

Piedmont Triad

Talent Alignment Strategy

EXECUTIVE SUMMARY

MARCH 2018



About the Triad Talent Alignment Strategy

Regional business and education leaders initiated a Talent Alignment Strategy for the Piedmont Triad in August 2017. The purpose of this Strategy is to ensure education and workforce development efforts are aligned with the needs of employers and to coordinate existing education and workforce development initiatives currently underway throughout the region. Ultimately, the project aims to create the next generation workforce that the Piedmont Triad will need to propel its economy forward.

The strategic planning process is a joint initiative between the Piedmont Triad Partnership and Greensboro Chamber, with engagement from key funding partners.

Avalanche Consulting and the Council for Adult & Experiential Learning (CAEL) were engaged to facilitate and prepare the Strategy, to include the following:

- **Phase 1: Workforce Analysis** will determine the makeup of the region's labor force and identify the industries and occupations that are thriving.
- **Phase 2: Supply-Demand Gap Analysis** will identify what skills the workforce currently has, what skills employers need, and how to fill in gaps in the workforce pipeline.
- **Phase 3: Talent Alignment Strategy** will provide recommendations on how to align and improve the region's talent pipeline.

Stakeholder Input will take place throughout this process. Focus groups and interviews will be facilitated with stakeholders in the region, supplemented by an employer survey. A Steering Committee consisting of industry, education, and workforce leaders from throughout the Piedmont Triad will serve as advisors to the project.

Funding Partners



PIEDMONT TRIAD
REGIONAL COUNCIL



Acknowledgements

The Piedmont Triad Partnership, Greensboro Chamber, and consulting team would like to thank the numerous individuals who are providing input throughout the strategic planning process.

A Steering Committee consisting of industry, education, and workforce leaders from throughout the Piedmont Triad serve as advisors to the project. In addition, the consulting team met with over 100 stakeholders throughout the course of this project, including employers focus groups and survey respondents.

Steering Committee

Charles Blanchard, Guilford County Schools	Dr. Algie C. Gatewood, Alamance Community College
John Brandberg, Procter & Gamble Manufacturing	John Geib, Duke Energy Corp
Dr. Barry Burks, North Carolina A&T State University	Dr. Frank Gilliam, UNC-Greensboro
Patrick Chapin, Business High Point, Inc. / High Point Chamber	Dr. Gary Green, Forsyth Technical Community College
Brent Christensen, Greensboro Chamber of Commerce	Stan Kelly, Piedmont Triad Partnership
Freddine Crabtree, Workforce Carolina	Ed Kitchen, Bryan Foundation
Dr. Larry Czarda, Greensboro College	Bob Leak, Winston-Salem Business Inc.
R. Kriss Dinkins, Wake Forest University	Darlene Leonard, Smith Leonard
Matthew Dolge, Piedmont Triad Regional Council	Donna Newton, The Community Foundation of Greater Greensboro
Andrea Fleming, Alamance Chamber	Dr. Randy Parker, GTCC
	Kenneth Rempher, Cone Health
	Annie Tyson Jett, Herbalife
	Wendy Walker Fox, PTRC Workforce Development Program
	Tom Young, VF Corporation

About the Project Consulting Team



Avalanche Consulting's mission and passion is to help communities become more vibrant and prosperous. We are a leading national consultancy specializing in strategic planning, workforce analyses, and customized research for economic and workforce development organizations.



The Council for Adult and Experiential Learning (CAEL) is a national, non-profit organization whose mission is to expand learning opportunities for adults. CAEL works to remove policy and organizational barriers to learning opportunities, identifies and disseminates effective practices, and delivers value-added services.

Executive Summary

This report contains an executive summary of each phase of the strategic planning process:

Phase 1: Workforce Analysis

Phase 2: Supply-Demand Gap Analysis

Phase 3: Talent Alignment Strategy

Report 1: Workforce Analysis

Summary of Findings

During the past decade, the Piedmont Triad region's **population has swelled by more than 125,000 individuals**. The region's population growth has been broad-based, with increases across every age and racial/ethnic group. The Piedmont Triad's veteran population has also increased significantly in recent years.

