GO Virginia Region 2 Annual Report

Photo 1: The COgro Labs at Virginia Tech Corporate Research Center.
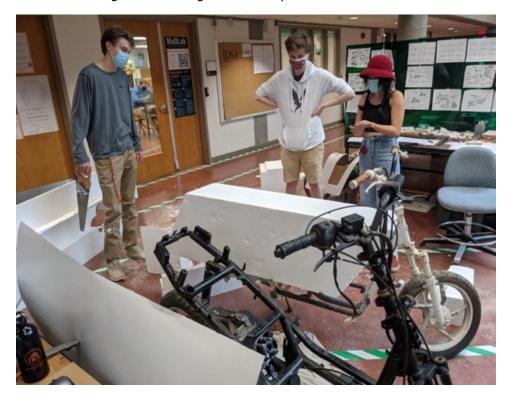

Photo 2: Student participants in the Developing a Destination for Talent program.

Photo 3: Fall foliage, seen from the Blue Ridge Parkway in Floyd County.

Photo 4: A student in the Women in Machining class at Vector Space in Lynchburg. Photo courtesy of Cardinal News.

I: Introduction

Region 2 of GO Virginia spans across three metropolitan statistical areas (MSAs) and regional commissions on the western half of the state. The region is comprised of the Lynchburg, New River Valley, and Roanoke-Alleghany MSAs. In total, Region 2 contains thirteen counties and five independent cities: the counties of Alleghany, Amherst, Appomattox, Bedford, Botetourt, Campbell, Craig, Floyd, Franklin, Giles, Montgomery, Pulaski, and Roanoke; and the cities of Covington, Lynchburg, Radford, Roanoke, and Salem. The region's population of 781,531 made up 9.1% of Virginia's 2020 total population.

Each of these areas has a strong history of local cooperation, and some experience with interregional collaboration, primarily between the New River and Roanoke Valleys. Together, they all share many economic similarities: traditional industry strengths in manufacturing, transportation, and agriculture; emerging technology sectors; mixed urban and rural characteristics; and higher education and healthcare as economic and employment drivers.

The four (4) target industry clusters identified in GO Virginia Region 2 are:

Region 2 Target Sectors
Transportation & Automation
Life Science & Healthcare
IT & Emerging Tech
Materials & Machinery Manufacturing

Virginia Tech's Center for Economic and Community Engagement serves as Region 2's support organization. The support organization provides fiduciary oversight and administrative services for activities related to GO Virginia in Region 2. This annual report serves as a record and celebration of the activities, partnerships, research, outcomes, and impacts that have been a part of GO Virginia during the past year (July 2021 – June 2022).

II: Growth & Diversification Plan

The Growth & Diversification Plan documents the socio-economic trajectory of Region 2, particularly the concentration of different industries across this footprint, their job growth rates compared to the nation, their contributions to gross regional product, the number of higher-than-average wage jobs available in these industries, and assets unique to the region that drive opportunity. The analysis of that data identifies four target "clusters"—or geographic concentrations of businesses with common markets, suppliers, technologies, and workforce needs. These four interrelated clusters offer the greatest potential for sustainable, scalable, future growth in the region.

The plan was updated this year, between June and August 2021. Data and analysis were performed by support organization staff. On August 18, 2021, leaders from across Region 2 gathered in Roanoke to discuss revisions to the 2021 GO Virginia Region 2 Growth and Diversification Plan. The meeting began with opening remarks and was followed by four workgroup sessions, focused on GO Virginia Region 2's four investment strategy areas: Talent, Entrepreneurship, Cluster Scale Up, and Sites and Infrastructure. Three regional sessions to gain feedback on the Growth and Diversification Plan took place in Roanoke (Oct. 4, 2021),

Lynchburg (Oct. 5, 2021), and Blacksburg (Oct. 7, 2021). The final plan was reviewed by the full Region 2 Council on October 27, 2021.

