Blueprint for Attracting and Sustaining Advanced Manufacturing in Southwest Virginia

August 2014

TEMPUR-Contour
RHAPSODY LUXE
TEMPUR-PEDIC

"Tempur-Pedic has been manufacturing mattresses and pillows in southwestern Virginia since 2001, and the plant has undergone both **expansion** and **modernization** since then. The availability of a **reliable workforce,** relatively low operating costs, and proximity to major distribution routes have contributed to the **long-term success** of the operation."

Alex Lupi
Director of Plant Operations
TempurPedic Productions Inc.

Preface

Manufacturing has deep roots in Southwest Virginia. One can see the effects of a strong manufacturing culture and rich tradition throughout communities in the region.

Southwest Virginia's skilled workforce, reliable infrastructure and manufacturing heritage have made it home for leading industry producers of aerospace and automotive components, mining machinery, utility housings, circuit boards, pressure vessels and much more. The region's diverse mix of manufacturing companies demonstrates its ability to attract and sustain a viable manufacturing base.

Southwest Virginia's strategic location provides access to half of the U.S. population in less than a day's drive. The region stretches from the tip of the Commonwealth in Cumberland Gap along a transportation network including Interstates 81 and 77 and four-lane highways connecting to Interstates 26 and 40. The 5,978 square miles of Southwest Virginia also boast the most robust broadband network of any rural area in the country.

With a population of over 400,000, Southwest Virginia is home to manufacturing operations of General Dynamics and Tempur Productions as well as technology companies such as Northrop Grumman and CGI.

Historically, Southwest Virginia has focused on tobacco farming, textiles, furniture manufacturing and energy extraction as the primary employment sectors. These industries have seen significant declines in recent decades leaving behind a foundational workforce that has great aptitude for engineering and manufacturing.

With the resurgence of manufacturing and the reshoring opportunities that exist for the U.S., Southwest Virginia has tremendous potential to attract new operations. Furthermore, the existing manufacturing base in our region has specific needs related to growth and operational success. This Blueprint for attracting and sustaining advanced manufacturing in Soutwest Virginia leverages the region's strengths to identify our competitive position, market opportunities, barriers to growth and needs of the manufacturing section. This Blueprint represents the work of many remarkable people throughout the region and the Commonwealth who think that the opportunities in Southwest Virginia far outweigh the challenges. It is one of several developed for the region addressing regional needs and opportunities.

Photograph at General Engineering
provided by Mike Looney

"As Governor,
I am committed to diversifying
and growing our economy
and manufacturing
is a key component of that
in every region across the Commonwealth,
especially in SWVA.
Advanced manufacturing
is a thriving industry, one that
creates an ecosystem for success
by providing a pro-business
environment,
a robust infrastructure
and a flexible, trainable
workforce.
It is my job to ensure that Virginia
is on the forefront of advanced manufacturing
so that companies, business leaders
and fellow competitors
see our Commonwealth
as a state embracing innovative
technologies and building new
industries."

Terry McAuliffe
Governor of Virginia

Photograph at General Engineering
provided by Mike Looney

The Virginia Coalfield Coalition is an economic development initiative led by the Lenowisco and Cumberland Plateau Planning Districts

The Appalachian Prosperity Project (APP) is a collaborative partnership among the University of Virginia, UVa-Wise, the Virginia Coalfield Coalition, the private sector, and the state to advance education, health, and economic prosperity in Southwest Virginia. The APP is a university-community-industry partnership that uses a systems approach to integrate education, health, and business development.

www.APProject.org

Organized in 1999, the Southwestern Virginia Technology Council has a mission to lead Southwestern Virginians in addressing technology issues for business, education and government with the purpose of enhancing the vitality and social well-being of Southwestern Virginia. Council membership includes businesses, institutions and individuals from the Wytheville region to the far western corner of Virginia.

www.swvtc.org

The Blueprint for Attracting and Sustaining Advanced Manufacturing in Southwest Virginia is an exciting community-based initiative, jointly supported by the Virginia Coalfield Coalition, the Appalachian Prosperity Project and the Southwest Virginia Technology Council to promote the growth of the manufacturing sector in Southwest Virginia.

It builds upon the 2013 workforce study commissioned by the Virginia Tobacco Commission and conducted by the Boston Consulting Group – *Developing an Advanced Manufacturing Workforce for Virginia's Tobacco Region* - which calls for alignment of the detailed cluster strategy, continued support for technical education and coordination among key stakeholders.The Blueprint builds upon the workforce study and outlines the broader ecosystem components required for manufacturing success. Specifically, the Blueprint:

- serves as a comprehensive plan to define priorities and guide actions;
- leverages existing programs and resources and outlines plans to fill identified gaps and capitalize upon current strengths;
- leverages the expertise and experience of local and regional business leaders and citizens;
- demonstrates vision and collaboration;
- enhances chances for successful funding;

Photograph at General Engineering provided by Mike Looney

Blueprint for Attracting and Sustaining Advanced Manufacturing in Southwest Virginia

Vision

Southwest Virginia is a hub for advanced manufacturing – supplying original equipment manufacturers (OEMs) throughout the Eastern U.S. and beyond.

Mission

The Virginia Coalfield Coalition, the Appalachian Prosperity Project and the Southwest Virginia Technology Council seek to improve the quality of life in Southwest Virginia through economic prosperity by fostering an environment where established and future manufacturing operations can be successful.

Values and Guiding Principles

The advanced manufacturing blueprint is built upon guiding principles that understand and appreciate the manufacturing tradition which exists in Southwest Virginia. Recognizing that a strong industrial base is crucial to economic prosperity, the Blueprint:

- celebrates the tremendous work ethic and talents of the region's workforce;
- acknowledges the commitment established manufacturers have already invested in our communities;
- recognizes that health, wellness, prosperity and education are all integrated; and
- commits to creating resources and opportunities for the region's citizens and businesses.

Photo by Tim Cox

Southwest Virginia: a Creative Culture… Authentic, Distinctive, Alive

"Southwest Virginia has a vibrant culture of music and craft. It's a region of spectacular views and opportunities for outdoor recreation which make it an attractive place to visit or plan a lifetime."

The Crooked Road: Virginia's Music Heritage Trail celebrates the unique musical and cultural heritage of Southwest Virginia and enables visitors to experience authentic mountain music in the region where it was born. The 330 mile route passes a multitude of historic music venues in a region where mountain music is an integral part of daily life.

www.thecrookedroad.org

Heartwood is the gateway to Southwest Virginia's craft, music, food and local culture. Formed by a coalition of artisans, economic development groups, state government and regional communities, Heartwood showcases the region's cultural and natural assets and celebrates a region that is authentic, distinctive, and alive!

www.heartwoodvirginia.org

Spearhead Trails, also known as the "Adventure Playground of the East," is a multi-use trail system within far Southwest Virginia that includes equestrian trails, hiking, biking, off-highway vehicles and blueways. The natural beauty of the region, with its unmatched vistas, offers an endless variety of adventures for all ages and skill levels.

www.spearheadtrails.com

'Round the Mountain: Southwest Virginia's Artisan Network is a non-profit organization whose mission is to promote sustainable economic development of the region's communities by assisting local artisans with marketing, educational and entrepreneurial opportunities. Serving the 19 counties and four cities of Southwest Virginia, this craft advocacy organization seeks to help the region fulfill its potential as a nationally recognized arts and crafts tourism destination.