Despite healthy levels of population growth, the effects of the Great Recession continue to linger in the Piedmont Triad. Between 2007 and 2010, local employers shed more than 50,000 jobs. Fortunately, the region has since rebounded – the **overall employment base has increased for 7 consecutive years but remains below pre-recession levels**. The unemployment rate in the Piedmont Triad, which reached double digits in 2011, has fallen below 5%.

Since 2011, **employment growth within the Piedmont Triad has been fueled by a variety of industry clusters**. In absolute numbers, the largest drivers of growth have been Back Office (8,600 net new jobs), Entertainment (8,200), Healthcare (7,700) and Retail (7,500). On a percentage basis, several smaller industry clusters have posted especially impressive growth – Aerospace doubled; Biomedical increased by more than 30%; and Automotive rose by more than 25%.

The Piedmont Triad's emerging industry clusters complement several traditional sources of economic activity within the region. Despite job losses, employment in Apparel & Textiles and Furniture remains far more concentrated in the Piedmont Triad region relative to the US average. Advanced Materials, which grew 11% since 2011, is twice as concentrated regionally compared to the national average.

Report 1: Workforce Analysis

Summary of Findings

Future employment growth in the Piedmont Triad will require thousands of new workers in occupations such as Production, Logistics, Management, Business & Finance, Computer & Math, and Health Care. Through 2026, demand for Healthcare talent is expected to be especially strong. The cumulative need for Home Health Aides, Registered Nurses, Healthcare Support Specialists, and Laboratory Technicians is projected to approach 9,000 workers. Over the next decade, the region is also expected to need nearly 2,000 Computer Control Programmers, Fabricators, Machinists, and Welders. The Piedmont Triad's Logistics firms will require thousands of new Drivers and Material Movers. More than 1,000 additional Computer & Information Analysts, Software Developers, Database Administrators, and Computer Support Specialists will be needed to support the region's burgeoning Software & IT industry.

Filling the thousands of jobs expected to be created in the Triad region will require successfully producing and attracting skilled labor. Fortunately, **the region has a demonstrated track record of increasing local talent production.** Between 2010 and 2015, educational attainment in the Piedmont Triad region increased at both the Associate's and Bachelor's degree levels. High school graduation rates are rising and regional SAT scores are approaching the US average.

From a labor perspective, the Piedmont Triad Region's geographic location also provides it with significant flex capacity. The Piedmont Triad currently imports more than 150,000 workers from outside the region. At the same time, more than 165,000 Piedmont Triad residents work outside the region. **Continued employment growth throughout the Piedmont Triad region will make it easier for employers to attract additional outside workers while increasing the opportunity to keep more residents employed locally.**

Report 2: Supply- Demand Gap Analysis

Summary of Findings

Today, the availability of talent is a top concern for community and companies alike – across the US and in the Piedmont Triad. Providing companies with plentiful access to a sustained pipeline of workers with the skills necessary for operational success is vitally important. Likewise, providing students with the skills and education that prepare them for work will boost prosperity for all. Within the Piedmont Triad, ensuring that education and workforce efforts are aligned is especially critical to the region's long-term economic success.

In *Report 1: Workforce Analysis*, we examined the composition of the region's labor force and identified especially promising industries and occupations that can be expected to drive future growth. In *Report 2: Supply-Demand Gap Analysis*, we examine the current ability of local post-secondary institutions to meet the needs of local employers, both today and tomorrow.

TODAY'S PIEDMONT TRIAD GRADUATE PIPELINE

During the past decade, the Piedmont Triad region's population has increased by more than 125,000 individuals. The region has also demonstrated a track record of increasing local talent production. The total number of all graduates in the Piedmont Triad soared 28% during the past 5 years, more than twice the national average. The Piedmont Triad is a significant producer of graduates in Health Care, Business, and Liberal Arts/Multicultural Studies. Together these three degree groups make up 45% of all graduates in the region. However since 2010, the largest growth in graduate output was in more technical/trade-related clusters like Construction, Personal Services, and Mechanics & Machine Repair.

