

Targeted Business Sectors & Clusters

Region 8's targeted industries have expanded since approval of the original Economic Growth and Diversification Plan in 2017. The initial plan identified the following five targeted industries:

- Financial and Business Services
- Health Care
- Information Technology/Communications
- Light Manufacturing
- Transportation and Logistics

These sectors were chosen because they demonstrated strong employment growth, had high earnings potential for workers, and were export-oriented; thus, they correlated directly to the goals of GO Virginia.

In the spring of 2018, the Region 8 Council re-evaluated its five targeted industries to determine if any other sectors should be considered to promote and support transformative projects in the region. The consultant that prepared the original plan, Camoin Associates, was asked to conduct a comprehensive review of the data from the Region 8 Economic Growth and Diversification Plan. This review included analyzing historic and projected growth in jobs, regional average wages, GO Virginia requirements, and conversations with key stakeholders.

The Region 8 Council thoroughly considered this background data, along with regional context, and confirmed the addition of two other targeted industries: Value-Added Food Manufacturing and Biomedical/Biotechnical. The Region 8 Council believed that these additional target industries would encourage a range of projects that could be funded through GO Virginia, thereby stimulating vital sectors within our regional economy. The addition of the two targeted industries was unanimously approved by the Region 8 Council at its June 27, 2018 meeting, and submitted to DHCD staff for administrative review and approval. The Region 8 Economic Growth and Diversification Plan now reflects seven targeted industries as listed below:

- Biomedical/Biotechnical
- Financial and Business Services
- Health Care
- Information Technology/Communications
- Light Manufacturing
- Transportation and Logistics
- Value-Added Food Manufacturing

With the exception of Health Care, these sectors continue to align with the goals of GO Virginia and also consist of industries that are already strong in Region 8. The selected targets also allow the region to promote and build upon several key assets including economic base, skilled

workforce, available infrastructure, innovation, and entrepreneurship. While Region 8's economy is already quite diversified, it needs to grow and offer greater opportunities to expand supply chains for each of the targeted sectors.

Changes in Each Sector from Current Plan

Based on analysis of JobsEQ data for each of the current target sectors, the 2019 Economic Growth and Diversification Plan for Region 8 will continue to focus on the same seven targeted industries, including Health Care. Although the Region 8 Council understands that health care projects are not eligible for GO Virginia funding, the Council continues to recognize the significant influence of the Health Care sector on the region’s economy. In addition, the opportunity for regional collaboration to address the demand for health care services, and to attract and retain talent in the region to provide those services, is still in keeping with the GO Virginia “model.”

Overall, total employment in all industries increased by 4,195 jobs, or 1.8%, over the last two years. Employment growth in the Region’s seven targeted industries exceeded this and, together, they increased by 2.3%. All seven targeted industries reported an increase in jobs. Below is a table summarizing employment trends followed by a more detailed description of changes by sector.

**Region 8 Employment Trends
2017-2024**

Sector	2017 Employment	2019 Employment	2024 Projected Employment
Biomedical/Biotechnical	2,466	2,638	2,652
Financial and Business Services	18,315	18,913	19,418
Health Care	32,338	32,947	35,482
IT/ Communications	4,767	5,070	5,218
Light Manufacturing	20,022	20,266	19,578
Transportation and Logistics	13,233	13,892	14,775
Value-Added Food Manufacturing	21,746	22,128	22,867
Total – Targeted Industries*	95,847	98,019	101,518
Total – All Industries	236,379	240,574	247,652

Source: JobsEQ, 2019 Q1

*Employment for Total-Targeted Industries does not equal total of the seven sectors as some NAICS codes are included under more than one sector.

Biomedical/Biotechnical

The Region 8 Council amended the Economic Growth and Diversification Plan in 2018 to add this sector which merges research, development, and the manufacturing of medical equipment with the production of pharmaceutical drugs. Region 8 currently has 107 establishments that employ 2,466 workers, with average earnings of \$77,709. The top industry in this cluster is Pharmaceutical and Medicine Manufacturing (NAICS 3254) with a location quotient (LQ) of 2.27. This subsector employs 40% of workers in the Biomedical/Biotechnical industry in the region.