Photo 5: Kick-off meeting for the Growth and Diversification Plan (Aug 18, 2021)

Photo 6: Blacksburg Regional meeting for the Growth and Diversification Plan (Oct 7, 2021)

Photo 7: Lynchburg Regional Meeting for the Growth and Diversification Plan (Oct 5, 2021)

III: Summary of Projects

Project	GO Virginia Funds	Locality Match	Non-Locality Match	Other Leverage
Future Workforce for Industry	$45,360	$5,000	$25,000	$0
Lynchburg Beacon of Hope	$97,740	$42,250	$15,000	$0
Health Sciences Talent Pipeline	$100,000	$0	$106,355	$0
Project Eagle+	$599,437	$225,000	$278,687	$0
Regional Talent Strategy Implementation	$315,911	$50,854	$153,500	$0
Workforce and Entrepreneurship Initiatives in a Regional Makerspace	$324,000	$69,000	$93,100	$0

Future Workforce for Industry 4.0 | VT Grado Department of Industrial and Systems Engineering, *Localities served: Counties of Botetourt and Roanoke; City of Roanoke*. Local matching funds were committed by Roanoke Regional Partnership and its member localities of Alleghany, Botetourt, Franklin, and Roanoke. Cities of Covington, Roanoke, Salem; and Town of Vinton. The Virginia Tech Grado Department of Industrial and Systems Engineering (ISE) will convene employers and stakeholders to help identify areas of Industry 4.0 technology in use, Industry 4.0 technology and skill gaps among the current and future workforce, and areas of potential Industry 4.0 collaborative projects using the Learning Factory as an initial experiential learning site to bring together students and professional learners. ECB products include an Action plan that identifies current and future 4.0 employer technology and workforce skill needs in Region 2.

Lynchburg Beacon of Hope | Lynchburg Beacon of Hope, *Localities served: Counties of Amherst and Campbell; City of Lynchburg.* Local matching funds were committed by Amherst County Public Schools and

Campbell County Public Schools. Lynchburg Beacon of Hope will develop a playbook for future centers, which will result in a programmatic guide for the operations of the high school future centers, a template for hiring directors of each future center, and a professional development and training module for effective Future Centers. The mission of the Future Centers is to help prepare and train high school students for post-secondary opportunities focused on in-demand high wage occupations in Manufacturing, Technology/IT, and Life Sciences. ECB products include a Playbook for Future Centers.

Health Sciences Talent Pipeline | Freedom First, Carilion Clinic, *Localities served: Counties of Roanoke, Botetourt, Craig, Franklin, Alleghany, Montgomery, Floyd, Pulaski and Giles; cities of Salem, Roanoke, Radford, and Covington.* A business led consortium: The Blue Ridge Partnership for Health Sciences Careers, will be organized through a 12-person Executive Committee comprised of educational and health and life sciences stakeholders. The partnership will advance its activities through task forces, with chairs reporting to the executive committee. This initiative will accelerate the establishment of a new model for widespread business-education collaboration, increase the number of health and life sciences graduates, and begin to formalize a health sciences talent pipeline focused on engineering, cybersecurity, mechatronics, and the broader life sciences traded sector. ECB products include a Regional Situational Assessment and Analysis, formation of The Blue Ridge Partnership for Health Sciences Careers, and the launch of their website.

Project Eagle+ |Virginia Tech Corporate Research Center (VT CRC), *Localities served: All of Region 2 with primary focus in Roanoke-Alleghany and New River Valley subregions.* Local matching funds were contributed by Montgomery County and City of Roanoke. The VT CRC secured a per capita grant to advance a three-prong approach to grow the region's health and life sciences cluster. A project leadership team that includes the VT Corporate Research Center, Johnson & Johnson JLABS, and other private and public sector partners will 1) build out a pilot shared lab facility in Blacksburg, 2) launch Johnson & Johnson JLABS accelerator programming in the region, and 3) conduct site design and engineering work for a scaled-up lab facility based in Roanoke. Metrics include Number of businesses served, Number of jobs created/filled, Number of existing businesses expanded, and Total capital raised. Products/outcomes include Preliminary architectural and engineering work for Roanoke site, 8-10 businesses served, 32 jobs created/filled, 3-4 existing businesses expanded, and $7.5 million in capital raised.