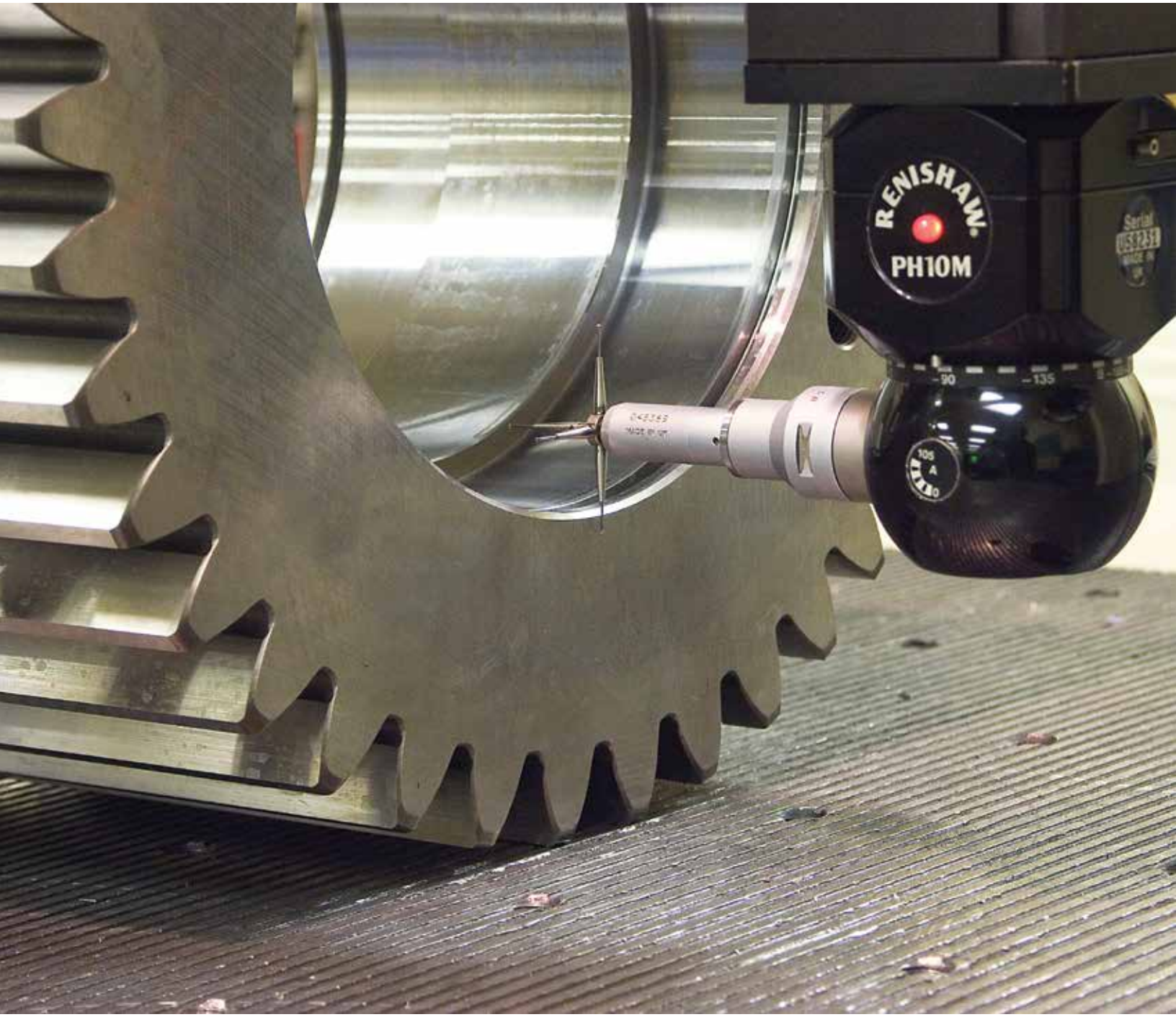
www.roundthemountain.org

Appalachian Spring is an initiative to further develop and promote the world-class outdoor recreation and natural assets of Southwest Virginia in order to create an international awareness of the region as a destination for travel, as well as for living and doing business. Modeled after The Crooked Road: Virginia's Heritage Music Trail, Appalachian Spring is aggregating and cross-promoting eight major outdoor recreation anchor assets, as a part of the broader Southwest Virginia brand: Appalachian Trail, Blue Ridge Parkway, Breaks Interstate Park, Clinch River, Daniel Boone Wilderness Trail, High Knob Recreation Area, Mt. Rogers National Recreation Area, and the New River. The initiative is also working with numerous partners in outdoor recreation and economic development in order to establish an outdoor recreation industry in Southwest Virginia.

www.youtube.com/watch?v=XlYhOMIEDDA

The Clinch River Valley Initiative is an innovative, pioneering and collaborative effort to build local economies in the Coalfields of Southwest Virginia, focusing on the Clinch River Valley—one of the most biodiverse river systems in North America. This grassroots effort is connecting downtown revitalization, outdoor recreation, entrepreneurship and environmental education along the Clinch River. The effort builds upon the unique cultural and ecological assets of the Clinch River to distinguish and create new possibilities in the communities along the Clinch as distinctive cultural and ecological areas, particularly around environmental education and entrepreneurship opportunities. Building on a vision for the Clinch River Valley, five action groups are developing action plans for five goal areas defined by the Initiative.

www.clinchriverva.com



Photograph provided by Joy Global

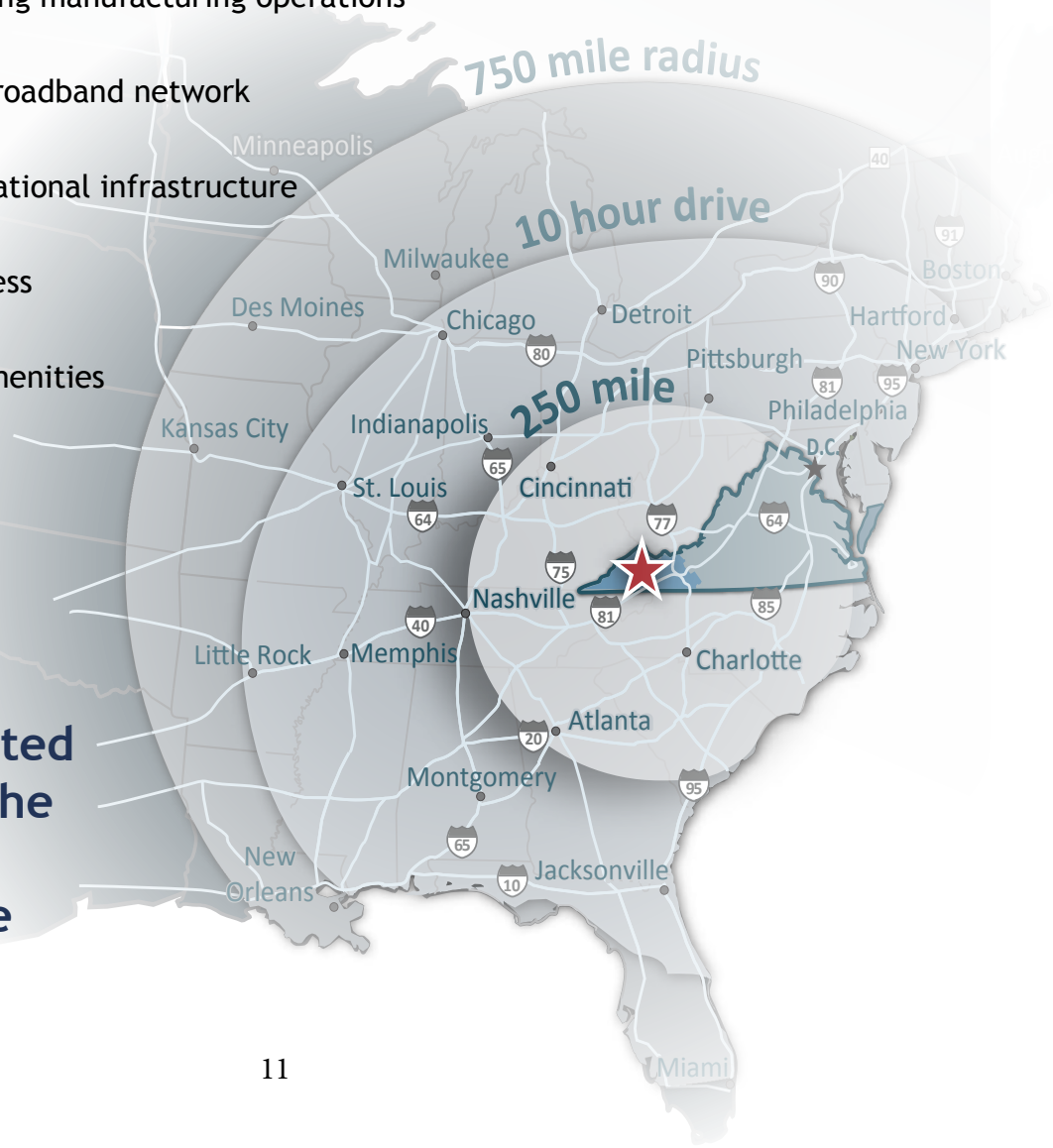
Manufacturing – The Region's Strategic Advantage