In May 2019, Merck & Company announced a \$1 billion expansion of its Elkton facility in Rockingham County, along with the planned addition of 100 new jobs. With this one announcement of 100 jobs, Region 8 has already exceeded the 5-year employment forecast in the table above. As part of Merck's plan to hire additional employees, the pharmaceutical company also announced a collaboration with James Madison University and Blue Ridge Community College to train workers for critical positions. The partnership is aimed at addressing short- and long-term employment needs at the company. BRCC and JMU will establish a pipeline of biotechnology engineering and computer science talent that will allow the Shenandoah Valley to accommodate the future growth of Merck and other life science industries and manufacturers in the region.

The Biomedical/Biotechnical sector will continue to be supported by the Region's colleges and universities that have strong programs in health innovation, including the sectors of pharmacy, chemistry, and biology. A primary example is Blue Ridge Community College's newly constructed bioscience building, scheduled to open for the 2019 fall semester. The facility will feature a bioscience-oriented manufacturing lab designed to replicate and provide instruction in the rigid requirements of an FDA-validated bio manufacturing or food processing facility. The facility will expand support of bioscience fields and promote new programs to meet industry needs in emerging areas such as those required by the Merck expansion. In addition, the new building will be home to BRCC's existing nursing program.

Financial and Business Services

The Finance and Business Services sector represents industries that provide finance, insurance, real estate, accounting, and consulting services. Regional job growth in the sector has historically outpaced that of the state and nation. In Region 8, 2,126 establishments currently employ 18,913 workers, with an average annual salary of \$52,730. With a LQ of 1.43 and 3,737 employees, Depository Credit Intermediation (NAICS 5221) is the Region's top subsector. It has added 335 jobs over the past two years. Printing and Related Support Activities (with an LQ of 4.05) is also a concentrated industry within Region 8; however, this subsector lost 73 jobs within the last two years and is projected to lose another 222 during the next five years.

Health Care

As mentioned previously, the Region 8 Council understands that healthcare-related projects are generally considered ineligible for GO Virginia funding. Nevertheless, Health Care remains a very influential sector on the Region's current economy and on its quality of life. More importantly, a reliable and vibrant health care sector is essential to attracting talent to the region to support the other targeted sectors that are in keeping with GO Virginia's objectives.

The Health Care sector represents industries that provide health care and social assistance for individuals. Industries in this sector cooperate in the process to serve patients through health care providers, technology, and research. Establishments include hospitals, doctors' offices, nursing homes, surgery centers, laboratories, and medical research centers. As of 2019 Q1, 32,947 workers were employed at 2,903 establishments in Region 8. This is an increase of 609 workers over the last two years. Looking forward, Region 8 is projected to add 2,535 Health Care jobs by 2024, a 7.7% increase. General Medical and Surgical Hospitals (NAICS 6221) remains the region's core subsector, employing over 8,600 workers.

The Region 8 Council remains keenly aware of and concerned about the growing demand for a skilled nursing workforce to support the evolving Health Care sector of our regional economy. Additionally, over 3,000 nurses are expected to retire in the next few years, creating significant need to "fill the pipeline" with well-trained replacements. As such, Health Care will continue as one of Region 8's targeted sectors that will be addressed through non-GO Virginia avenues.

A noteworthy, non-GO Virginia project to address the nursing shortage in Region 8 was announced in June 2018. James Madison University (JMU) was awarded \$2.7 million in federal funding to recruit, admit, and retain students interested in pursuing nursing and working in underserved primary care environments in Page County. Funding was awarded through the Department of Health and Human Services' Nurse Education, Practice, Quality and Retention Program. Funding will be used to create partnerships with Valley Health Page Memorial Rural Health Centers, and Counseling and Psychological Services to address shortages in primary, mental health, and substance/opioid abuse treatment in Page County within rural health clinics. During the four-year funding period, 56 scholars will receive training.

Furthermore, Blue Ridge Community College (BRCC) is completing construction of a 20,000 square foot bioscience building. The facility will be home to the school's nursing program and a microbiology laboratory. New programs to train paramedics, histologists, and medical laboratory technicians are set to be launched when the building opens for the 2019 fall semester. BRCC's programs will support the growing need for biology, nursing, and allied health professions in the workforce.