Regional Talent Strategy Implementation | Greater Roanoke Workforce Development Board, Localities served: *Counties of Roanoke, Botetourt, Craig, Franklin; Cities of Salem, Roanoke, and Covington.* Local matching funds were contributed by the counties of Botetourt, Roanoke, and Franklin, and the cities of Covington, Roanoke, and Salem. The Workforce Development Board will implement a regional talent strategy in the Roanoke Valley and Alleghany Highlands in partnership with the Roanoke Regional Partnership focused on career awareness and career pathways, talent development, talent attraction and retention, and collaboration and leadership. Activities of the project will include attracting out-of-market workers to relocate to the Roanoke Valley and Alleghany Highlands and retaining and developing the current workforce in the region, all while fostering collaboration and partnership between economic development and workforce development partners. Some of the activities will be completed to meet the goal of the strategy will include creating a regional web-based talent portal, creating toolkits for business and industry to use for recruitment of new employees, establishing an annual talent retreat for the region's economic and workforce partners, engaging business and industry in sector strategy activities, and more. The GRWDB will work closely with the Roanoke Regional Partnership to engage business and industry through the convening of the Talent Advisory Council to create a talent attraction, retention, and development strategy to grow the current and future talent pipeline for the Roanoke Valley and the Alleghany Highlands. Metrics include Number of students trained, Number of businesses served, Number of employees upskilled, Number of jobs created/filled. Products/outcomes include a Regional Talent Portal, creation of a Talent Advisory Council, a

toolkit for employer recruitment, an annual talent retreat, 50 students trained, 100 businesses served, 20 employees upskilled, and 40 jobs created/filled through work-based learning.

Workforce and Entrepreneurship Initiatives in a Regional Makerspace |Vector Space, *Localities served: Counties of Bedford and Campbell; City of Lynchburg.* Local matching funds were committed by the City of Lynchburg. Women in Machining Program: Vector Space will work with 10 low-income women to support workforce development needs in the Materials and Machinery cluster and collaborate with Central Virginia Community College (CVCC) to allow participants to obtain credits towards MAC 161: Machine Shop Practices I program. Co.Starters: A 10-week program that equips aspiring entrepreneurs with insights, relationships, and the tools needed to turn businesses ideas into action. Recruitment will focus on micro-manufacturing and technology startups, with encouragement for relevant graduates to continue their business development with Regional Accelerator & Mentoring Program (RAMP). Vector Space will work with the Lynchburg Regional Business Alliance (LRBA)'s EPIC Center for Entrepreneurs to design and offer complementary services between the Center and Vector Space. Vector Space will offer a series of workshops in partnership with University of Lynchburg, Randolph College, and Sweet Briar College to encourage entrepreneurial thinking in area college students. High school students will have the ability to participate in STEM projects, from engineering to entrepreneurship, in after school and summer programs that encourage career exploration. Metrics include Number of students trained, Number of businesses served, and Number of jobs created/filled. Products/outcomes include 12 students trained, 8 businesses created, 5 businesses served, and 37 jobs created.

IV: Regional Collaboration & Partner Support

Industry cluster working groups:

Region 2 Council requested further examination of the region's target industry clusters. In response, working groups for each of the four industry clusters were organized to meet the following objectives:

- Improve our understanding of industry composition and business dynamics in each of the region's target clusters
- Assess Region 2 Growth and Diversification Plan strategies with industry stakeholders in each cluster
- Encourage groups to develop cluster specific proposals in response to the strategies
- Develop information from industry to improve our ability to evaluate the impact of projects on jobs and investment among firms in the target cluster

Each of the four working groups were led by two co-chairs from Council with support from a staff member. Guided by the working group co-chairs, staff conducted research on the major pain points for the industry cluster and developed a presentation and white paper to share with Council. Reports back from the industry cluster working groups started at the May 2022 Council meeting and will continue into 2023.

Collaborations through grantees:

VT's Destination for Talent program participated with OnwardNRV in a recruitment event, partnered with the Roanoke Regional Partnership with a virtual professional development session, and began a VT CPD (Career and Professional Development) federal work study program.

The CVCC CTE Academy engaged partners through stakeholders and steering committee meetings. They also created a Hubspot business repository.

VT Industry 4.0 hosted numerous meetings around partner discovery and workforce education. Industry, community colleges, workforce representatives, and K-12 participated in drafting, writing, reviewing, and soliciting feedback for the draft curriculum.

Ignite Internships: Industry participants included Celanese, CGI, and Radford Animal Hospital through business tours

Lynchburg Beacon of Hope: partnered with the four high schools at all future center sites for Virginia College Application Week. A collaborative evaluation session with all future center directors highlighted significant improvements in student and family engagement in events. They partnered with 12 major employers to launch the Stay Close, Go Far internship program, a first-of-its kind experiential internship program for high school juniors and seniors.