Report 2: Supply- Demand Gap Analysis

Summary of Findings

WORKFORCE DEMAND OVER THE NEXT DECADE

Future employment growth in the Piedmont Triad will require thousands of new workers in occupations such as Health Care, Logistics, Management, Business & Finance, and Computer & Math.

Through 2026, demand for Healthcare talent is expected to be especially strong, creating more than 15,000 new jobs. The cumulative need for certificate and associate's positions such as Home Health Aides, Registered Nurses, Healthcare Support Specialists, and Laboratory Technicians is projected to approach 9,000 workers.

While Production occupations are expected to decline overall over the next decade, the region is still expected to need nearly 2,000 Computer Control Programmers, Fabricators, Machinists, and Welders as a result of retirements and turnover. The Piedmont Triad's Logistics firms will also require thousands of new Drivers and Material Movers to support growth in both manufacturing and e-commerce.

Computer and Math-related occupations represent only a small portion of the Piedmont Triad workforce, but the increased role of technology, networking, and security in our personal lives and businesses will spur more demand over the next decade. More than 1,000 additional Computer & Information Analysts, Software Developers, Database Administrators, and Computer Support Specialists will be needed to support the region's burgeoning Software & IT industry.

Demand for Professional & Financial Services talent in the Piedmont Triad region has soared over the last decade and is expected to continue to do so for occupations related to Back Office support, Business, Finance, and Sales & Marketing.

Report 2: Supply- Demand Gap Analysis

Summary of Findings

EMPLOYER VIEWPOINT ON TALENT SITUATION

In a survey of nearly 300 Piedmont Triad companies, more than 75% of surveyed firms reported experiencing difficulty filling open positions during the past 12 months. Employers reported the greatest difficulty in recruiting skilled labor and technical positions. The most widely cited barriers to finding new employees are the lack of workers with the right technical and soft skills. Employers repeatedly cited critical & analytical thinking skills, interpersonal/teamwork skills, and good attendance as especially difficult skills to find among local workers. With more than 80% of surveyed companies in the Piedmont Triad anticipating hiring additional employees in the next 2 years and the most robust hiring expected to occur among new professional positions, the crunch for talent may become even more pronounced in the years ahead.

GLOBAL FORCES AND THE CHANGING NATURE OF WORK

In addition to local supply and demand dynamics, several emerging global forces will also have profound impacts on the Piedmont Triad's workforce.

From a demographic perspective, the decline in labor force participation and increase in the number of retiring workers may exacerbate workforce shortages, especially in the areas of health care and manufacturing.

The urbanization trend is expected to continue driving more talent and innovation into metros and away from already struggling rural areas. All the while, our population will become increasingly diverse forcing educators and companies to rethink their training and hiring practices.

Report 2: Supply- Demand Gap Analysis

Summary of Findings

The renewed vibrancy of domestic manufacturing, facilitated by reshoring and increased foreign direct investment in US companies, will increase demand for manufacturing and engineering talent. Advancements in technologies such as AI and robotics that automate functions will also continue to drive increased demand for STEM-related skillsets, while reducing demand for routine- and rules-based work in industries as varied as manufacturing, logistics, and retail.

The Gig economy will continue to grow as more workers seek greater flexibility and the ability to earn extra income. This trend reduces the supply of full-time talent and forces companies to re-examine their organizational structures and how they outsource work.

Overall, these global forces will require communities and companies to be adaptive and collaborative in their approach to talent alignment.

TRIAD SUPPLY-DEMAND CONDITIONS

Collectively, data findings, employer survey results, and global forces suggest that the Piedmont Triad may encounter labor shortages across a variety of occupations.

