial Machinery Mechanics

### Specialized Skills

- Warehousing
- Project Management
- Continuous Improvement Process
- Quality Management
- Process Improvement

### Core Competencies

- Communication
- Customer Service
- Management
- Operations
- Problem Solving

### Software Skills

- Microsoft Office
- Microsoft Excel
- Microsoft Powerpoint
- AutoCAD
- SolidWorks

### Top Credentials

- Security Clearance
- Engineer License
- Six Sigma Certification
- Certified Auditor
- Commercial Driver's License

Source: Lightcast Dataset 2025Q2



# Manufacturing for Transportation, Energy & Autonomy Cluster Assets

## Existing Programs

- Community colleges and universities
- ASE Auto Servicing Excellence
- Advanced Vehicle Dynamics Lab
- Center for Automotive Fuel Cell Systems
- Center for Engineering Research and Education (CERE) Industry Labs
- MidAtlantic Aviation Partnership (MAAP)
- Mountain Gateway Community College
- Regional Accelerator & Mentoring Program (under RBIA)
- Virginia Smart Road
- Virginia Tech Transportation Institute (VTTI)

## Industry Players

- Local economic developers and workforce boards
- Additive Materials and Advanced Manufacturing Tech Hub in the NRV and Danville
- Lynchburg Regional Business Alliance
- Onward New River Valley
- Roanoke-Blacksburg Innovation Alliance
- Roanoke-Blacksburg Technology Council (RBTC)
- Regional Entrepreneurship Initiative
- Roanoke Regional Partnership
- The Advancement Foundation (TAF)
- VA Small Business Development Center (Greater Roanoke & NRV and Lynchburg offices)
- Virginia Economic Development Partnership
- VTOP, Veteran Support Network, and other support organizations

## GOVA Project Spotlight

### Center for Engineering Research and Education (CERE) (2018-2020)

GOVA funding: \$1,586,100

CERE Industry Labs worked with Liberty University and Framatome (AREVA Inc.) to create four industry labs including: Chemical/Material Lab, EMC Lab, Calibration Lab, and a Non-Destructive Testing Lab through site preparedness on a 28-acre lot in Bedford, VA. Through developing the land and establishing the labs, the region will be able to attract and build industry support for leading innovations and attract high-growth energy companies to the region. Outcomes from the GOVA project included 483 students trained, 81 certificates awarded, 60 jobs created, and 7 educational partnerships created.



*Credit Liberty University*

### Manufacturing Workforce Strategy for the Lynchburg Region (2024-2025), GOVA funding: \$40,500

This project aimed to enhance talent retention and attraction, aligning with Region 2's Growth and Diversification Plan. Key initiatives included the Educator Workforce Academy, which fostered collaboration between K-12 educators and local employers, thereby enhancing workforce development. Educators gained insights through site visits and advocated for a streamlined employer engagement system. The Hickey Global Workforce Analysis highlighted Lynchburg's strengths in nuclear technology and identified workforce challenges, such as skills gaps and the need for digital talent. Recommendations included launching a career portal, expanding upskilling programs, and enhancing K-12 career awareness. These efforts supported GO Virginia's goal of strengthening the manufacturing talent pipeline for sustained growth.

# Manufacturing for Transportation, Energy & Autonomy

## Growth Strategies and Activities

The following activities and project ideas were gathered during one-on-one engagements with industry and GO VA partners as well as one two-hour workshop. They represent ideas and priorities for cluster growth in the coming years. GO Virginia Region 2 applicants are encouraged to align proposal activities with this list.

Prioritized Activities and Projects	Investment Area(s)	Common Outcome Metrics
Expand GOTECH, CTE Academy, CTE Coaching, Summer Work Experiences, Worlds of Opportunity Career Expo, Industry Insight Tours for educators, Business Success Symposium and other pipeline programs that connect students with industry	Talent	
Identify more developable sites and conduct more site readiness planning, grading, and development	Infrastructure	
Develop more paid internships, work-based learning, mentoring and apprenticeship opportunities. This includes the state apprenticeship program that allows for workers under 18	Talent	
Come home campaign and virtual support systems for connecting students from the region but studying elsewhere with paid internships	Talent	
Develop a plan and scale-up nuclear and energy cluster through sector-specific training, more cluster business-ready sites, entrepreneur and lab-to-market expertise	Scale-Up	
Grow and support talent development of all trade occupations as they serve as feeder programs to manufacturing	Talent	
Identify and refurbish underutilized spaces for labs, testing, and scaled-up manufacturing	Infrastructure	
Identify/generate more well-advertised funding opportunities (proof of concept, gap funding, angel group funding)	Start-Up	
Improve coordination among local, regional, and state economic development to mitigate fatigue	Scale-Up	
Encourage more entrepreneur networking through mentorship programs, events, pitches, and entrepreneur of the year awards	Start-Up	

