Growth & Diversification Investment Plan  
“SoVaGO”  
Region 3 of the GO Virginia Initiative  

Executive Summary

The Southern Virginia GO Virginia Region (“SoVaGO” or “Region 3”) is a region of monumental potential. To plan for a future that fully employs this potential, it is imperative that we remain focused on two key questions: what are the greatest growth and diversification opportunities for Region 3, and what are our greatest gaps? Our greatest opportunity is to align our workforce talent development with our economic development in areas where we already have substantial activity and competitive advantage, to translate our existing success stories into region-wide advancement. Our greatest gap is that we have an aging and shrinking population. We are losing our young and talented individuals to other areas, and our existing workforce is aging en masse towards retirement. We must retain, train, and grow a sustainably sized, well-qualified workforce that meets the needs of our existing and future businesses, and that enables our region to thrive.

What follows is the Growth & Diversification Investment Plan for Southern Virginia GO Virginia (SoVaGO) Region 3. The plan begins with an explanation of intent, and a summary of a much larger report, the “GO Virginia Southern Virginia Region 3 Regional Planning Data Analysis,” which is found in Appendix I. This larger report provides a detailed demographic and socioeconomic description of the region, an analysis of employment and workforce trends, documentation of business sentiment, and an exploration of Region 3 assets. Following that summary is an analysis of three critical opportunities:

- Workforce Talent Development and Recruitment — Making sure we develop and retain people that have the hard and soft skills our region needs to advance economic opportunity and the growth of higher wages;
- Sectoral Development — Given limited resources, what are the business sectors that have the greatest potential of growing the number of employees, the wage levels and the types of businesses in the region; and,
- Cyber Infrastructure — In the 19th Century it was railroads, in the 20th Century it was roads; going forward it will be areas with internet and broadband that will be more competitive; all of this region must be "connected" with this infrastructure in order to sustain a healthy economy.
Each section of this Growth & Diversification Investment Plan was completed by experts and practitioners in relevant fields, with input from local stakeholder groups. The approach to the development of the Plan was designed and approved by the Region 3 Council, which was also consistently engaged in the review and ultimate drafting of the document. The overlap in recommendations from the experts, practitioners, and local stakeholders across areas of expertise, despite no formal cross communication during the development process, is telling. Themes were consistent, and have informed the confident ultimate selection of critical opportunities. Recommendations for first steps that can result in the biggest impact for the region within these critical opportunities are outlined as follows:

**Workforce Talent Development and Recruitment**

The first overarching critical opportunity for Region 3 is the development, recruitment, and maintenance of workforce talent with the hard and soft skills the region needs to advance economic opportunity and growth of higher wages. This can be achieved through the following initiatives:

1. **Sector Partnerships**: Develop sector partnerships in up to three priority areas: information technology services, engineering and product design services, and healthcare services. These partnerships will include prominent employers, educators, and other key stakeholders for each of these sectors. The sector partnerships will facilitate the identification of unique challenges and opportunities for workforce development and recruitment in each sector, and will enable the building of networks for ongoing problem solving and collaboration.

2. **Career Pathways**: Utilize the sector partnerships, particularly employer and educator leadership, to design career pathways in each sector. The goals of the career pathways are to more effectively guide our budding talent to in-demand, high-wage career opportunities, and to attract private sector investment and economic development opportunities. These career pathways should be aligned with high school program redesign. We will use the existing Capstone Integrated Machining Technology Program (a partnership between Danville Community College and the Institute for Advanced Learning & Research – see Appendix III) as a model in this design.

3. **Work-based Learning**: Provide a work-based learning (WBL) experience to 100% of public high school students, with introductory experiences that begin in elementary school. This will help to ensure that our students are aware of and prepared for the in-demand career opportunities available to them in Region 3 and enable private-sector businesses to identify potential employees earlier in their career development.
4. **Recruitment**: Work with local government, economic developers, and other key stakeholders to create innovative incentives to recruit talent, entrepreneurs, and small business owners in the prioritized sectors.

