

Stafford Workforce & Education Partnership (SWEP)

Workforce Development Report August 2010

In 2009, Stafford County officials recognized a significant business need. While the county ranked number two in Virginia in both job and business growth (by percentage of growth 2004-2009) a number of businesses found it difficult to fill job openings with qualified employees. Given the significant level of business retention and expansion, Stafford County employers' need for enhanced education and workforce development opportunities was becoming increasingly critical.

Why the Stafford Workforce and Education Partnership?

Industry and education stakeholders were invited by Stafford County's Department of Economic Development to develop and execute a plan of action. Ultimately it was determined that Stafford County Schools, Germanna Community College, and the University of Mary Washington, would collaborate with the County's Department of Economic Development to form the Stafford Workforce and Education Partnership (SWEP). The partners would work together to determine the education and workforce development needs of local businesses. Starting with the County middle and high schools and continuing through undergraduate and graduate degree programs, SWEP would facilitate the identification, development, and offering of courses and programs designed to meet the business community's educational needs.

Approach

In the fall of 2009, SWEP determined that a series of four focus group sessions with the County's key industry representatives would provide the best mechanism for identifying employers' education and workforce development needs. A plan of action was detailed and a

schedule set for sessions in 2010, industry supported the new collaborative approach and the process was initiated. Taking action on educational matters without delay ensured that the County and its constituents would be better positioned for future business growth. SWEP's perspective was that any delay in obtaining information from the business community would impact the county's competitive capabilities.

In order to identify education and workforce development needs specific to Stafford County's key employers, SWEP defined the County's primary industry clusters as those considered major employers – those experiencing high growth in the fields of science, technology, engineering and health care, and those engaged in the hospitality and tourism industry that support County's unique cultural and recreational assets. After careful consideration, SWEP determined that the four focus groups would address the following clusters: federal and defense industry contractors; healthcare professionals; mechanics and skilled technicians; and, hospitality and tourism industry representatives.

Four 90-minute focus group sessions were held at Germanna Community College's Stafford County Center, one for each of the four industry clusters. Tailored to the attributes of each industry cluster, the four focus groups used the same format and approach. After introductions and opening remarks, focus group participants were asked a series of questions that were designed to elicit distinct information about their industry's education and workforce development needs. Information related to the critical skills and competencies needed by employees entering jobs and the current workforce, today and in the future, was obtained. Finally, focus group participants were asked about the availability of relevant education and workforce development programs within the County that would lead to employees' attainment of the most valued credentials – i.e., academic degrees, professional certifications, and licenses.

Common Themes

Although the industry clusters represented a variety of job categories, common themes were immediately apparent. Universally, Stafford County employers agreed that while job-based technical and professional skills are important, they cited another more pressing workforce challenge. More specifically, each cohort of focus group participants lamented the shortage of applicants and current employees possessing what are generally referred to as “soft

skills.” These capabilities are the foundation of employability skills that are necessary for success on the job. Work ethic, personal accountability, problem solving, adaptability, customer service, teamwork and collaborative skills, and the ability to interact and communicate positively and productively were always included in the discussion among participants. The need for effective communication skills focused on writing proficiently and speaking professionally. Regardless of industry group, prior experience was valued by all employers and the retaining and retraining of experienced employees was a common theme.

Managing a diverse group of employees presented challenges. Many participants agreed that oral and written communication among younger generation employees suffered due to their reliance on texting and email. Generational challenges in hiring applicants and managing current employees centered topics related to the use of technology and the ability to communicate effectively. Current and particularly older employees often lacked the requisite technology skills regardless of industry group. New, and especially younger employees, often lacked experience, maturity, and acceptable levels of communication and customer service skills.

Employers recommended that a successful workforce development initiative would require training that was pertinent, diverse, cost effective and flexible in terms of scheduling, time, and location. A virtual component was recommended to ensure accessibility, especially when employers’ job requirements involve extensive domestic and international travel. Real world preparation that provides an understanding of business environment expectations universally was deemed essential. An experienced instructor with business knowledge and experience was recommended and employers suggested internships, mentoring, and business/community partnerships with education. For younger students, including those still in the County’s secondary schools, several employers suggested job shadowing, career days, and career exploration events.