Situated along I-81 and its crossroads with I-77 and connections to I-26, Southwest Virginia offers market access to the eastern United States and the Midwest on a robust transportation network that connects with major North-South and East-West arteries. The region, which touches North Carolina, Tennessee, Kentucky and West Virginia, provides market distribution advantages to manufacturers with real-time production and opportunities for just-in-time deliveries.

Add a strong existing industry base of aerospace, automotive, plastics, high tech manufacturing, pharmaceutical, logistics and distribution companies, research and development operations, a skilled workforce with outstanding training opportunities and a lower cost of doing business, and you'll see the advantages of locating in Southwest Virginia.

The Southwest Virginia Advantages include:

- Access to transportation
- Strong, successful existing manufacturing operations
- Redundant fiber optic broadband network
- Skilled workforce, educational infrastructure
- Low cost of doing business
- Superb quality of life amenities

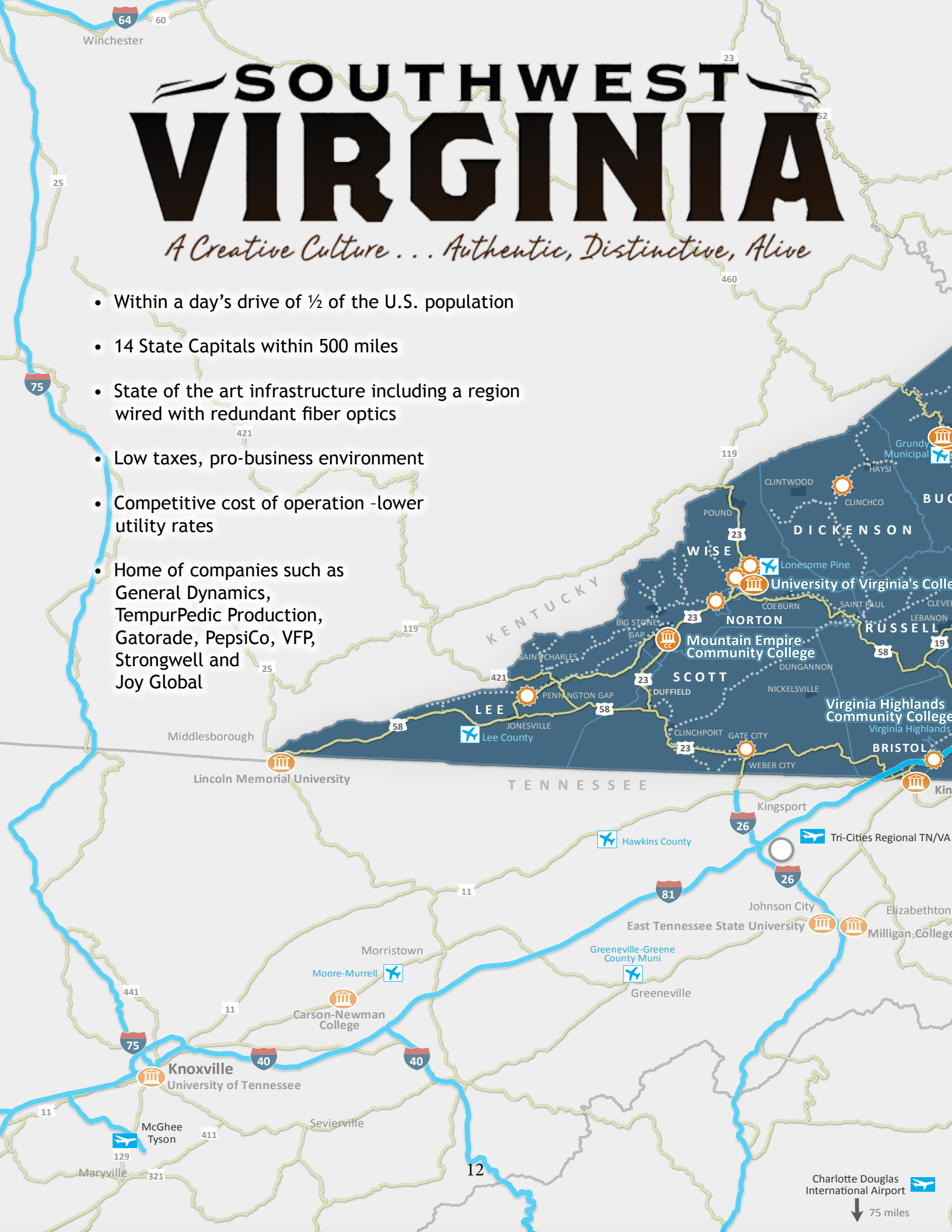


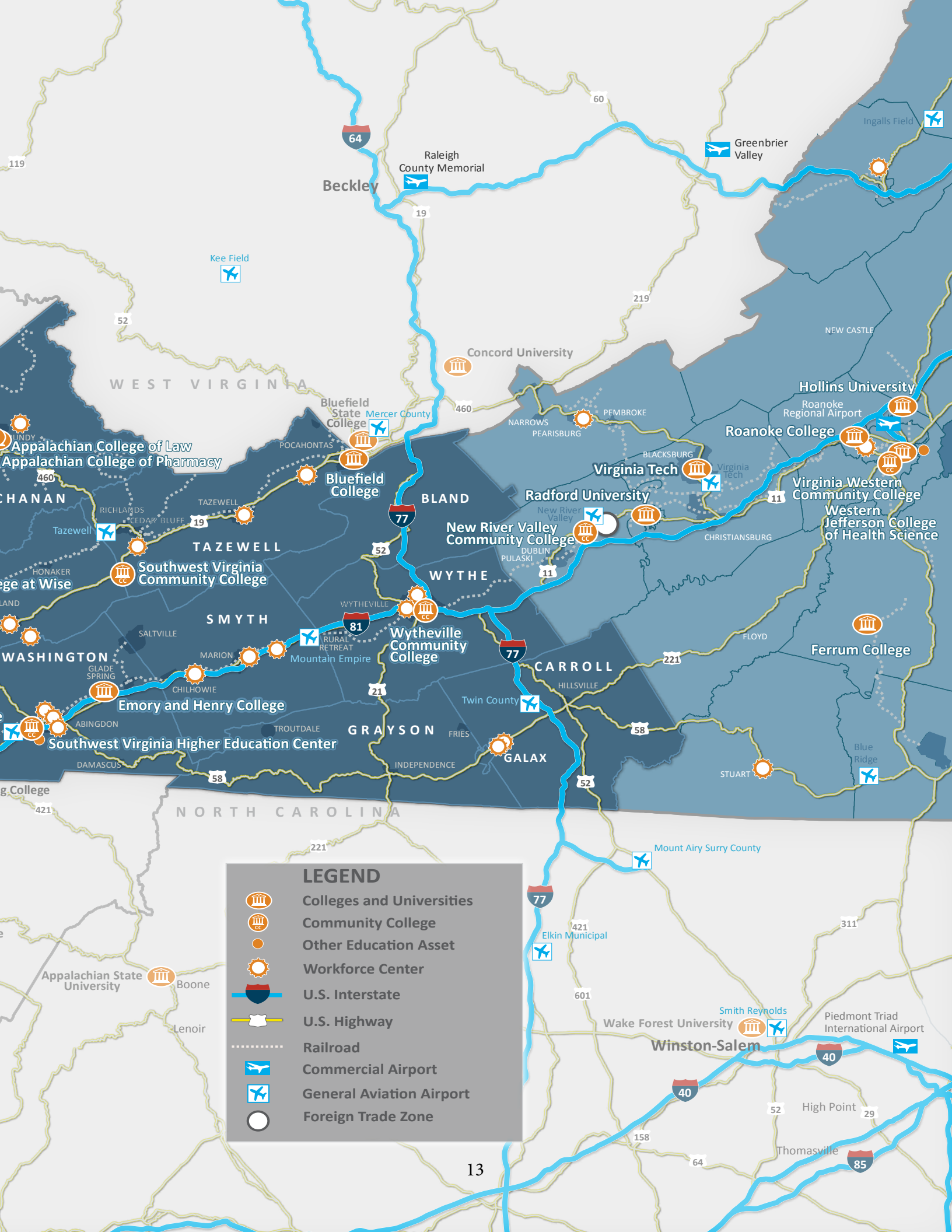
Strategically located to reach half of the U.S. population in one day's drive

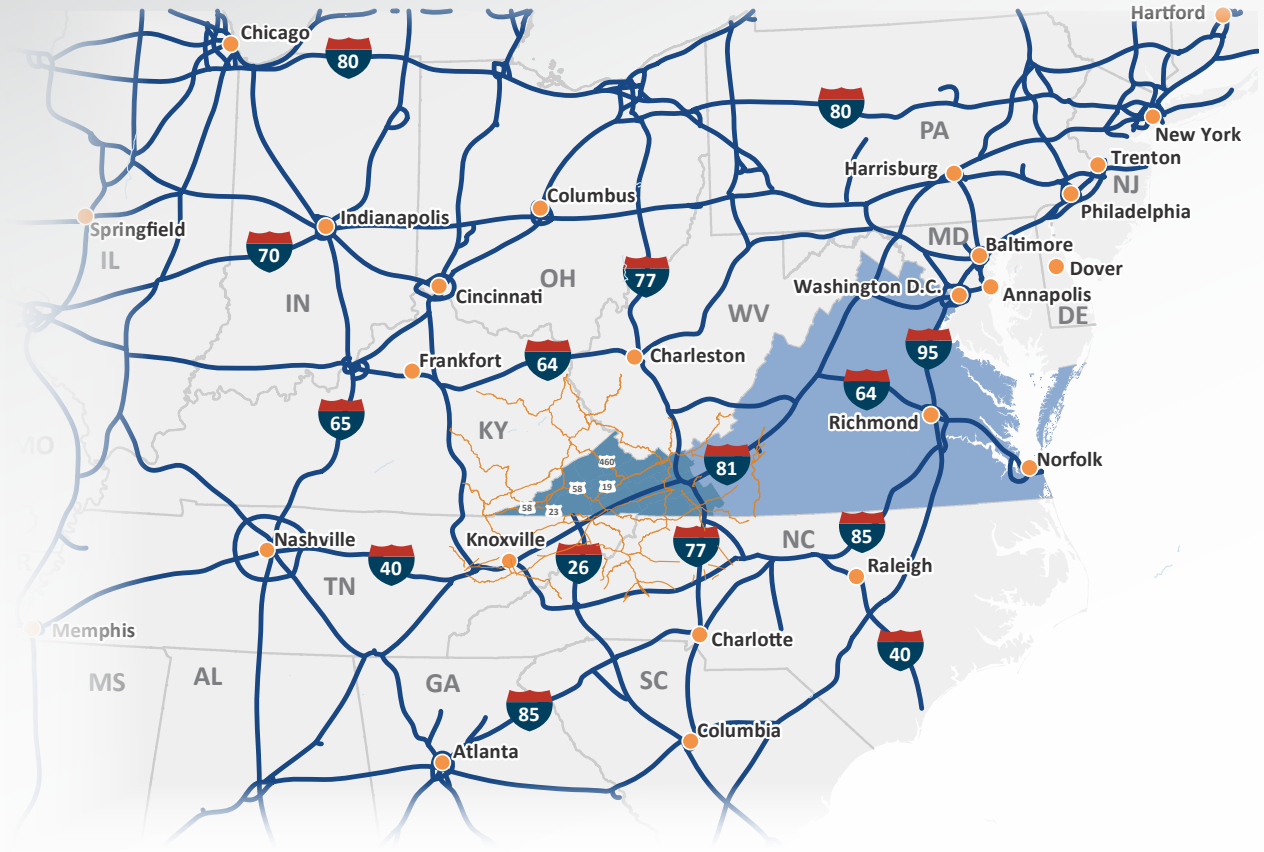
SOUTHWEST VIRGINIA

A Creative Culture . . . Authentic, Distinctive, Alive

- Within a day's drive of ½ of the U.S. population
- 14 State Capitals within 500 miles
- State of the art infrastructure including a region wired with redundant fiber optics
- Low taxes, pro-business environment
- Competitive cost of operation -lower utility rates
- Home of companies such as General Dynamics, TempurPedic Production, Gatorade, PepsiCo, VFP, Strongwell and Joy Global