\*Other identified needs and activities that may not be fundable through GOVA: market region better, more wrap around services and quality of life assets to retain and attract workers

# ADVANCED MATERIALS MANUFACTURING

Advanced Materials Manufacturing in GO Virginia Region 2 involves the design, development, and production of high-performance materials used across multiple industries such as aerospace, automotive, defense, and energy. Chemical, packaging, and other material manufacturers develop and process composites, nanomaterials, lightweight metals, and polymers that enhance product strength, durability, and efficiency. With R&D assets such as Virginia Tech’s Macromolecules Innovation Institute and a network of manufacturers and technical training programs, Region 2 is positioned to grow a hub for advanced materials innovation and production.

## Sub-Cluster Summary

### Multi-Application/Multiple Vertical

**Materials** - Versatile materials for multiple industries.

- 71 Payroll Businesses

**Chemical**- Specialized chemicals for advanced materials.

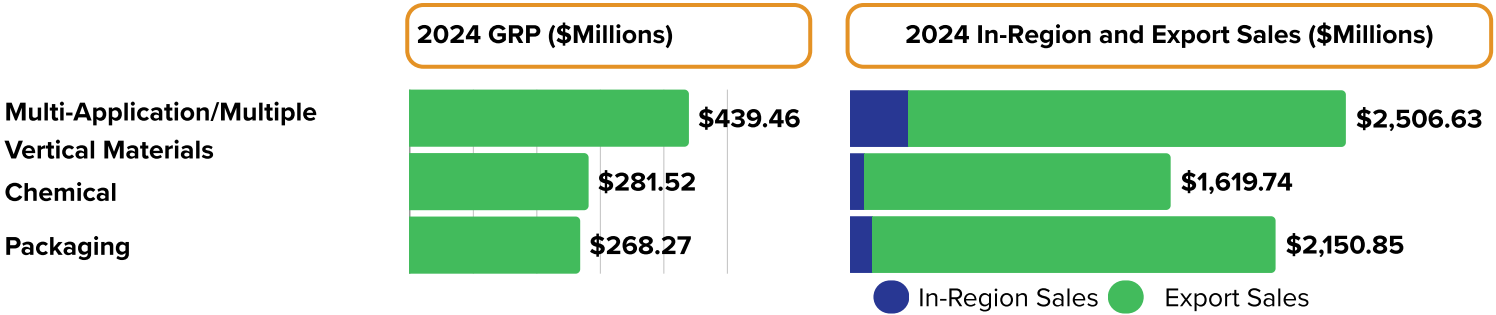
- 24 Payroll Businesses

**Packaging** - Durable, high-performance packaging materials.

- 22 Payroll Businesses



Advanced Materials Manufacturing supports over 11,000 jobs and has demonstrated strong regional competitiveness, with a workforce that is 3 times more concentrated than the national average, and 10.9% job growth and 45% growth in gross regional product (GRP) since 2015. Cluster growth is supported by a strong ecosystem of research and workforce assets, including Virginia Tech’s Macromolecules Innovation Institute, the Institute for Critical Technology and Applied Science (ICTAS), and advanced manufacturing programs at institutions like New River Community College. While the cluster continues to grow, many manufacturers search for: other industry verticals to diversify their market, continued innovations in sustainable and affordable materials, additional material quality testing and assurance resources, and process improvements particularly for small-batch manufacturing.



Subcluster	2017 Jobs	2024 Jobs	Job Change 2017-2024	Projected 2030 Jobs	Projected Change Job Change 2024-2030
Multi-Application/Multiple Vertical Materials	4,517	5,008	11%	5,285	6%
Chemical	1,829	2,558	40%	2,855	12%
Packaging	3,347	2,691	-20%	2,479	-8%

Source: Lightcast, Dataset 2025Q2


# Top Ten Materials Manufacturing In-Demand Skilled Occupations

The Advanced Materials Manufacturing Cluster shares many of the same workforce needs as the Manufacturing for Transportation, Energy & Autonomy Cluster, particularly in production and two-year degree and below occupations. In addition, due to the precise nature of materials and their processing, expertise in chemistry and engineering are vital to the continued growth and innovation of this cluster. While this region has a sufficient number of workers receiving degrees and certifications for this type of work (in theory), the challenge is retaining prospective and existing workers and attracting experienced workers to the region. Below are the cluster's top "skilled" occupations with higher than average wages.

