



GO Virginia Region One IT Working/Focus Group #1

“Plowing the Field”

Southwest Virginia Higher Education Center

February 26, 2019

In Attendance:

Kickoff Meeting Overview – Olivia Rollins welcomed the group, and presented an overview of the last Information Technology Working Group meeting, held on January 28th. This meeting was considered the Kickoff meeting, and it was there that the Chmura Economics and Analytics team outlined their plans for the next three IT Focus Groups.

First, Leslie and Olivia led the group in a discussion about the Rules of Engagement, and established the framework for the steps the group would take in this first meeting designed to take a closer look at Region One’s Strengths, Opportunities, Aspirations and Results through the SOAR analysis. The SOAR analysis asked these questions of 5 key areas, taken primarily from the GO Virginia Region One Growth and Diversification Plan, these areas include:

- Infrastructure
- Education and Training
- Regional Labor Market
- Quality of Place
- Marketing and Perception

Additionally, the group was led to answer two questions about IT in Region One: what is, and is not working in the region?

Success Story- Working:

CGI: CGI came to Lebanon Virginia in 2006 with the intent of bringing high paying IT jobs. Thirteen years later they are still there, and employ over 330 technology employees working in computer programming and software testing. The bulk of CGI’s employees are hired in what are considered “traditional” IT jobs, with the business side of the company being taught to majority of employees after they are hired.

Not Working:

Workforce: It was noted that the issues with workforce are often a “chicken or the egg” problem; what needs to come first, the workforce to fill future positions, or the jobs themselves? The State will offer computer programming as part of a student’s math credits, but there was concern expressed about the low number of classes in computer programming being offered despite this fact.

In response, the group was prompted to list some of the school-based initiatives:

- Wise County, Norton and Bristol City schools are offering dual enrollment cyber security classes. Hydroponics courses will also be offered as a result of the CBD oil plant coming to Bristol.
- A United Way of Southwest Virginia survey and credential study revealed that employers are looking for individuals who not only possess professional competency, but also demonstrate “soft skills” more recently called “essential skills.” They have also sent the results of this study out for additional professional analysis. Another finding from the credential study revealed that no two localities are exactly the same; there needs to be customized workforce solutions for different localities.
- Neva Bryan of UVa-Wise presented data collected by UVa-Wise Career Discovery and Planning. Their data looked at graduating classes from 2016 -2018 which revealed that 50% of graduates end up leaving the region for work. The other half stay in Southwest Virginia or Northeast Tennessee. This research tracked students for the first six months after graduation for each of the three years, and captured data for 85% of students from each graduating class. As a result, one strategy to consider may be targeted marketing to attract those who have left the region.
- The Sides event held in November of 2018, at UVa-Wise, was in partnership with MECC, SWCC and Virginia Cyber Arrange and featured a guest speaker to discuss cyber security. The event created a digital capture-the-flag scenario, with ethical hackers competing on two teams. The Cyber Patriot program hosts these events at a national level, and works closely to help High School students and instructors get involved on these programs. Working with Cyber Patriot in the future may hold vast potential to increase interest and awareness of the cyber security field for students in their formative high school years.

Additional Comments: Mark Eschle mentioned that at a larger scale, CGI and Northrop Grumman are the two primary examples of success stories in the Region. This comment prompted discussion about meeting the needs of the existing success stories while also attempting to address the challenge of meeting the needs of the future. The experience requirement is one of the biggest hurdles we face as a region. A possible solution to this hurdle is allowing future IT employees to gain work experience while receiving their education.

What funded initiatives need a new direction?

- **Education for Cyber Security-** Skills in cyber security are important, but technology positions also require a knowledge of the fundamentals of computer programming. As of now, there are education programs for cyber security jobs, but they sometimes lack these programming fundamentals. People going into STEM programs are not always going into computer science, but the core concepts of computer programming are needed as a part of this curriculum.
- It was noted that the schools are very willing to tailor their technology instruction, especially if they were to receive exact statements of need from prospective employers.

SOAR: The state of IT as it exists today

- **Strengths:**
 - **Broadband Infrastructure:** It is here, but this message isn't properly delivered outside of the region.
 - **Educational Institutions:** These are in place to properly educate the workforce, but the volume of potential employees is still too low.
 - **Regional Labor Market:** One strength is the quality of the current workforce. They are ready to be moved up. Workplace loyalty in the region is legendary.
 - **Quality of Place:** High quality of life, revitalization efforts, outdoor tourism, culture
 - **Marketing and Perceptions:** Tourism Marketing, Outdoor Recreation
- **Opportunities:**
 - **Infrastructure:** Could 5G connected towns be an opportunity through 5G Wi-Fi hotspots. Reaching the Last Mile for taking classes online. Cumberland Plateau PDC could potentially address this.
 - **Education and Training:** Create more leadership in the region. Create a unified vision.
 - Homesteading Idea
 - **Marketing** the strengths of the current labor force, educational institutions and infrastructure
- **Aspirations:**
 - **Infrastructure:** Change the narrative; market the region's broadband
 - Reaching the "workforce in exile" - Marketing the Region to those who once lived here, or who may be interested in trying it for the first time.
 - Mentoring Programs: Older Leaders Mentoring Millennials
 - Be more responsive to our partners when looking at funding opportunities within our community
- **Results:** What are some pieces that each person perceives as actionable?
 - Cyber Security 2 year degree
 - Programs to sell the region

- 5G Wi-Fi Hotspots
- Market the Broadband Infrastructure
- Sharing data with computer science and math department
- Kids to Coding program
- Unify the region's message
- Get more involved with SWVA Leadership Program