Beckley
Raleigh County Memorial
Greenbrier Valley
Ingalls Field
Kee Field
Concord University
WEST VIRGINIA
Bluefield State College
Mercer County
Appalachian College of Law
Appalachian College of Pharmacy
Bluefield College
POCAHONTAS
TAZEWELL
Tazewell
RICHLANDS
CEDAR BLUFF
TAZEWELL
BLAND
Southwest Virginia Community College
HONAKER
WYTHE
SMYTH
WYTHEVILLE
SALTVILLE
RURAL RETREAT
Mountain Empire
Wytheville Community College
WASHINGTON
MARION
GLADE SPRING
CHILHOWIE
Emory and Henry College
ABINGDON
Southwest Virginia Higher Education Center
TROUTDALE
GRAYSON
FRIES
GALAX
INDEPENDENCE
DAMASCUS
CARROLL
HILLSVILLE
Twin County
NARROWS
PEARISBURG
PEMBROKE
BLACKSBURG
Virginia Tech
Radford University
New River Valley
New River Valley Community College
DUBLIN
PULASKI
CHRISTIANSBURG
NEW CASTLE
Hollins University
Roanoke Regional Airport
Roanoke College
Virginia Western Community College
Western Jefferson College of Health Science
FLOYD
Ferrum College
STUART
Blue Ridge
NORTH CAROLINA
Mount Airy Surry County
Elkin Municipal
Appalachian State University
Boone
Lenoir
Wake Forest University
Smith Reynolds
Winston-Salem
Piedmont Triad International Airport
High Point
Thomasville
LEGEND
Colleges and Universities
Community College
Other Education Asset
Workforce Center
U.S. Interstate
U.S. Highway
Railroad
Commercial Airport
General Aviation Airport
Foreign Trade Zone



Virginia Facts

- Virginia continues to rank among America's leading states for business, according to CNBC and Pollina
- Ranked as America's 2013 Best State for Business by Forbes.com
- 3rd lowest worker's compensation employer insurance cost
- 5th lowest unemployment insurance tax rate
- 6 percent corporate income tax rate that hasn't increased since 1972
- 6th most corporate tax-friendly state, as reported in 2014 by the Tax Foundation
- In 2014, the average cost per unit of electricity for the industrial sector was 6.43 cents in Virginia, compared to 6.91 cents for the nation
- Virginia has a low unionization rate - only 3.1 percent of private sector workers are union members

Map support provided by
Virginia Economic Development Partnership

Virginia
YesVirginia.org
BEST STATE FOR BUSINESS

Introduction to Strategies

Southwest Virginia's skilled workforce, reliable infrastructure and manufacturing heritage have made it home for leading industry producers of aerospace and automotive components, mining machinery, utility housings, circuit boards, pressure vessels and much more. The blueprint builds upon the assets and characteristics that already make the region an excellent location for manufacturing. This blueprint will empower communities in Southwest Virginia to:

- develop a talent pipeline
- build the manufacturing ecosystem
- encourage innovation
- promote the region as a hub for advanced manufacturing

Photograph provided by Joy Global

Strategy #1
Develop Educational Pathways & Talent Pipeline

Build a highly educated and innovative workforce which includes the next generation of leaders with strong work ethic and team skills

Align education and training programs with needs and expectations of manufacturers.

- Strengthen relationships and communication channels between educational entities, entrepreneurs and industry.
  - Establish peer-to-peer groups or manufacturing councils throughout the region and have the industry speak with one voice when communicating with educators.
  - Engage manufacturers and other private sector employers in K-12 education; invite manufacturers into the classrooms, especially at the primary and middle school level.
  - Engage Federal and State Legislators so that as they take actions which impact manufacturing and education, they are supporting the ultimate effectiveness of the education process.
- Build education and training programs with exceptionally trained graduates.
  - Identify industry-recognized certifications and required skills and emphasize these along with degree programs.
  - Identify transferrable skills amongst differing industries at all levels and develop programs to build and reinforce.
  - Create transition programs and incentives for displaced or re-careering individuals targeting manufacturing.
  - Explore dual enrollment opportunities in advanced manufacturing required skills and knowledge areas.
  - Develop a sustaining regional "Leadership Academy" umbrella of programs/certifications, with flexible yet measurable criteria for programs to fall under this umbrella.
- Build/develop state of the art facility or facilities to support advanced training programs; Leverage Tobacco Commission funds for Center of Excellence in region.

Build a strong pipeline of participants for manufacturing/skill trade programs.

- Promote manufacturing career opportunities at all levels.
  - Hold annual manufacturing career fairs and/or showcases similar to the International Space Station event held in Wise County in 2013 which engaged approximately 5000 k-12 students in space exploration strengthening their interest in STEM fields. Frequent career fairs and/or showcases will foster the perception that these events are to drive results rather than to be an annual "event."
  - Develop and implement an advanced manufacturing marketing strategy for the community which factors in the need for potential research and development components.
    - Educate the general public (parents, grandparents, career coaches, media representatives) of the new face of manufacturing. Use a multimedia approach, including town hall meetings, social media and traditional mass marketing such as PSA's and bulk mail.

Strategy #1 (Continued)
Develop Educational Pathways & Talent Pipeline

- Design a concentrated educational effort directed toward high school guidance counselors and career coaches regarding the career opportunities available in advanced manufacturing. Obtain support from each school board that performance metrics will support this initiative.
- Coordinate tours of manufacturing facilities throughout the region for the public. Feature at least one employer in sub regions each quarter.
- Find meaningful experiences for young students to be exposed to manufacturing along with the educational tracks they will need to undertake to come back and achieve these skill sets. Utilize both on-site experiences as well as manufacturing laboratories. Promote "what" is made in SWVA and locations to which the products are distributed.
- Find ways to show "How it is made" specifically in SWVA.
- Promote manufacturing jobs as "high-tech and high value" jobs.
- Engage state and national organizations promoting veterans employment and access for matching veterans with employers.

▪ Design promotional campaign to target and engage women in manufacturing programs.
▪ Highlight the opportunities manufacturing careers offer for upward mobility and skill development.
▪ Develop summer camps for youth to introduce them to manufacturing and the required skills. This should apply to youth who are targeted for professional occupations, such as Management and Engineering, as well as Advanced Manufacturing Technicians.

- Highlight the profit that can be made by small and midsized manufacturers
  - ▪ Highlight that economic barriers to entry (investment) in manufacturing are not high as it is often thought.
  - ▪ Highlight the opportunity for innovation, invention and enterprise to create wealth for those who start manufacturing companies and those who work with them.
- Develop a manufacturing apprenticeship/internship exchange amongst the regions colleges, high schools and manufacturers that enhances active learning and employment opportunities.
- Ensure all groups of students have career paths and well developed soft skills.

Enhance existing workforce capacity.

- Reenergize and expand across the region the Return to Roots program to bring back native sons and daughters to the region; Explore including access to Return to Roots candidate pool as an economic development incentive or giving extra credit to companies bringing back SWVA natives.
- Conduct a study and identify two or three "Quality of Life" infrastructure issues that could be improved to prevent migration of emerging talent or attract it back to the area.
- Develop a health conscious workforce to enhance worker efficiency and productivity.
- Identify issues that drive residents to feel compelled to seek public assistance for healthcare rather than utilize employer provided healthcare.
- Promote "Bring a Child to Work" program so that they can shadow mentors.
- Develop a mentoring program in the manufacturing sector for students and teachers to enable "eyes on training."

Strategy #2
Build the Manufacturing Ecosystem

Build a strong and supportive environment for manufacturing success

Cultivate the region's understanding and appreciation for "Advanced" Manufacturing.

- Build a cultural mindset within the supply chain and workforce for LEAN principles and Just-In-Time manufacturing.
- Provide opportunities for small to medium sized manufacturers to obtained LEAN, green belt, black belt, and Six Sigma Certifications.
- Create a "Lean Boot Camp" for Managers and Professionals which is held every quarter.