 High School to 2 Year Degree

 Bachelor's Degree

 Graduate Degree(s)

Occupation	2025 Jobs in Region	Job Change 2015-2025	Average Annual Openings	Position Titles
 Heavy and Tractor-Trailer Truck Drivers	6,098	61%	771	CDL Driver, Line Haul Driver, Over-the-Road (OTR) Driver, Delivery Truck Driver
 General and Operations Managers	6,739	42%	701	Operations Manager, General Manager, Plant Manager, Business Manager
 Project Management Specialists	2,071	316%	228	Project Manager, Program Manager, Project Coordinator, Implementation Specialist
 Industrial Engineers	1,227	64%	114	Process Engineer, Quality Engineer, Manufacturing Engineer, Systems Engineer
 Mechanical Engineers	756	11%	66	Design Engineer, Product Engineer, Mechanical Design Engineer, R&D Engineer
 Industrial Engineering Technologists and Technicians	338	23%	53	Engineering Technician, Industrial Technician, Quality Technician
 Industrial Production Managers	521	23%	53	Production Manager, Manufacturing Supervisor, Plant Supervisor, Operations Supervisor
 Chemical Technicians	163	121%	28	Lab Technician, Quality Control Technician, Process Technician, Analytical Technician
 Chemists	143	92%	23	Research Chemist, Analytical Chemist, Quality Assurance Chemist, Formulation Chemist
 Chemical Engineers	43	1%	9	Process Engineer, Production Engineer, Chemical Process Engineer, R&D Engineer

## Specialized Skills

- Warehousing
- Forklift Truck
- Auditing
- Truck Driving
- Project Management

## Core Competencies

- Communication
- Operations
- Management
- Leadership
- Customer Service

## Software Skills

- Microsoft Office
- Microsoft Excel
- Microsoft Powerpoint
- AutoCAD
- SolidWorks

## Top Credentials

- Drivers License
- Commercial Drivers License
- Security Clearance
- CDL License
- Tanker Endorsement

Source: Lightcast Dataset 2025Q2

# Advance Material Manufacturing Cluster Assets

## Existing Programs

- Community colleges and universities
- Additive Materials Manufacturing Partnership Labs (AMPL)
- Center for Engineering Research and Education (CERE) Industry Labs
- Center for Intelligent Material Systems and Structures (CIMSS)
- Center for Packaging and Unit Load Design (CPULD)
- Institute for Critical Technology and Applied Science
- Kroehling Advanced Materials Foundry (VT FIRE)
- Onward NRV Manufacturing Leadership Summit (twice a year)
- Regional Accelerator & Mentoring Program (under RBIA)
- Virginia Tech's Macromolecules Innovation Institute
- XLR8 STEM Academy

## Industry Players

- Local economic developers and workforce boards
- Additive Materials and Advanced Manufacturing Tech Hub in the NRV and Danville
- Lynchburg Regional Business Alliance
- Onward New River Valley
- Roanoke-Blacksburg Innovation Alliance (formerly VERGE)
- Roanoke-Blacksburg Technology Council (RBTC)
- Regional Entrepreneurship Initiative
- Roanoke Regional Partnership
- The Advancement Foundation
- VA Small Business Development Center (Greater Roanoke & NRV and Lynchburg offices)
- Virginia Economic Development Partnership
- VTOP, Veteran Support Network, and other support organizations

## GOVA Project Spotlight

### Additive Manufacturing Partnership Labs (AMPL) (2019-2022), \$274,980 in GOVA funding

AMPL was a collaborative effort between Liberty University (LU), the Center for Engineering Research and Education (CERE), Central Virginia Community College (CVCC), the XLR8 STEM Academy, local partners BWX Technologies, FarField NDT, and Bedford County to support the collective goal of building the Additive Manufacturing (AM) base and educating the AM workforce. GO Virginia funding purchased the AM equipment needed to establish the lab. LU outfitted the AM laboratory with: two Markforged Metal X 3D Printers, one Markforged X7 3D Printer, one Geomagic Capture Scanner, and smaller 3D printers in support of the STEM Academy. The 2,400 square-foot facility includes several AM systems capable of full consolidation of nylon, carbon fiber, polymeric, metallic, and ceramic material systems, as well as a prototyping laboratory with a host of characterization techniques. The AMPL continues to flourish and bring in industries to the region with several new startup firms working out of CERE to develop new and innovative products to support the growth of new small business in the area. Outcomes of this project included 7 established education partnerships, 34 faculty trained, 46 employees upskilled, over 75 industry site visits during the project period.