5. **Broadband**: Utilize the competitive advantage that Mid-Atlantic Broadband provides to first, attract and grow businesses and industries of all sizes that rely upon this high-speed network access and second, support workforce talent recruitment and retention. Position and brand Region 3 as the most prominent rural “gig-speed region” in the United States, similar to what has been done in Chattanooga.

### Sectoral Development

The second critical opportunity for Region 3 is the development of four priority or “target” sectors that have the greatest potential to grow the number of employees, wage levels, and types of businesses needed in the region. Only one out of every four employees in the region (25%) is currently employed in a position that creates or attracts wealth for the region. According to US Cluster Mapping, the national average for this metric is 36%, providing a benchmark to which the region can aspire. In this section of the report, four target sectors are identified as key sectors that Region 3 should be pursuing. These target sectors were selected because they represent the best opportunities for the region to increase its share of higher paying, in-demand occupations, leading to a corresponding increase in per capita income. There are many other historically important sectors, such as agriculture, that do not immediately meet the requirements of GO Virginia legislation as it relates to higher-income jobs. However, over time and with appropriately directed investment and leadership, there could be innovative development of higher-paying jobs in these sectors that are currently viewed as “traditional.” The target sectors, listed below, may impact and influence traditional sectors, and linkages between these should be encouraged and supported.

1. **Business Services / IT Data Centers**: Business Services is the #2 top-employing traded sector in the region, with over 4,750 employees, a ten year growth rate of 69%, and an average wage of $48K. The sector consists of generally white-collar employment in corporate headquarter functions, and engineering, legal, consulting, and professional services. IT Data Centers are mammoth investments that provide the hardware and hosting backbone for Software as a Service (SaaS), cloud computing services, and applications. It is a $144 Billion industry growing at nearly 25% per year with an average wage for a computer system analyst of nearly $81K.

2. **Advanced Manufacturing and Materials**: Advanced Manufacturing is a sector comprised of both existing and emerging trade clusters, driven by technologically sophisticated industries. Examples of those industries include Aerospace Manufacturing
Commercial and Defense), Production Technology and Lighting and Electrical Equipment.

Total employment in the Advanced Manufacturing cluster is approximately 1,528 in Region 3, with average wages around $56K. The aerospace cluster benefits in the eastern United States from three new major assembly plants (Honda Jet in Greensboro, NC, Boeing in Charleston, SC and Airbus in Mobile, AL). The supply chains for these businesses, while global, currently depend heavily on West Coast facilities for supply. Given the concentration of manufacturing on the East Coast, these supply chains are likely to move east to reduce lead times and to improve supply chain responsiveness.

Materials is the largest current industrial cluster within Region 3. Typically, these businesses consist of process industries, which either through batch or continuous manufacturing produce an intermediate or finished industrial product. The majority of these industries are located along the 58 corridor. Examples include Rubber Product Manufacturing, Paint, Coating and Adhesive Manufacturing and Basic Chemical Manufacturing. The combined employment of these 68 firms across the region is estimated to be around 6,540 positions. Wages are in excess of $60K per year.

3. High Value Natural Resource Products: This is a prioritized industry in Region 3 due to its employment concentration, growth, relatively high wages, and history in the area. The 2015 average wages in Natural Resources & Mining were $36,667 in Region 3, which is 11% higher than the region's average wage. Forestry is one of the region’s strongest industry clusters within the natural resources category. Forestry posted an average wage of $54,000 in 2016, and has a location quotient of 15, which means that forestry employment in the region is about 15 times more concentrated than the national average. Employment in the forestry cluster grew 14% from 2006 - 2016, and is expected to grow an additional 15% from 2016-2026. Region 3 has had a long history of utilizing its hardwood forests for value-added new product development and engineering design, production and distribution. Continued growth in the wood products sector offer significant opportunities for Region 3 going forward.