Create opportunities for manufacturers to grow and strengthen supply chain.

- Create an environment where existing manufacturers can expand to new lines of business.
  - Match leaders and innovators – Innovative new products are needed to allow 'new line of business' and high quality leaders/entrepreneurs are needed to commercialize them.
- Encourage and incentivize automation of operations for manufacturers in order to enable their efficiency and competitiveness.
- Scale up supply chain.
  - Leverage relationships with key strategic manufacturers in Virginia to introduce SWVA small to medium size companies to their supply chain opportunities.
  - Provide resources and training to assist small to medium size manufacturers in expanding capacities to serve in new supply chains.
  - Identify suppliers of larger existing manufacturers in SWVA and recruit them to the region.
- Promote resources available in the areas of training, information, environmental assistance, etc.

Strengthen the supportive environment in which manufacturers operate in the region.

- Actively seek to create policies that are business friendly with an eye toward manufacturing and leveling the playing field in a globally competitive economy. Ask existing manufacturers for feedback on current and proposed policies.
- Improve the region's quality of life by enhancing amenities for younger citizens and increasing awareness of what currently exists.
- Develop manufacturing peer groups to better understand the resources and collaboration opportunities which exist in the region in order to promote business-to-business relationships.
- Identify areas with a lack of childcare and encourage the development of the service; Engage the My SWVA Opportunity initiative to encourage entrepreneurial development in childcare services.

Strategy #2
Build the Manufacturing Ecosystem

Enhance Industrial Infrastructure

Continue efforts to enhance reliability of utilities.

- Improve reliability and redundancy of utilities, e.g., power, water, and broadband; diversify energy access, including availability and access to natural gas.
- Develop a regional energy policy and strategic plan to capitalize on the abundance of existing energy resources.

Strengthen the region's logistics and transportation network.

- Improve access to public transportation.
- Maintain rights of way and easements for abandoned railways for future economic development use.
- Explore opportunities for connecting to Amtrak hubs in D.C., Charlotte, Atlanta, Roanoke, etc.
- Design plan to leverage the multi-modal facility for rail to truck/truck to rail access.
- Find opportunities for maximizing efficiency in freight trips in order to reduce cost of transportation where possible.
- Explore opportunities for enhancing air transportation.

Expand access to available buildings and sites.

- Inventory available publicly and privately owned buildings; Ensure information is consistently updated in Virginia Scan.
- Improve the stock of available buildings. Encourage existing manufacturers to rebuild their existing factories and vacate older cheaper facilities to allow incomers to take "low cost buildings."

I commend and fully support the team of individuals and organizations from the public and private sectors that came together to create a Blueprint for Attracting and Sustaining Advanced Manufacturing in Southwest Virginia. This blueprint demonstrates a commitment of many partnerships in SWVA to create a workforce skilled in cutting edge technology that can compete on the global stage.

SWVA's unique location with its access to America's Heartland in a day's drive makes the region a prime location for advanced manufacturing in Virginia.

Maurice Jones
Virginia Secretary of Commerce
and Trade

Strategy #3
Encourage Innovation

Leverage the region's strengths of flexibility, ingenuity, university capabilities and manufacturing expertise to drive innovation

Create an environment that supports attracting and sustaining R&D into the region.

- Leverage current state and local incentives and establish new incentives to attract R&D, along with scalability and testing to move toward commercialization.
- Support innovative, additive manufacturing initiatives including digital manufacturing and design innovation.
- Build a team of Subject Matter Experts (SMEs) needed to conduct due diligence on new R&D opportunities incorporating not only market viability, business stability and technological soundness but leadership capacity as well. Work closely with the faculty of area colleges to document their resources and student interests.
- Align regional due diligence efforts of companies with those of private angel/venture capital.
- Explore with officials/faculty of Appalachian College of Law about supporting an Intellectual Property (IP) curriculum of study.
- Host a seminar to educate local economic developers regarding strategies available to assess a firm's "readiness factor' as a means of determining risk.
- Leverage existing resources supporting entrepreneurial ventures and small businesses by engaging the My SWVA Opportunity regional entrepreneurship effort.

Promote the region as a viable location for R&D and early-stage companies.

- Highlight existing R&D efforts underway with existing developers, manufacturers, and other firms in the region.
- Conduct seminars that inform new R&D companies from outside the region, on the myriad incentives currently available and their conditions of use.

"I applaud SWVA for undertaking the development of this Blueprint. Technological advances in manufacturing are spurring a new wave of economic opportunities for both entrepreneurs and existing companies. I look forward to supporting the implementation of the Blueprint and to seeing the resurgence of the manufacturing industry in SWVA."

Karen Jackson
Virginia Secretary of Technology

Strategy #4
Promote the Region as a Hub for Advanced Manufacturing

Position the region as a manufacturing region; celebrate success of existing manufacturers and target small – medium sized operations

Benchmark and evaluate Southwest Virginia's competitive advantages in order to continue enhancing the region's value proposition.

- Understand our competitive advantage.
  - Benchmark SWVA against our competition (global and domestic).
  - Identify what the manufacturing industry needs to be successful.
  - Leverage the region's central location on the east coast and access to the majority of the U.S. population.
  - Evaluate effectiveness of current economic development incentives and develop innovative, simple and straight forward incentives to better match needs of the industry.
- Identify barriers to larger manufacturers selecting SWVA; visit out-of-state manufacturing operations to get feedback on the region.
- Explore a Federal Manufacturing Hub designation as part of the National Network for Manufacturing Innovation (NNMI).

Promote the region's manufacturing identity.

- Create and promote our own regional image and not let others define us. Promote one brand / name for the region "Southwest Virginia" vs. "Southwestern Virginia"
- Think "regionally" not by counties and cities. Explore partnerships across state lines.
- Focus on specific target industries and opportunities.
  - Target small to medium sized manufacturing operations and reshoring opportunities.
  - Identify cluster industries for targeted promotions.
  - Target operations that will attract new talent to the region in addition to retaining the region's current talent.
  - Target "half-wayers" those that want to live/stay between North and South in the US.
  - Coordinate a regional visit from key target industry decision makers.
- Assure those marketing the region are armed with the appropriate messages, materials and skills to tell the region's story. Provide high quality maps and highlight the cost benefit regionally and internationally: wage rates, buildings costs, energy costs, tax rates, etc.
- Partner with tourism entities to highlight amenities, cultural assets; promote our strategic location and our uniqueness (food, culture, music, etc.).
- Leverage relationship with the Commonwealth's Center for Advanced Manufacturing (CCAM) to maximize industry recruitment opportunities.
- Promote the resources available in the region for existing manufacturers. Encourage business to business/ customer-supplier relationships among existing manufacturers. Increase connections and diversification for existing manufacturers.
  - Host Manufacturing B2B Showcases.

Strategy #4 (Continued)
Promote the Region as a Hub for Advanced Manufacturing

- Highlight manufacturing success in SWVA; launch a proactive media and promotional campaign.
- Consider publishing a manufacturing directory for the region as a tool for the area's economic developers and manufacturers to access inputs/outputs and compare with items presently being imported/exported.

- Ameliorate outside perceptions on the quality of education by making available easy-to-access and understand educational attainment metrics.
- Use this Blueprint as a robust marketing tool to show prospective manufacturers the region is focused on the industry.
- Promote the presence of few natural and manmade threats in Southwest Virginia.
- Leverage relationship with the region's former residents and supporters in order to encourage them to identify and refer opportunities.