### New River Valley Materials and Machinery Cluster Scale-up (2023-2025), \$98,859 in GOVA Funding

This project outcomes included a 10-year Roadmap for Support Materials and Machinery Scale-Up in the NRV, identification of more than 10 implementation projects, and developed a stronger, more capable coalition of 20+ partners through four work sessions and 20+ one-on-one meetings. The subgrantees and project partners focused their efforts to strengthen the Additive Materials & Advanced Manufacturing Tech Hub in the NRV and Danville.

The project team and AM2 Tech Hub coalition also supported the GOTEC Launch in Region 2 GOVA grant application, approved by the state in June 2025.



**VIRGINIA'S**  
**Additive Manufacturing**  
**& Advanced Materials**  
**TECH HUB**



# Advanced Materials Manufacturing Growth Strategies and Activities

The following activities and project ideas were gathered during one-on-one engagements with industry and GO VA partners as well as one two-hour workshop. They represent ideas and priorities for cluster growth in the coming years. GO Virginia Region 2 applicants are encouraged to align proposal activities with this list.

Prioritized Activities and Projects	Investment Area(s)	Common Outcome Metrics
Expand GOTECH, CTE Academy, CTE Coaching, Summer Work Experiences, Worlds of Opportunity Career Expo, Industry Insight Tours for educators, Business Success Symposium and other pipeline programs that connect students with industry	Talent	
Identify more developable sites and conduct more site readiness planning, grading, and development	Infrastructure	
Develop more paid internships, work-based learning, mentoring and apprenticeship opportunities. This includes the state apprenticeship program that allows for workers under 18	Talent	
Come home campaign and systems for connecting students from the region but studying elsewhere with paid internships	Talent	
Support adoption of AI, automation, 3D printing, advanced materials, digital twins, etc.	Scale-Up	
Grow and support talent development of all trade occupations as they serve as feeder programs to manufacturing	Talent	
Identify and refurbish underutilized spaces for labs, testing, and scaled-up manufacturing	Infrastructure	
Identify/generate more well-advertised funding opportunities (proof of concept, gap funding, angel group funding)	Start-Up	
Improve coordination among local, regional, and state economic development to mitigate fatigue	Scale-Up	
Encourage more entrepreneur networking through mentorship programs, events, pitches, and entrepreneur of the year awards	Start-Up	
Create an additive manufacturing and materials maker space	Infrastructure	
*Other identified needs and activities that may not be fundable through GOVA: market region better, more wrap around services and quality of life assets to retain and attract workers		

# IT, Engineering Services & Emerging Technology

IT, Engineering Services and Emerging Technology refers to businesses that design and develop machines, materials, instruments, structures, processes, and/or systems to enable businesses to improve performance and stay competitive in a rapidly evolving digital economy. Knowledge services include advanced digital systems, including software engineering, cloud computing, AI, cybersecurity, and data analytics; architectural and engineering service to promote innovative and sustainable infrastructure across industries such as manufacturing and healthcare; and other consulting services that creating tailored solutions to enhance productivity and data-driven decision-making.

### Sub-Cluster Summary

**IT and Cyber Security** - Involves securing, managing, and optimizing digital systems and sensitive data to ensure reliable and protected technology operations.

