



## Great Opportunities in Technology and Engineering Careers

Stimulating job growth within the commonwealth by creating dependable talent pipelines in strategic sectors, fostered through public and private partnerships.

### STRATEGY

GO TEC uses a hub-and-spoke model to progressively generate a robust talent pipeline across Virginia. Middle schoolers encounter occupations and relevant technologies in Career Connections Labs. In high school, they connect to career and technical education (CTE) courses, industry certification programs and dual-enrollment training, often in partnership with regional higher education institutions. Finally, they may progress to advanced-level training or a baccalaureate program through a hub institution.

To achieve established goals, targeted career pathways have been identified, focusing on in-demand advanced manufacturing needs across multiple disciplines (welding, machining, robotics, IT). Curriculum is led by GO TEC staff and teachers with the support and guidance of a 21-member advisory board composed of businesses, K-12 and higher education — all with equal representation. To create and scale the GO TEC initiative, partners leverage a variety of funding sources including state and federal grants, local government and philanthropic funds.

### OUR ORGANIZATION

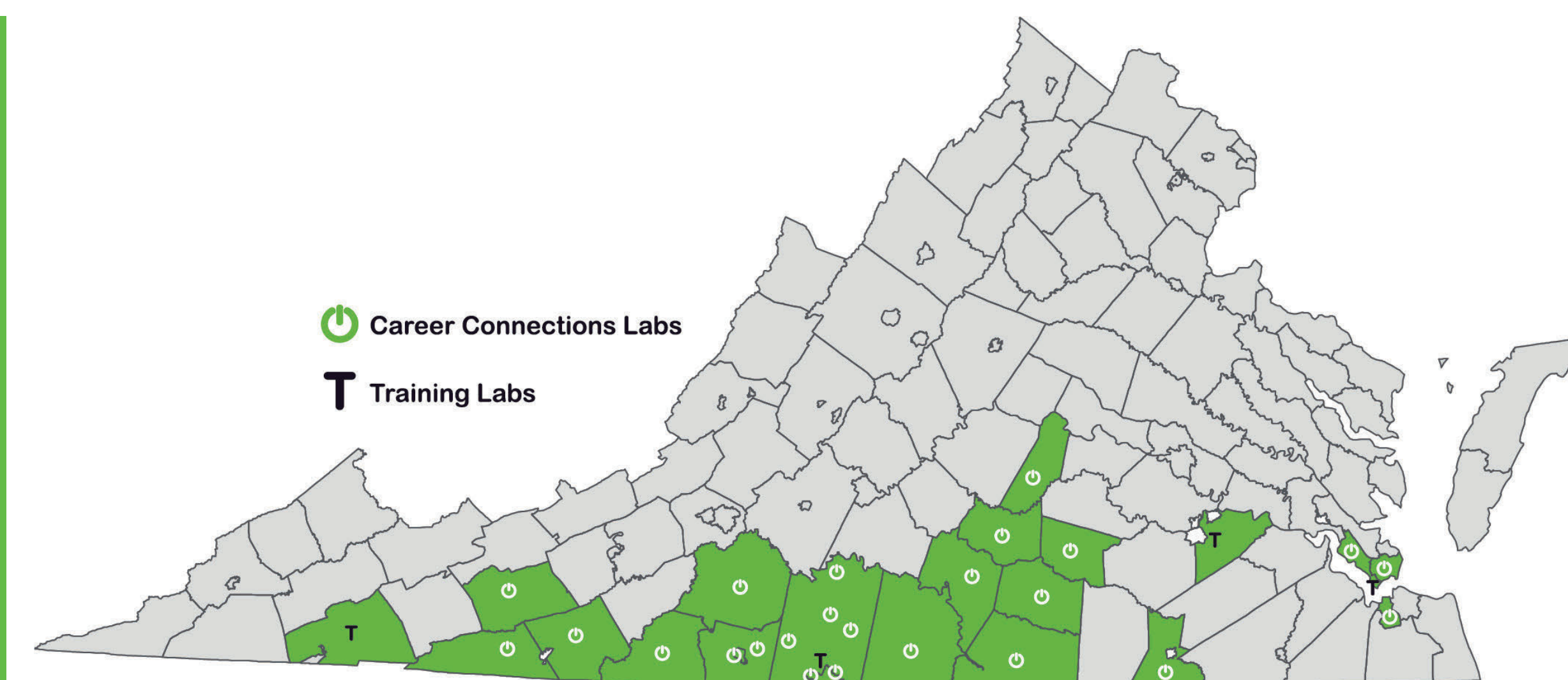
Primarily administered by the Institute for Advanced Learning and Research (IALR), Great Opportunities in Technology and Engineering Careers (GO TEC™) is a collaborative project that aims to develop the regional workforce to meet changing industry demands. Through a hub-and-spoke model that involves K-12 school systems, higher education and industry, GO TEC delivers real-world workforce training and talent development. Starting in middle school Career Connections Labs and continuing through high school dual-enrollment and postsecondary programs, GO TEC engages students in hands-on learning in high-demand career pathways such as precision machining, welding, IT and cybersecurity, robotics and automation, mechatronics and advanced materials. After starting as a pilot program in Danville and Pittsylvania County, GO TEC now serves approximately 3,500 middle school students annually. This project was funded in part by GO Virginia, a state-funded initiative administered by the Virginia Department of Housing and Community Development (DHCD) that strengthens and diversifies Virginia's economy and fosters the creation of higher wage jobs in strategic industries.

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### OPPORTUNITY

While there are many strong workforce programs across Virginia, only some begin in high school, and most are offered post-graduation, creating a lack of early exposure. Instead of waiting for students to hear about advanced manufacturing and STEM careers, the GO TEC team wanted to begin exposure in middle school by showing students and parents the possibilities for in-demand career paths across strategic sectors. In every decision, the goal has been to develop a strategic workforce training program with the capacity to scale and expand successfully beyond Southern Virginia.

### COMMUNITY CONTEXT

For two decades, starting in the 1990s, the stark decline in anchor industries such as textiles, furniture and tobacco caused Southern Virginia's economy to suffer. Regional stakeholders have worked to modernize the legacy industry of manufacturing with today's technologies and to create strategic workforce development programs – like GO TEC – that will attract and support manufacturers.

The GO TEC program has primarily spread through Virginia's more rural regions. Through a collaborative hub-and-spoke model, partners support strategic talent pathways, starting with Career Connections Labs in middle schools across Virginia.

Thanks to Letterpress Communications, our valued communications partner, for their support of GO TEC.

### Outcomes and Impact

- Influenced a \$300 million investment by Tyson Foods.
- Impacted creation of 1,800+ jobs in Southern VA.
- Created a K-12 network for rapid industry-relevant technology integration.
- Reached 3,500+ middle school students annually.
- 2,857 credentials earned.
- 25 middle school labs; 50 by 2025.

### LESSONS LEARNED

- Collaboration is Key.**  
As the program has entered additional school divisions, it has become even more critical that all partners, including K-12 divisions, industry, local governments, economic development professionals and higher education institutions, work as a team to ensure that the program is replicated effectively.
- Flexibility is Needed for Growth.**  
The partner organizations support standardization of the GO TEC pathways and middle school curriculum, critical to the scaled expansion, while allowing for some flexibility and regional “flavor” in order to meet anticipated workforce needs in each region of Virginia.
- Regional Growth and Programs Take Time.**  
Regional growth is a long-term game requiring trusted partnerships. “Further together” requires steadfast commitment.

### NEXT STEPS

- Have programs in 50 middle schools by 2025.
- Develop student-level longitudinal data system to assess career readiness.