"We found the economic incentives and industrial culture ripe for our decision to move our R&D company to Southwest Virginia with a strong eye toward manufacturing in the region."

Karen Sorber
CEO, Micronic Technologies

Photo provided by Universal Fibers provided by The Southwest Virginia Alliance for Manufacturing

Participants

During a series of three community forums, economic developers, educators, health care professionals, government agencies, employers and local business leaders gathered to spend time considering what the region must do to support the manufacturing industry. The format was interactive and collaborative, building upon each participant's expertise and driving toward a consensus on the region's challenges and strengths. These community discussions, combined with dozens of follow up discussions, ultimately led to the creation of this comprehensive document.

The following individuals provided input into the development of the blueprint. The inclusion of names and organizations does not mean that participants agree with all the statements in this document.

Lorraine Abraham, Emory and Henry College
Karen Akers, Virginia Employment Commission
Joe Anwyl, Commonwealth Center for Advanced Manufacturing
Jerry Arnold, VFP, Inc.
Greg Baker, Scott County Economic Development Authority
Jim Baldwin, Cumberland Plateau Planning District Commission
Craig Barbrow, USDA Rural Development
Howard Batholomay, Universal Fiber Systems
Craig Belcher, Southwest Virginia Technology Council Board
Jonathan Belcher, Virginia Coalfield Economic Development Authority
Darrel Blankenship, Workforce Investment Board
Laura Blevins, Senator Tim Kaine's Office
Shannon Blevins, The University of Virginia's College at Wise
Sue Ellen Boatright-Wells, Mountain Empire Community College
Jeoff Bodenhorst, LA Corp.
Esther Bolling, SWVA Technology Council
Paul Bolling, Arch Coal
Whitney Bonham, Virginia Tech
Buckey Boone, Virginia Early Childhood Foundation
Bob Bost, Lee County Chamber of Commerce
Stan Botts, Jr., Botts Optometry
David Carpenter, Southwest Heat Treat, Inc.
David Cattell-Gordon, University of Virginia
Ricky Chafin, American Electric Power
Tommie Clements, Mountain Empire Community College
Bill Carrico, Senate of Virginia 5th District
Mary Rae Carter, Office of the Governor for Virginia
Cheryl Carrico, VT Ph.D. Program
Tom Casteel, Department of Social Services
Rick Colley, Wise County Chamber of Commerce
Diana Collier, Virginia Employment Commission
Susan Copeland, Virginia Coalfield Economic Development Authority
Steve Cronemeyer, Verizon, Inc.
Ed Davidson, Coalfield Services
Vicki Delp, Manufacturing Technology Center
Cory Dotson, First Bank and Trust
Alan Dougherty, Joy Global
Lennie Gail Dunlop, Southwest Virginia Alliance for Manufacturing
Debbie Eades, Bristol Compressors
Greg Edwards, Dominion
Tom Elliott, Virginia's aCorridor
Dr. J. Mark Estepp, Southwest Virginia Community College
Sim Ewing, The University of Virginia's College at Wise
Alan Freeman, Quadrant EPP USA Inc.
Roger Fraysier, Scott County Telephone Cooperative
Jim Gerland, Mountain Empire Community College
Kenny Gilley, Wise County Board of Supervisors
Joe Gillespie, Virginia Economic Development Partnership
Christa Glassburn, Pyott-Boone Electronics, Inc.
Gil Graham, Scholle Packaging
Gary Hale, Virginia Employment Commission
Roger Halsey, Wytheville Community College
Dr. Scott Hamilton, Mountain Empire Community College
Alan Hawthorne, Joint IDA Wytheville
Leton Harding, Powell Valley National Bank
Marketta Horton, Virginia Coalfield Economic Development Authority
George Hunnicut, Pepsi Corp.
Doug Jackson, Virginia Department of Housing & Community Development
Michelle Jenkins, Congressman Morgan Griffith's Office
Bill Kahl, Steel Fab
Gary Larrue, Carroll County
Frank Kibler, Lenowisco Planning District Commission
John Kilgore, Scott County Economic Development
Mark Larson, Occupational Enterprises Inc.
Michael James, Lee County IDA
Melinda Leland, Virginia Highland Community College
Tom Lester, Tal Consulting
Pace Lochte, University of Virginia
Lea Lofty, Virginia Department of Business Assistance
Drew Lumpkin, Senator Mark Warner's Office
Alex Lupi, Tempur-Pedic Production USA
Tony Martin, Bancroft Hall
Ken McFadden, Blue Ridge Crossroads Economic Development Authority
Mike McGregor, Miner's Exchange Bank
Art Meade, Weldon Cooper Center
Rhonda Meadows, Samuel Pressure Vessel Group
Steve Miller, Misty Mountain Spring Water
Dan Minahan, Crutchfield, Inc.
Charlotte Mullins, Dickenson County IDA
Tim Mullins, Thompson & Litton
Kevin Mumpower, Bristol Compressors
Linda Newman, Manufacturing Technology Center
Rachel Patton, Workforce Investment Board
Sharon Peery, Southwest Virginia Community College
Clark Phipps, Sykes, Inc.
Randy Porter, Environmental Monitoring Inc.
Will Powers, Rolls-Royce
John Provo, Virginia Tech
Phillip Puckett, Senator of Virginia 38th district
Don Purdie, Data Ensure, Inc.
Marcia Quesenberry, The University of Virginia's College at Wise
Vickie Ratliff, Mountain Empire Community College
Jeff Rowlett, Lee Bank
Nicky Rahley, Southwest Virginia Higher Education Center
Harry Rutherford, Russell County IDA
Feldon Sanders, Coalfield Services, Inc.
Shannon Scott, Wise County
Pam Seals, Joy Global
Richard Settle, Settle and Associates
Herbert Shortt, Pound Industrial Development Authority
Kimber Simmons, Joint IDA Wytheville
Skip Skinner, Lenowisco Planning District Commission
Carl Snodgrass, Wise County IDA
Karen Sorber, Micronic Technologies
Travis Staton, United Way of Virginia Highlands
Jonathan Sweet, Grayson County
Jim Talley, General Dynamics
Matt Tavenner, Wellmont Health System
Nelson Teed, Manufacturing Technology Center
James Thomas, Bristol Compressors
Mike Thompson, Tazewell County
Richard Thompson, Radical Combustion Technologies
Terry Truett, PepsiCo
Bobby Tuck, Tuck Mapping Solutions, Inc.
Mitzi Williams, Mountain Empire Community College
Sam Wolford, Tazewell County
Mitch Williams, Strongwell Corporation
Tracy Wright, Strongwell Corporation