Information Technology/Communications

The Information Technology/Communications sector represents industries involved in the development, manufacturing, and usage of IT and communications-related products and services. This industry currently employs 5,070 workers at 550 establishments. During the last two years, this industry added 303 jobs, a 6.4% increase. While the Security Systems Services subsector has shown growth in the region, the subsectors with the most employees are Telecommunications Resellers (NAICS 517911), Software Publishers (NAICS 511210), and Computer Systems Design Services (NAICS 541512). Telecommunications Resellers has a LQ of 6.55 and gained 248 jobs during the last two years. Average annual wages in IT/Communications is \$67,771.

Light Manufacturing

Light Manufacturing encompasses the range of processes in which materials are mechanically, physically, or chemically transformed into new products. Manufacturing has a strong legacy throughout Region 8 and continues to be a significant industry. It has six subsectors with location quotients above 4.00. The most concentrated is Sugar and Confectionery Product Manufacturing (NAICS 3113) with a LQ of 8.77. For the first quarter of 2019, Light Manufacturing employed 20,266 workers at 440 establishments. Jobs that are in demand in this sector are higher skill and, therefore, higher wage positions, with average annual earnings of \$47,597. The top two subsectors for employment are Plastics Product Manufacturing (NAICS 3261) and Printing and Related Support Activities.

This industry continues to experience changes from technological advancements and increased productivity levels. During the last two years, Region 8 experienced an increase of 244 light manufacturing jobs; however, the overall trend is a reduction in the number of employees both regionally and nationally, and Region 8 is projected to lose 688 jobs over the next five years. Despite this downward trend, Region 8 is positioned to outperform similar markets given its valuable assets on which it can capitalize to ensure that local operators have the resources to be successful.

Rockbridge Area Advanced Manufacturing Project (RAAMP) – Byers Technical Institute (BTI), a new technical training center in Rockbridge County, partnered with the City of Buena Vista and the Rockbridge County Economic Development Authority to produce a pipeline of skilled welders for manufacturing companies throughout Region 8. BTI offers a 40-week advanced welding program to prepare students to enter the welding field at the Journeyman level. A GO Virginia grant is supporting the expansion of this program by providing funding for instructors and training equipment.

Transportation and Logistics

The Transportation and Logistics sector represents industries that link producers and consumers through interconnected supply chains and an array of transportation modes. Logistics industries

provide detailed coordination to increase efficiency in multi-modal transportation systems. Services within this sector primarily include transportation of passengers and goods, storing and warehousing products, and providing service and facilitating distribution to these establishments.

This sector employs 13,892 workers at 642 establishments. Average annual wages are \$48,242. Of the Region's seven targeted sectors, Transportation and Logistics added the most jobs over the last two years – 659. More than half of those jobs were in Warehousing and Storage (NAICS 4931), the top subsector in this industry having an LQ of 3.17. Nonscheduled Air Transportation (NAICS 4812), with an LQ of 5.77, showed growth during the last couple of years. It gained 144 jobs, a 47% increase from 2017. Over the next five years, this industry is expected to have an average annual growth rate of 1.2% compared to 0.6% for all industries.

Value-Added Food Manufacturing

As with the Biomedical/Biotechnical sector, Value-Added Food Manufacturing was added as a target to Region 8's Economic Growth and Diversification Plan with the 2018 amendment. Value-Added Food Manufacturing is an industry that marries Region 8's agricultural roots with its manufacturing legacy. In this sector, manufacturers process and convert a raw commodity into a consumable good. This may require adding ingredients, packaging, or changing the genetics of the product. Value-added goods are sold at a higher price, allowing manufacturers to capture a larger share of the food dollar. A location quotient of 2.55 reinforces the strength of Value-Added Food Manufacturing in the area, and demonstrates that Region 8 is highly specialized in a diverse range of value-added processes. In fact, the LQ for this sector is higher than that for Light Manufacturing at 1.51.

Value-Added Food Manufacturing currently employs 20,266 workers at 290 establishments; however, unlike the Light Manufacturing industry, Value-Added Food Manufacturing is projected to grow by 739 jobs over the next five years, a 0.7% average annual growth rate. Average annual wages in this industry cluster are \$41,420, and core subsectors are Warehousing and Storage (NAICS 4931) and Animal Slaughtering and Processing (NAICS 3116).