Industry Specific Needs

In addition to the common themes and recommendations, each industry group, as delineated below, identified and presented specific concerns.

Federal Contractors

When asked to identify the primary business challenges facing the Stafford County defense community, focus group participants identified issues related to the availability of funding, the need for additional Class A office space, financing, and a high- quality entry-level and mid-career workforce. Salary levels, government in-sourcing, BRACs' impact on regional businesses, changes in government administration, green initiatives and/or sustainability requirements, and post-9/11 security requirements also were a concern. Education, certification, and training in project management, engineering, software development, computer science, mathematics, aerospace engineering, procurement and contract management, information assurance and security, and specialized information technology (IT) skills were important to this group. Modeling and simulation was deemed an important need for government contractors in the future. They also noted a need for assessing how BRAC will impact the County's current and future business climate.

Healthcare Providers

Individuals representing an array of healthcare providers discussed the impact of federal healthcare reform, uncertainty in planning for the future, and the need to adapt quickly to respond to the changing environment. They noted an increasing customer base, competition, unfunded mandates for electronic medical records, and pointed to personnel issues related to competitive salaries and staff flexibility. They indicated the need for an experienced workforce, emergency medical care experience, imaging facilities, specialized care, and access to affordable training. Training requirements also included the need for management classes for entry-level supervisors. Certifications and education needs were listed in a variety of disciplines including EMT, life support, optometry and ophthalmology, nursing, radiology, medical assistance, healthcare management, radiology, and dental hygiene. Computer skills, a common theme across all four groups, were particularly needed in all health care jobs and medical employers noted that four-year degrees are required for only 50% of the positions in the medical field.

Mechanics and Skilled Technical Trades

The Mechanics and Skilled Technical Trades focus group participants expressed concerns related to their ability to attract and recruit qualified technicians. While discussing the same soft skills as other industry groups, this group of employers requires entry-level and experienced employees who possess job-specific technical competencies. Like their peers in other sectors, they shared their challenges managing experienced employees who are well-versed in their trade but lack technological capabilities. Additional frustrations result when trying to supervise younger employees who are tech-savvy but lack adequate experience and possess a markedly different work ethic. Continued job-specific training is important to this group of employers. Credentials needed include, but are not limited to PMP, LEED, ISO 9000, ASE, ISEC, NEMA, OSHA, ANSI, as well as vendor-specific certifications. Engineering, drafting, marketing, and construction management degrees are needed, as well as training in computer skills, risk management, safety, AutoCAD, and an array of mechanical and technical skills.

Tourism and Hospitality

Tourism and Hospitality representatives were concerned with developing a county tourism vision and identity that supports an increased awareness of Stafford County as a desirable overnight destination. Discussions included the need for comprehensive signage, a stronger web presence, and a holistic promotional package that included countywide information. While the current economy combined with decreased customer attendance has diminished the need for new hires, certain skills are considered valuable for new and current employees. For example, bilingual ability (especially Spanish) is increasingly important and IT and accounting skills are a plus. Most tourism and hospitality focus group participants agreed that they preferred experience to degrees and recommended using internships for on-the-job training. They built a strong case for high school and college partnerships and recommended national and state-recognized certificates, including a career work readiness certification. Given that many tourism and hospitality venues employ a nominal number of employees, the focus group participants suggested that a centralized location for collaborative tourism and hospitality training, customized specifically for Stafford County, would be helpful.

SWEP's Response

In response to what SWEP representatives learned, it is valuable to highlight the education and workforce development programs that currently exist as well as the specific steps that SWEP will take to address the identified needs of Stafford County employers.