BRHSTP- Carilion: formation of the business-led consortium called the Blue Ridge Partnership for Health Science Careers. Additional partners included George Mason's Center for Health, Workforce development, and Virginia Tech Institute for Policy and Governance

ELITE: Developed agreements with Hollins University and RBTC (Roanoke Blacksburg Technology Council) members to help place students. New partners include ArchiveCore, KlarVis, and Beam Diagnostics. There is an additional partnership with a workforce development company called CivilianCyber.

Amherst Site Readiness: partnered with the US Army Corps of Engineers

VT Lab Space: Partnered with EDC, SMBW, Facility Logix, and the Roanoke Regional Partnership to develop a business plan and membership model for the future project.

Project Eagle: developed charter and collaborative agreements between JLABS and the VT Corporate Research Center. An additional partner is the Carilion Clinic Innovations program

Please refer to *Appendix 1* for a bulleted list of partners.

V: Outcomes & Impact

The development and strengthening of regional partnerships continued in FY22, with a host of new private businesses, especially becoming engaged through the internship and experiential learning programs. The majority of the activity in this fiscal year was either in building capacity for new projects in emerging areas, such as the Blue Ridge Partnership for Health Science Careers, Beacon of Hope, and Project Eagle, or in implementing experiential learning and internship programs. For this reason, many of the most salient tangible outcomes from this fiscal year are related to talent and are explained below.

Short-Term talent outcomes
Over half of our investments have been in the talent space. Many projects in FY22 also focused on talent, and hence our evaluation effort centered around changes in this space. Below are some highlights of the important outcomes of our talent programs.

Interest and awareness of in-demand industry-relevant occupations was increased through employer/faculty/student networking events, inviting new companies to career fairs, hosting multiple in-person and virtual informational sessions, and engaging events like the CTE Skills competition and VibeFest. In the Lynchburg region, 35/36 participants completed the program, all business sites invited more students for next year, and students reported changing their educational or career pathways as a result of the program.

Pipelines to priority industry clusters were strengthened through varied types of training at high school, college, and post-graduate level. Our internship programs (Destination for Talent, Classrooms to Careers, and ELITE), hosted over 200 internships for students. On the training side, new programs for CDL and CompTia were formed, and new programs for automotive and aircraft were explored. Numerous career coaches were hired at the community college level to help increase information about these pathways. In the emerging area of Blockchain, over 150 students participated in intensive Bootcamps, and 54 students were enrolled in the new Blockchain certification program. In total, over 365 students were trained in Blockchain, and two new businesses were created.

Increased completions of degrees or certificates applicable to target industry clusters was furthered. Enrollments in Montgomery County high school certification programs increased, with 55 enrollments in cybersecurity, 17 in computer science, and 69 in information systems. 48 students received a credential in Fall 2021 from the CTE academy, and a new credential from VMWare Academy is being implemented. 353 credentials were awarded with 128 of these in target industry sectors. 216 students are enrolled in dual enrollment, a strong signal of the connections between high school and community colleges along the pipeline. Finally, The VT CS (Computer Science) department hired their first Blockchain specific professor, who is seeking to increase the number of certifications completed.

Enhanced employer engagement was achieved as evidenced by the number of new businesses engaging in workforce and education activities, and businesses increasing their engagement through more in-depth participation. The Destination for Talent program engaged 386 businesses over the course of the project. The project found that regional target businesses found working with GOVA easier than through the existing VT platform, Handshake. Industry reports a better relationship with Virginia Tech, as a result of the program. For example, two companies, Meld and M4 submitted an additional SBIR (Small Business Innovation Research) with the AOE (Aerospace and Ocean Engineering) department. For the Blockchain project, working directly with businesses to understand their use case for the technology was critical. The team served 84 businesses in total through webinars, cultivating relationships and promoting the certificate program, which helps businesses learn more about how their operations can utilize Blockchain. Further many businesses were engaged as potential speakers at the conference. For the CVCC CTE Academy, over 100 business were served

Summary Impact Metrics for Talent and COVID-response

Of the 33 projects contracted between FY18 and FY22, 11 projects commit to reporting jobs outcomes at the project close. So far, grantees have committed 991 jobs, and have reported creating 532 of those. In addition, projects report retaining 47,625 jobs, through the COVID-response grants.