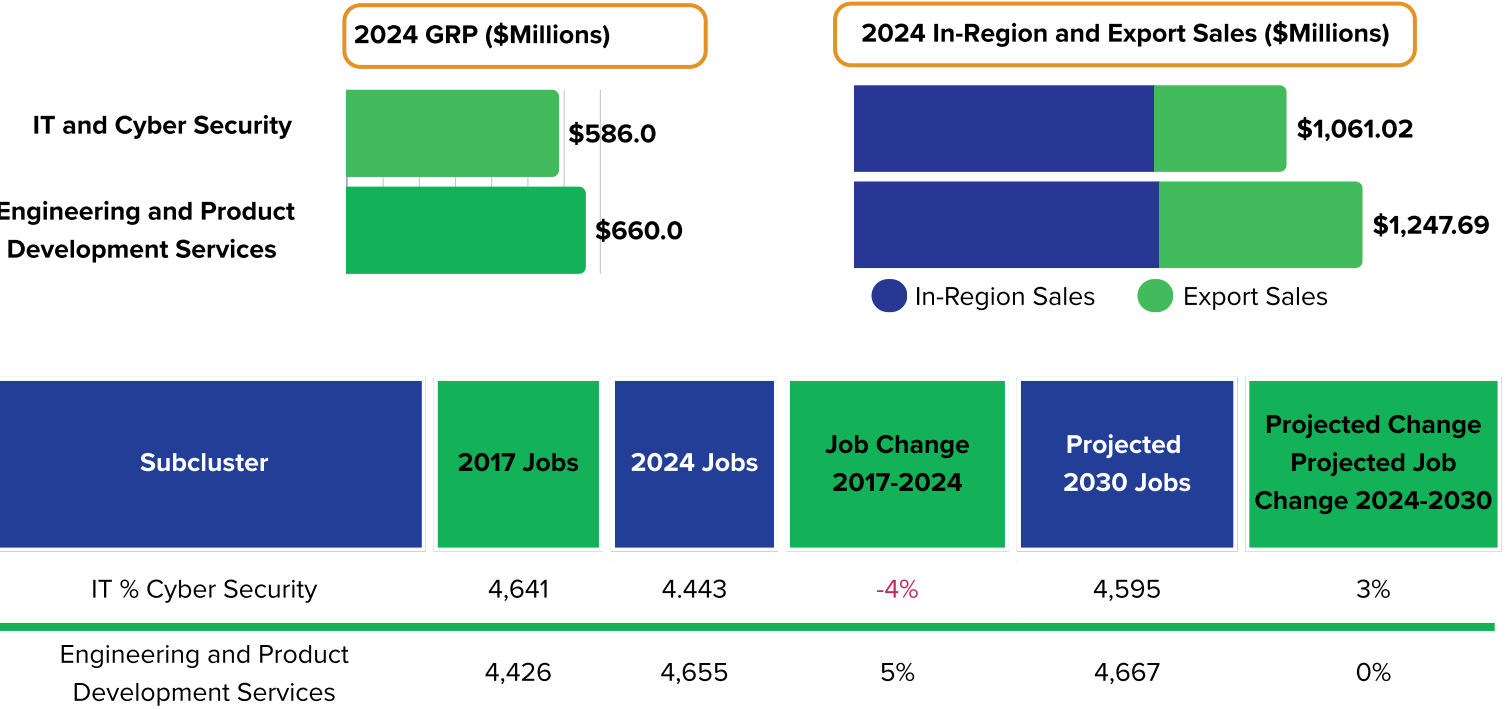
- **617** Payroll Businesses

**Engineering and Product Development Services** - Focuses on designing, developing, and implementing technology solutions and systems that drive innovation and support complex digital infrastructure needs.

- **434** Payroll Businesses



The IT, Engineering Services, and Emerging Technology cluster employs over 9,000 Region 2 workers; however, significantly more knowledge-worker jobs represented in this cluster serve all regional industries, particularly those in Region 2's traded clusters. Historically, businesses in this cluster have advanced emerging technologies that could then be adopted and manufactured in the region. As such, supporting the growth of this cluster not only fosters greater regional innovation and expansion, it also supports the evolution and talent of all Region 2 industries. From 2019 to 2024, the region experienced strong job growth in areas such as software development, data analytics, and cloud services, with continued expansion projected through 2030—especially in artificial intelligence, cybersecurity, and systems engineering. Key industries in this cluster include Custom Computer Programming, Engineering Services, Data Processing and Hosting, and Emerging Technology R&D.



Source: Lightcast Dataset 2025Q2

# Top 10 IT, Engineering Services & Emerging Tech In-Demand Skilled Occupations

The IT, Engineering Services & Emerging Technology Cluster in-demand talent is largely amongst IT specialists, data analysts and engineers, and management occupations. In theory, the cluster has access to a plethora of graduates from community college and university programs across the region. The workforce challenges in this cluster are losing talent to other regions upon graduation due as well as retaining and attracting more experienced talent to the region. Underlying weaknesses including lagging wages and outdated hiring practices among regional employers. Cluster employers are looking for talent skilled in problem solving, critical thinking, customer engagement, and teamwork.