4. Health Care: While not a traded cluster, health care is a stable and vital growth sector for the region. The sector employed 14,680 workers in 2016 in Region 3, at an average wage of $47.6K. The cluster experienced employment growth of 8.5% from 2006 to 2016 (EMSI 2017.1).
Cyber Infrastructure

In the 19th Century it was railroad infrastructure that rendered a region competitive; in the 20th Century it was roads. Today, the development of cyber infrastructure and broadband access is critical to ensure that the region is “connected,” competitive, and able to sustain a healthy economy. Within this broad opportunity, there are three key ideas for Region 3 that represent a foundation for region-wide changes and improvement.

1. Regional Collaboration: A regional approach to cyber infrastructure (in lieu of a piecemeal approach by localities) will enable pooling of intellectual and financial resources and more efficient development of networks. This collaboration will also enable Region 3 to position itself more competitively to ISP vendors and to funders who may be able to provide federal and other grant opportunities to offset the high infrastructure costs of expanding rural broadband.

2. “Middle Mile” and “Last Mile” Opportunities: A broadband network only becomes truly effective when it extends from main fiber routes to reach “middle mile” and “last mile” end users. The region seeks to develop a project that improves broadband coverage by facilitating the action of “middle-mile” and “last mile” technology companies by creating region-wide tax-exempt statuses, fee waivers, and expedited easement access for such providers. Such a project will ultimately remove costs and time delays that currently present barriers to the development of a robust and cutting-edge fiber network in the region. Inducements to these companies will result in investments in the counties and towns that offer them, and will significantly improve quality of life, opportunity for businesses, and access to education in the region.

Opportunities for Improvement

The consensus view of those involved in developing this Growth & Diversification Investment Plan is that there is an impressive array of impactful and scalable initiatives already launched or launching in Region 3, that make the Region optimistic for its economic future. However, there are also under-leveraged opportunities for enhanced regional collaboration that must be addressed:

- The Region houses entities that provide strong focus on entrepreneurship and small business development, but in general, these initiatives operate locally rather than regionally. For example, multiple localities are striving to package resources to create an entrepreneurial map or “blueprint,” but because business footprints do not stop at jurisdictional boundaries, this might be more cost effective and valuable on a regional scale. In addition, there is room for greater emphasis on entrepreneurship topics
including availability of capital, incubators and accelerators, technical advising, and mentoring.

- Issues regarding quality of life, crucial for attracting and retaining talented, innovative individuals and businesses are currently addressed intermittently. Interviews with business leaders have highlighted the importance of investing in cultural amenities, lively downtowns, outdoor recreation, shopping, and other attractors. As a region, we have amenities, but we do not promote or brand them in a unified and assertive way, internally or externally. The regional collaboration inherent in this GO Virginia initiative presents the perfect opportunity for enhanced region-wide promotion efforts.

- The importance of infrastructure, especially broadband internet coverage, is frequently noted. However, there is a need for the economic development entities within Region 3 to pool their political influence and lobby for infrastructure improvements that will have the greatest collective regional impact. There also remains a need to more thoroughly discuss how to fund this much-needed expansion.

- There is occasional focus on promising occupations, such as healthcare occupations and skilled trades. However, there is opportunity to turn these discussions into action through the aforementioned region-wide initiatives to develop career pathways and target sector strategies.

**Overall, the greatest need is to increase the economic health of the region by scaling up our existing successful or promising initiatives, and by promoting and expanding regionalism in all respects.** Throughout the development of this Growth & Diversification Investment Plan, a consistent expression of hope and enthusiasm has emerged around ideas for connecting regional assets, leaders, and common counterparts. There is a “hunger” to boost regional connectivity and learning opportunities, to replicate successes, to learn from mistakes, and to leverage our assets. There is a belief that the image and brand of Southern Virginia, both internally and externally, can be improved through more intentional connection and interaction between elected leadership, local and regional organizations, businesses, and citizens. The intent of the Region 3 Growth & Diversification Investment Plan is to continue to build on these expressions of hope and “hunger,” by creating a framework for the Region 3 Council to use as it considers its investment opportunities.