COVID Response:
- Businesses engaged: 3052
- Businesses served: 1571
- Jobs retained: 47,464
- Jobs created: 51

Talent

- Students trained: 1586
- Upskilled employees: 141
- Existing jobs retained: 141
- Jobs filled/created: 247
- Businesses served: 429
- New programs/credentials implemented: 69
- Credentials awarded: 572

FY22 Metrics of GO Virginia Projects

Talent

- Students trained: 205
- Students enrolled in dual enrollment: 155
- Credentials earned: 305
- Businesses served: 276
- Internships completed: 39
- Jobs created/filled: 9

COVID Response

- Businesses served: 199
- Jobs created/filled: 49
- Employees trained/upskilled: 8

Collaborative Sites & Infrastructure

- Students and Faculty utilizing lab equipment: 500
- Industry site visits to CERE Labs: 19
- Jobs created/filled: 14
- Revenue from lab usage: $145,000

VI: Communication and Outreach

Dates of Region 2 Council Meetings: The GO Virginia Region 2 council met on July 29, 2021, October 27, 2021, February 4, 2022, and May 5, 2022.

Dates of updating Growth & Diversification Plan: On August 18, 2021, leaders from across Region 2 gathered in Roanoke to discuss revisions to the 2021 GO Virginia Region 2 Growth and Diversification Plan. The meeting began with opening remarks and was followed by four workgroup sessions, focused on GO Virginia Region 2's four investment strategy areas: Talent, Entrepreneurship, Cluster Scale Up, and Sites and Infrastructure. Three regional sessions to gain feedback on the Growth and Diversification Plan took place in Roanoke (Oct. 4, 2021), Lynchburg (Oct. 5, 2021), and Blacksburg (Oct. 7, 2021).

Project Eagle + Announcement Event: On December 15, 2021, the Virginia Tech Corporate Research Center (VTCRC) held a press conference and reception to announce the approval of their GO Virginia project, Project Eagle+. The Roanoke Times and WDBJ7 published articles about the announcement.

GOVA Region 2 Newsletters: Over the course of July 2021 – June 2022, six GOVA Region 2 newsletters were sent to our mailing list. Newsletters can be viewed on our GOVA Documentation page.

Photo 8: Announcement Event for Project Eagle (Dec 15, 2021)

Photo 9: October 2021 Region 2 Council Meeting

Photo 10: February 2022 Region 2 Council Meeting

Photo 11: May 2022 Region 2 Council Meeting

VII: Project Pipeline

1. Expanding Welding Training Capacity and Jobs in the Roanoke Valley | Botetourt Technical Education Center

2. Center for Entrepreneurship | Lynchburg Regional Business Alliance
3. Airport Commerce Park Regional Development | City of Lynchburg and Campbell County
4. Industry 4.0 for the ACE Workforce | Virginia Tech College of Engineering
5. Junior Achievement of Southwest Virginia
6. United Way of Roanoke Valley
7. Metal Workforce Retention | Town of Bedford
8. Radford Innovation, Certification, & Security Hub| Commonwealth Cyber Initiative (CCI) Southwest VA
9. Rocky Mount Feasibility Study| Franklin County
10. SHOW (Small Business Health and Organizational Wellbeing) | Virginia Tech College of Agriculture and Life Sciences

VIII: Council Members

Name	Company/Agency
Dr. Ray Smoot, *Chair*	Virginia Tech Foundation (Retired)
Dr. Eddie Amos, *Vice Chair*	TORC Robotics (Retired)
Michelle Austin	Bank of Botetourt
Dr. Nathaniel Bishop	Carilion Clinic
Dr. John Capps	Central Virginia Community College
Kenneth Craig	Liberty University
Janice Crawford	Framatome, Inc.
Beverly Dalton	English Construction
Sandy Davis	BCR Property Management (Retired)
Paul Denham	Southern Air Inc.
Dr. John Dooley	Virginia Tech Foundation (Retired)
Dr. Michael Friedlander	Fralin Biomedical Research Institute
Don Halliwill	Carilion Clinic
Mike Hamlar	Hamlar-Curtis Funeral Home
Vince Hatcher	Hollingsworth & Vose Company
Dr. Pat Huber	New River Community College
Victor Iannello	Radiant Physics, Radiant Ventures (R&D)
Fourd Kemper	Woods Rogers Attorneys at Law
Floyd Merryman	Sonny Merryman Inc.
Marty Muscatello	MM Consulting
John Putney	Bedford County
Kimball Payne	The Berkley Group
Debbie Petrine	Commonwealth Care of Roanoke
Luke Towles	Pinnacle Financial Partners
Justin Yalung	Inorganic Ventures