■ High School to 2 Year Degree
 ■ Bachelor's Degree
 ■ Graduate(s) Degree

Occupation	2025 Jobs in Region	Job Change 2015-2025	Average Annual Openings	Position Titles
<span style="color: blue;">■</span> Software Developers	901	17%	206	Front-End Developer, Back-End Developer, Full Stack Developer
<span style="color: blue;">■</span> Civil Engineers	420	28%	83	Structural Engineer, Transportation Engineer, Water Resources Engineer
<span style="color: orange;">■</span> General and Operations Managers	364	43%	897	Operations Director, Business Manager, Plant Manager
<span style="color: blue;">■</span> Sales Reps of Services	320	19%	229	Account Executive, Business Development Representative, Client Solutions Specialist
<span style="color: orange;">■</span> Project Management Specialists	313	51%	267	Project Coordinator, Agile Project Manager, Program Manager
<span style="color: green;">■</span> Computer User Support Specialists	298	(29%)	118	Help Desk Technician, IT Support Specialist, Technical Support Analyst
<span style="color: blue;">■</span> Computer Systems Analysts	277	(12%)	95	Business Systems Analyst, IT Systems Analyst, Application Analyst
<span style="color: blue;">■</span> Market Research Analysts and Marketing Specialists	240	28%	192	Consumer Insights Analyst, Marketing Strategist, Brand Analyst
<span style="color: blue;">■</span> Management Analysts	217	31%	169	Business Consultant, Organizational Effectiveness Analyst, Strategy Analyst
<span style="color: orange;">■</span> Computer and Information Systems Manager	209	28%	81	IT Director, Chief Information Officer (CIO), Technology Manager

## Specialized Skills

- Field Service Management
- IT Security
- Technical Support
- Computer Science
- Project Management

## Core Competencies

- Problem Solving
- Communication
- Planning
- Sales
- Research

## Software Skills

- GitHub
- C++
- Linux
- Python
- SQL

## Top Credentials

- NIST Cybersecurity Framework
- CompTIA Network
- CompTIA Security
- Professional Engineer License
- Certified Quality Engineer

Source: Lightcast Dataset 2025Q2



# IT, Engineering Services & Emerging Technology Cluster Assets

## Existing Programs

- Community colleges and universities
- Additive Materials Manufacturing Partnership Labs (AMPL)
- Center for Engineering Research and Education (CERE) Industry Labs
- Center for Intelligent Material Systems and Structures (CIMSS)
- Center for Packaging and Unit Load Design (CPULD)
- Commonwealth Cyber Initiative SWVA
- CS/ROOT (supporting computer science entrepreneurs)
- Exelaration
- GMU Mason Enterprise
- Regional Accelerator & Mentoring Program (under RBIA)
- Kroehling Advanced Materials Foundry (VT FIRE)
- XLR8 STEM Academy

## Industry Players

- Local economic developers and workforce boards
- APEX Center for Entrepreneurship
- Advancement Foundation
- Blacks in Technology SWVA
- Lynchburg Regional Business Alliance
- Onward New River Valley
- Roanoke-Blacksburg Innovation Alliance (formerly VERGE)
- Roanoke-Blacksburg Technology Council (RBTC)
- Regional Entrepreneurship Initiative
- Roanoke Regional Partnership
- Virginia Business Ready Sites Program (VBRSP)
- Virginia Economic Development Partnership
- VA Small Business Development Center (Greater Roanoke & NRV and Lynchburg offices)
- Virginia Tech Corporate Research Center
- V-TOP, Veteran Support Network, and other support organizations

## GOVA Project Spotlight

Artificial Intelligence Statewide Landscape Assessment (ASLA) (2025 - 2026), GOVA funding: \$100,000

This statewide competitive project between GOVA Regions 2 and 3 aims to explore how artificial intelligence (AI) will transform Virginia's business landscape and workforce and, for specific GO Virginia target sectors of statewide significance. As part of the Chamber's Blueprint Virginia 2035 update, this initiative focuses on sustaining a resilient and industry-responsive talent pipeline.

Through individual interviews, surveys conducted throughout the Blueprint 2035 tour, and additional activities identified by a qualified consultant, the insights of business leaders, workforce development leaders, and local chamber representatives will be used to develop a comprehensive AI report. The project will analyze current and future AI applications, standardize essential terminology and concepts, identify prevailing trends, and report sector-specific impact analysis, a current workforce development catalog, and strategic recommendations which will inform future GO Virginia initiatives to help priority sectors adapt to AI

## IT, Engineering Services, & Emerging Tech Growth Strategies and Activities

The following activities and project ideas were gathered during one-on-one engagements with industry and GO VA partners as well as one two-hour workshop. They represent ideas and priorities for cluster growth in the coming years. GO Virginia Region 2 applicants are encouraged to align proposal activities with this list.