Health & Biomedical

Over the next five years, the Health & Biomedical sector is expected to post the Piedmont Triad region's strongest employment gains. At the certificate level, the region is at significant risk for experiencing shortages of **Nursing Aides** and **Phlebotomists**. At the associate's degree level, the Piedmont Triad region will experience workforce shortages in a variety of areas, including **Medical & Clinical Laboratory Technicians, Dental Hygienists, Diagnostic Medical Sonographers, Specialty Therapists, and Veterinary Technologists and Technicians**. Additionally, the region produces relatively few Health & Biomedical doctorate degrees.

Report 2: Supply- Demand Gap Analysis

Summary of Findings

Manufacturing & Production

Production occupations represent one of the largest employment sectors within the Piedmont Triad. Most jobs in the sector do not require post-secondary education. At the same time, an increasing number of Production positions require technology skills and overall employment demand continues to rise. Production occupations experiencing labor shortages include **Printing Operators, Industrial Production Managers, Semiconductor Manufacturing Technicians, Medical Equipment Repair, and Heavy Vehicle Mechanics.**

Engineering

The demand for a variety of Engineering positions requiring a certificate or associate's degree outweighs the supply in the Piedmont Triad. Key occupations facing severe shortages include **Telecom Technicians, Computer Installers & Repairers, and Industrial Engineering Technicians.** At the bachelor's degree level, the demand for **Mechanical Engineers** currently outweighs the supply and should be closely monitored moving forward.

Professional Services

The Piedmont Triad is projected to experience strong growth in Business & Finance-related occupations over the next five years. While the total number of Business-related degrees produced by post-secondary institutions in the region is second only to Healthcare, several occupations remain at risk for potential talent shortages, such as **Financial Advisors and Banking Analysts.**

IMPLICATIONS FOR THE TALENT ALIGNMENT STRATEGY

A multi-faceted and collaborative approach to tackling the workforce shortages outlined in this report is key. In *Report 3: Talent Alignment Strategy*, the consulting team will provide recommendations on how Piedmont Triad leaders can collaborate to address specific shortages as well as broader global trends that will impact workforce availability in the region.

Report 3: Talent Alignment Strategy

Goals & Strategies Summary

The plan is driven by six core goals for talent alignment, development, and attraction. Multiple strategies and tactics support each goal:

GOAL 1: The Piedmont Triad is recognized as an attractive destination to live, work, and learn.

- 1.1 Develop a dedicated talent attraction and retention website.
- 1.2 Utilize additional marketing tools for outreach activities.

GOAL 2: Employer engagement in the Piedmont Triad is coordinated, consistent, and results-oriented.

- 2.1 Establish Sector Partnerships for each target industry.
- 2.2 Develop regional data sharing agreements and a central repository for talent-related information.
- 2.3 Create a Regional Leadership Forum.
- 2.4 Optimize how employers connect with students and graduates.

GOAL 3: K-20 students have access to and are engaged in world-class STEM and CTE Education.

- 3.1 Develop K-12 programs aligned with target industry needs.
- 3.2 Address programmatic alignment within higher education.
- 3.3 Build awareness of career opportunities in the Piedmont Triad.

GOAL 4: Expand experiential learning and career services in higher education.

- 4.1 Highlight the return on investment (ROI) for employers to offer more experiential learning opportunities.
- 4.2 Expand innovative career service functions within higher education institutions.

Report 3: Talent Alignment Strategy

Goals & Strategies Summary

GOAL 5: Discouraged populations are engaged in the workforce and supported in upskilling opportunities.

5.1 Expand programs that enable discouraged populations to re-enter the workforce.

5.2 Inform discouraged populations about career advancement resources in the region.

5.3 Promote on-the-job funding and program development offered through the workforce development system.

5.4 Highlight and promote the value of a post-secondary credential for the workforce.

GOAL 6: The Piedmont Triad has programs that support innovation and entrepreneurship.

6.1 Connect workforce initiatives with programs that support innovation and entrepreneurship.

6.2 Support the expansion of successful entrepreneurship models, such as Union Square and the Wake Forest Innovation Quarter.