IX: Support Organization

Support staff, CECE and CPE:		
John Provo, Director	Program manager	jprovo@vt.edu
Quina Weber-Shirk, Project Coordinator	Program management, marketing, and outreach	quina@vt.edu
Rachel Jones, Program Coordinator	General administration and planning, council support	rachelcj@vt.edu
Alyssa McKenney, Contracts Program Specialist	Contracts management	alyssa1@vt.edu
Tracie Smith, Fiscal Specialist	Accounting	sweeneyt@vt.edu
Scott Tate, Associate Director for Community Innovation	Applicant technical assistance	atate1@vt.edu
Elli Travis, Economic Development Specialist	Project and program evaluation	emtravis@vt.edu
Sarah Lyon-Hill, Associate Director for Research Development	Planning and research	sarahlh@vt.edu

- GO Virginia Region 2 website: https://cece.vt.edu/GOVAR2.html
- Virginia Tech Center for Economic and Community Engagement website: https://cece.vt.edu/

Appendix 1: Partner List

Note: Grantees report each partner with whom they have directly engaged in the previous quarter. Partners are categorized by type (education, economic development, workforce, etc.) and then asked to rate on a scale of 1-5 how often they engaged with that partner. The list below represents that grantee data

Education Partners

- Lynchburg City Public Schools
- Amherst County Schools
- Appomattox County Public Schools
- Campbell County Schools
- Lynchburg City Schools
- Central Virginia Community College
- Montgomery County Schools
- Floyd County Schools
- Radford City Schools
- Virginia Tech Continuing and Professional Education
- LINK
- VT Corporate Research Center
- Old Dominion Job Corps
- Center for Advanced Innovation in Agricultural (Virginia Tech)

Business Workforce Partners (includes companies engaged in workforce activities)

- Virginia Bio Connect Association
- Jubilee Center
- CB Fleet/Prestige Brands
- Southern Air
- Delta Star
- US Pipe
- Moore and Giles Inc
- City of Lynchburg Public Works
- Centra
- Framatome
- Jamerson Lewis
- Banker Steel
- Freedom School/The Listening
- Bank of the James
- Select Bank
- Academy Center of the Arts
- Smart Contract Research Association
- Protask Incorporated
- VT Blockchain Club
- TORC Robotics

- Bill Trifolo
- PMI Commonwealth
- Jason Nichols
- Audius
- CipherTrace
- APEX
- Sheppard Mullin
- Next Up Solutions LLC
- Maxx Potential Inc.
- Civilian Cyber
- ArchiveCore
- Klarivis
- JLABS
- MCPS Technology Department
- ACI Webs
- Ozmo
- Citizen Broadband
- 1901 Group
- Modea
- Fluxtec
- Automation Creations
- Fontaine Modifications
- Trova

Economic Development and Planning

- Central Virginia Regional Business Alliance
- OnwardNRV
- Valleys Innovation Council/RBTC/Verge
- Roanoke Regional Partnership
- Amherst County EDA
- Lynchburg EDA
- Lynchburg Regional Business Alliance
- Virginia Economic Development Partnership
- Virginia Career Works Roanoke Center

Government

- Town of Amherst
- City of Roanoke
- Roanoke County
- City of Salem
- Franklin County
- Botetourt County
- City of Covington

- Amherst County

Other Businesses

- Draper Aden Associates
- Accupoint Surveying & Design
- TRC
- Deloitte
- ArchieveCore
- Octo
- Amazon Web Services
- Value Technology Foundation
- Seednet
- Carilion
- The Giving Block
- Matchinator
- Flewid Capital
- Vibrent Health
- Rewired.one
- SAIC
- Blockframe
- Capital One
- Moog
- NFT42
- EDC
- SMBW
- Facility Logix
- Leadpoint Digital
- AEP
- VDOT
- Fralin Biomedical Research Institute
- NRV Task Force
- United Way of Southwest VA
- Uncork-it
- Card Isle
-