Prioritized Activities and Projects	Investment Area(s)	Common Outcome Metrics
Support infrastructure and talent development in AI, robotics, autonomy, and quantum computing	Scale-Up and Talent	
Increase awareness and informed use of AI along talent pipeline	Talent	
Better connect regional employers with students through job fairs and internships and improve/streamline hiring processes	Talent	
Improve technology transfer processes and catalyze technology adoption and development (e.g. AI, machine learning, augmented and virtual realities, cobots, data sciences and analytics, and existing catalogued university IP in the region).	Start-Up and Scale-Up	
Expand Roanoke Regional Airport	Infrastructure	
Implement more talent retention and attraction strategies e.g. develop clear career pathways from entry through senior level employment to illustrate a lifetime of career opportunities; showcase and promote top IT talent in the region to attract and retain more talent .	Talent	
Encourage and incentivize higher education institutions to allow funding for student start-ups that can lead to experience and new companies in Region 2	Start-Up	
Expand RBTC Talent coalition to include more Region 2 partners committed to advancing and sharing events and talent needs	Scale-Up and Talent	
Develop and implement more mid-career upskilling programs in response to aging workforce	Talent	
Strategize and implement ways of attracting private and alternative funding for research and start-up growth	Start-Up and Scale-Up	

\*Other identified needs and activities that may not be fundable through GOVA: improve regional marketing, more affordable and accessible child care workers, more affordable workforce housing, improve quality of life such as public transportation infrastructure, create regional funds for liquidity events

## **Virginia Growth and Opportunity Region 2 Council**

# **BYLAWS**

### **Article I. PURPOSE**

The Virginia Growth and Opportunity Regional Council (hereafter referred to as “Council”) is a public body certified by the Virginia Growth and Opportunity Board to receive grants pursuant to Code of Virginia section 2.2-2485 the Virginia Growth and Opportunity Act (hereafter referred to as “GO VA”). The Council will be supported by an organization that engages in collaborative planning or execution of economic or workforce development activities within a region to support the Council’s activities and to ensure proper administration of the Council’s funds.

### **Article II. DUTIES AND RESPONSIBILITIES**

#### **Section 1 Duties of the Regional Council**

The Council shall:

1. Work in a collaborative manner, respecting all points-of-view, while soliciting and reviewing proposed projects for recommendation to the GO VA Board.
2. Demonstrate extensive knowledge of the region’s potential for growth that lead to higher paying jobs. Identify economic/regional projects that support or encourage collaboration and yield significant new job creation.
3. Review and understand the authority, governance, and administrative role of the GO VA Board in certifying qualified regions and regional councils; including how the Board develops and implements guidelines or procedures for such certification.
4. Partner with existing or newly established economic/workforce development organizations to create focused collaborative projects or programs consistent with the Council’s economic growth and diversification plan.
5. Identify the region’s economic growth potential independently or in partnership with neighboring regions. Identify the competitive advantages for collaboration with private-sector investments to accelerate job growth/economic development.
6. Advise the Board on best practice initiatives, projects, etc. that encourage collaboration and yield measurable outcomes for job growth in the region.
7. Have the authority to enter into agreements through the support organization in order to pursue the goals and objectives of the Virginia Growth and Opportunity Act pursuant to the Code of Virginia and guidelines adopted by the Board.
8. Adhere to the Freedom of Information Act (FOIA) and the Conflict of Interest Act (COIA) except as exempted pursuant to §2.2-3711.A.48 of the Code of Virginia.
9. Provide for public participation as directed by the Code of Virginia and the Board.
10. Conform with guidelines as adopted by the Board.