Business Resources

Economic Development

Jurisdiction	Name	Email	Phone
Bland County	Eric Workman	eworkman@bland.org	276 688-4622
Blueridge Crossroads Economic Development Authority	Ken McFadyen	director@brceda.org	276 236-0391
Buchanan County	Craig Horn	rchorn@bvunet.net	276 597-7909
Carroll County	Gary Larrowe	carrolladmin@carrollcountyva.org	276 730-3000
City of Bristol	Andrew Trivette	atrivette@bristolva.org	276 645-7471
City of Galax	Keith Barker	kbarker@galaxva.com	276 236-5773
City of Norton	Fred Ramey	fredr@nortonva.org	276 679-1160
Dickenson County	Mitzi Sykes	mitzi.sykes@ida.dcwin.org	276 926-1619
Grayson County	Jonathan Sweet	jsweet@graysoncountyva.com	276 773-2471
Lee County	Michael James	mjames@co.lee.state.va.us	276 346-7766
Russell County	Harry Rutherford	russellcountyida@bvu.net	276 971-0173
Scott County	John Kilgore	jkilgore@scottcountyva.com	276 386-2525
Smyth County	Lori Hester	lhester@smythcounty.org	276 783-3298
Tazewell County	Mike Thompson	mthompson@tazewellcounty.org	276 395-1270
Town of Abingdon	Kevin Costello	kcostello@abingdon-va.gov	276 676-2282
UVa-Wise	Shannon Blevins	sblevins@uvawise.edu	276 328-0162
Virginia Coalfield Economic Development Authority	Jonathan Belcher	jonathan@vaceda.org	276 889-0381
Virginia's aCorridor	Tom Elliott	telliott@acorridor.com	276 783-9474
Washington County	Jason Berry	jberry@washcova.com	276 525-1305
Wise County	Carl Snodgrass	econdev@wisecounty.org	276 328-2321
Wythe County, Wytheville & Rural Retreat	David Manley	david.manley@wytheville.org	276 223-3370

Chamber of Commerce (Towns and Counties)

Jurisdiction	Name	Email	Phone
Bland County/ Wythe	Jennifer W. Atwell	chamber@wytheville.org	276 223-3365
Bristol City	Joy Madison	jmadison@bristolchamber.org	423 989-4850
Buchanan County	Mary Belcher	bcchamber@bvu.net	276 935-4147
Carroll County	Judy Brannock	info@twincountychamber.com	276 236-2184
Dickenson County	Rita Surratt	chamberdickenson@yahoo.com	276 926-6074
Grayson County	Judy Brannock	info@twincountychamber.com	276 236-2184
Greater Bluefield Chamber of Commerce	Marc Meachum	info@bluefieldchamber.com	304 327-7184
Lee County	Rita McCann	director@leecountyvachamber.org	276 337-9277
Richlands Area Chamber of Commerce	Ginger Branton	richlandschamber@roadrunner.com	276 963-3385
Russell County	Linda Marshall	lindatate@bvunet.net	276 889-8041
Scott County	Penny Horton	phorton@scottcountyva.com	276 386-6665
Smyth County	Sarah Gillespie	sgillespie@smythchamber.org	276 783-3161
Tazewell Area Chamber of Commerce	Pam Meade	info@tazewellchamber.org	276 988-5091
Washington County	Suzanne Lay	chamber@bvu.net	276 628-8141
Wise County/City of Norton	Rick Colley	wisecountycoc@verizon.net	276 679-0961

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Business Resource List

Organization	Name	Email	Phone
Appalachian One-Stop Workforce Center/Richlands Business Incubator	Meagan McGhee	amwhitt@tazewellcounty.org	276-963-2660
Bluestone Workforce Training Center and Business Incubator	Pamela Necessary	pnecessary@tazewellcounty.org	276-988-8976
Center for Innovative Technology	Bob Stolle	robert.stolle@cit.org	804-240-0273
Lonesome Pine Tourist & Information Center	Anita Wade	gap.partnership@yahoo.com	276-523-2060
Manufacturing Technology Center	Nelson Teed	nteed@wcc.vccs.edu	276-223-4889
My SWVA Opportunity - Regional Entrepreneurship	Brandi Hall	bhall@uvawise.edu	276-254-2802
New River/Mt. Rogers Workforce Investment Board (WIA 2)	Ronnie Martin	ronnie.martin@nrmrwib.org	540-633-6764
People Incorporated	Deborah Wagner	dwagner@peopleinc.net	276-623-9000
Pioneer Centers for Business Opportunity	Tim Blankenbecler	tblankenbecler@me.vccs.edu	276-431-7226
Planning District Commission (1) Lenowisco	G.A. "Skip" Skinner	lenowisco@lenowisco.org	276-431-2206
Planning District Commission (2) Cumberland Plateau	Jim Baldwin	jimbaldwin@bvu.net	276-889-1778
Planning District Commission (3) Mount Rogers	Brian Reed	staff@mrpdc.org	276-783-5103
Procurement Technical Assistance Center	Carolyn Alley	pac.info@sw.edu	276-964-7334
Round the Mountain: Southwest Virginia's Artisan Network	Diana Blackburn	info@roundthemountain.org	276-492-2408
SCORE Bristol	Guy Briggs	gvbriggs@btes.tv	423-878-2919
Small Business Development Center - MECC	Tim Blankenbecler	tblankenbecler@me.vccs.edu	276-523-6529
Small Business Development Center - SWCC	Margie Douglass	margie.douglass@sw.edu	276-964-7345
Small Business Development Center - VHCC	Tom Fleckenstein	tfleckenstein@vhcc.edu	276-739-2515
Southwest VA Workforce Investment Board Area (1)	Darrell Blankenship	dblankenship@wiaone.com	276-883-4034
Southwest Virginia Cultural Heritage Foundation	Todd Christensen	kalen.collins@dhcd.virginia.gov	276-492-2424
Southwest Virginia Alliance for Manufacturing	Lennie Gail Dunlop	lgdunlop@swvam.org	276-492-2100
Southwest Virginia Medical Reserve Corps	Kristina Morris	kristina.morris@vdh.virginia.gov	276-274-0555
Southwestern Virginia Technology Council	Esther Bolling	ebolling@swvtc.info	276-679-7800
USDA Rural Development	Kent Ware	kent.ware@va.usda.gov	804-287-1551
Virginia Community Capital	Wayne Waldrop	wwaldrop@vccva.org	804-793-0986
Virginia Department of Housing and Community Development	Lisa Atkinson	lisa.atkinson@dhcd.virginia.gov	804-371-7000
Virginia Department of Small Business and Supplier Diversity	Heather McDonough	heather.mcdonough@sbsd.virginia.gov	804-371-8230
Virginia Department of Small Business and Supplier Diversity	Sandy Ratliff	sandy.ratliff@sbsd.virginia.gov	276-676-3768
Virginia Economic Development Partnership	Joe Gillespie	jgillespie@yesvirginia.org	276-730-4709
Virginia Economic Development Partnership - International Trade	Diane Thomas	dthomas@yesvirginia.org	276-623-1536
Virginia Employment Commission - Norton	Diana Collier	diana.collier@vec.virginia.gov	276-679-9416
Virginia Employment Commission- Cedar Bluff	Frank Taylor	cedarbluff@vec.virginia.gov	276-964-4007
Virginia Employment Commission- Galax	Bill Webb	wwebb@vec.state.va.us	276-236-5105
Virginia Employment Commission- Marion	Joan McCleary	joan.mccleary@vec.virginia.gov	276-781-7431
Virginia Highlands Small Business Incubator	Cathy Lowe	clowe@vhsbi.com	276-492-2060
Virginia Jobs Investment Program	Lea Lofty	lea.lofty@yesvirginia.org	276-608-6167
Virginia Small Business Financing Authority	Linda Gilbert	linda.gilbert@sbsd.virginia.gov	540-492-0493
Virginia Tourism Corporation	Kitty Barker	kbarker@virginia.org	276-466-8772
Virginia Tourism Corporation	Randall Rose	rrose@virginia.org	276-322-2044

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