### **Article III. MEMBERSHIP**

1. The Council should include representatives from (i) the education sector, which include school divisions, community colleges, public institutions of higher education, and private institutions of higher education as appropriate; (ii) the public economic and workforce development sector; (iii) local government; (iv) planning district commissions; (v) nonprofit organizations; and (vi) other entities that significantly affect regional economic or workforce development. The distribution of the primary residence of members should approximately match the distribution of population among the areas that make up Region 2. Membership may include one or more non-legislative citizen members of the Board from the region. A majority of the members of the Council shall be from private sector with demonstrated significant private-sector business experience. The Council shall be chaired by a citizen member from the region with significant private-sector business experience.
2. The Council will consist of up to 30 members. The Board will approve the member selection process, structure, composition, and leadership to meet the requirements of COV section 2.2-2485 of the Virginia Growth and Opportunity Act and the guidelines set forth by the Board. Council membership is subject to Board review and approval.
3. Council members shall have knowledge of workforce and economic development.
4. Council members shall serve staggered three year terms as determined by the Council. Council members shall not serve more than (2) consecutive three year terms. A Chair and Vice Chair are elected from the council membership for terms of two years, which will count against the limit of two (2) consecutive three year council terms. If the council terms of a Chair or Vice Chair expire during their leadership service, their council membership will extend to the end of their terms as Chair or Vice Chair.
5. A vacancy on the Council shall be filled by the Council as provided for in Article VIII of this document.
6. A Council member may be removed by the Board with a majority vote. Notice must be provided to Council members 7 days in advance of a meeting where a removal action is on an agenda. The reasons for removal must be documented by the Council.
7. Council members are expected to participate in all meetings of the council. Absence from more than 50% of meetings in a fiscal year may constitute grounds for removal.

### **Article IV. MEETINGS**

1. The Council shall meet on a regular basis and at a minimum quarterly at a predetermined location and time. The meeting notice of time, location and purpose shall be given to all Council members at least 7 days prior to the date of meeting.
2. The Council will meet all of the Code of Virginia public meeting requirements (§2.2-3707). Meetings will be advertised a minimum of three business days in advance of the meeting at the following locations: the administrative offices of the support organization and administrative offices of individual meeting locations.

3. Attendance of a majority of Council members shall constitute a quorum and, unless a greater proportion is required by the Board for a particular act/vote, the majority vote of the Council present and voting at any meeting, at which there is a quorum, shall constitute the Act of the Council.

#### **Article V. PARLIAMENTARY PROCEDURE**

In all matters of procedure not specifically covered by these By-Laws, the most recent edition of Roberts Rules of Order shall be observed.

#### **Article VI. ORGANIZATION**

During the inaugural meeting, the Council shall elect from among its members, a Chair and a Vice-Chair. The Chair and Vice Chair shall be a Council member with significant private-sector experience.

The Chair shall preside over all meetings. The Vice-Chair shall preside over all meetings in the absence of the Chair.

#### **Article VII. SUPPORT ORGANIZATION**

1. The support organization can be a new or existing organization with purposes and competencies including collaborative planning, economic development, or workforce activities within the region.
2. The support organization may provide data analysis, review of best practices, review and analysis of project proposals, and other duties as determined by the Regional Council.
3. The support organization will make project recommendations to the Regional Council for submission to the Board and will be responsible for monitoring the impacts of projects in carrying out the economic growth and diversification plan.
4. The support organization will be responsible for the receiving, use of, and auditing of funds received.
5. The support organization will have a contract with the regional council that provides for its role as outlined above.

#### **Article VIII. SUBCOUNCIL ORGANIZATION**

The Council may appoint all committees as deemed necessary to meet the Council requirements of COV 2.2-2485; the Virginia Growth and Opportunity Act and to fulfill the duties of the Council. In addition, the Council shall create an Executive Committee. The distribution of the primary residence of members of this or any committee should approximately match the distribution of population among the areas that make up Region 2. The Executive Committee will have the authority to act judiciously on behalf of the Council when time sensitive matters occur, as determined by the chair, before a meeting of the full Council can be held. The Committee's meetings are subject to the Code of Virginia public meeting requirements (§2.2-

3707) except as exempted pursuant to §2.2-3711.A.48. Minutes must be reported and distributed within 10 days of a Committee meeting. A report from the Executive Committee will be a standing agenda items for all full meetings of the Council. The Executive Committee will present a slate of officers, potential new members, and recommend to the council persons to fill vacancies on the Council. Council members from each area within Region 2 should be polled by the Committee with respect to vacancies occurring in their area. Following a vote by the full Council nominees are forwarded to the state board for approval.

Each committee shall appoint a Chair and set meeting dates, times and locations. The duties of each committee member shall be implied by the name and function of the committee. Each committee shall have only the powers specifically designated to them by the Council. Each committee shall report to the full Council.

## **Article IX. BYLAWS**

The bylaws shall not be amended, modified or replaced except by a majority action of the Regional Council in an official meeting. Action on amended bylaws may not take place at the meeting in which they are introduced. Action on amended bylaws shall take place a minimum of thirty days after their introduction. The bylaws shall be amended to conform to statutory requirements as required. The Board shall review and approve amendments to the Bylaws.

## **SEVERABILITY**

In the event that any portions of the bylaws are deemed invalid, the remaining portion shall stand.