Federal Contractors

Stafford County Schools has a strong high school technology education program that supports the Science, Technology, Engineering and Mathematics (STEM) curriculum and learning process including two nationally-certified Project Lead the Way engineering schools and three Stafford Academy for Technology (STAT) programs in engineering, information technology, and programming. Representative industry certifications that are available to high school students include CISCO, Autodesk, AutoCAD, MOS, IC³, and ADDA architecture. Specific high-tech course content is available in the fields of communication systems, imaging technology, digital visualization, video production, computer-integrated manufacturing, digital electronics, and civil engineering and architecture. Robotics teams recently have been created and have competed successfully in regional and national competitive events. Stafford County Schools, in partnership with Germanna Community College, offers dual enrollment classes that allow students to concurrently earn academic credit for high school and college courses. Middle school exploratory programs expose students to a range of high-tech career fields. Summer engineering and IT camp experiences help students focus on STEM concepts and team building as well as participate in real-world activities. High School students also may enroll in Navy, Air Force, and Army ROTC programs.

Germanna Community College offers a multiplicity of transfer programs, certificates, and two-year degrees that support federal contractors. Business Administration, Psychology, Science, Business Management, Graphic Communications, Accounting, E-commerce, Microcomputer Applications, Small Business Management, and Supervision, are available to sustain a pool of qualified employees for regional employers. More specifically, GCC offers credit and non-credit classes in Information Technology including Cisco Certified Network Associate (CCNA), Certified Information Systems Security Professional (CISSP), CompTia Network +, CompTia Security +, and CompTia A+ certification programs. These programs will be offered in traditional classroom and online formats. Further, Germanna can customize these

programs to fit the needs of individual clients. Also, Germanna provides numerous Information Technology programs on-line through our association with Ed2Go and Gatlin Education Services.

The College's Associate's Degree in Engineering is aligned with upper division Engineering programs at the University of Virginia, Virginia Tech, and Virginia Commonwealth University. The College's Business Department offers classes in procurement and logistics. Germanna representatives have initiated conversations with one of the Virginia universities to serve as a host site for the institution's Master's of Information Systems program.

The University of Mary Washington has an array of academic programs relevant to the needs of federal contractors including: undergraduate traditional and adult degree programs with relevant majors/programs of study such as Business Administration (including an Accounting track), Computer Science, Economics, Geographic Information Systems (GIS), Mathematics, Physics, and Psychology; an undergraduate degree completion program for adult students with concentrations in business and information technology; and, graduate business and technology programs – the MBA (with elective groupings in Accounting, General Management, Information Assurance and Security, Management Technology, and Project Management), the Master of Science in Management Information Systems (MSMIS), and the MBA/MSMIS dual degree – designed for working professionals. The University's Center for Professional Development, located on the UMW Stafford Campus, offers programs specifically tailored to federal contractors' competitive requirements. More specifically, the University has been a Project Management Institute Global Registered Education Provider since 2003 and offers regularly scheduled open enrollment and contract/on-site Project Management Professional (PMP) Certification and Microsoft Project programs. The Center's technology certification programs, offered on an open enrollment and on-site/contract basis beginning in 2000, include CompTIA A+, CompTia Network+, CompTIA Security+, Cisco Certified Network Associate (CCNA), Microsoft Certified IT Professional (MCITP), Microsoft Certified Technical Specialist – Windows 7 (MCTS), Systems Security Certified Practitioner (SSCP), and Certified Information Systems Security Professional (CISSP). (Note: A+, Network+, Security+, SSCP, and CISSP meet the DoD Directive 8570.1 requirements.) MS Office on-site/contract courses can be

arranged and participants who successfully complete these courses can attain certification as a Microsoft Office Specialist. Finally, the University has hosted the Commonwealth Graduate Engineering Program (CGEP), a graduate distance learning program provided by GMU, ODU, UVA, VCU and VT, for more than 20 years, offers Masters of Engineering programs in 12 disciplines.

Healthcare Providers

Stafford County Schools continues to develop its partnership base to support diverse Health and Medical Sciences high school offerings. Programs include EMT, Nurse Aide, Medical Assistant, Health Assistant, and the STAT Biomedical Sciences academy. Additionally, Stafford Schools and Spotsylvania Schools share student allocations to the first year of the Spotsylvania Career and Technical Center's LPN program. Students finish the second year of the program at Germanna Community College which allows them to sit for the National Council Licensure Exam, the required credential for entry into practice. Other student industry credentials that high school students can attain include Emergency Medical Technician, First Aid, CPR, Certified Nursing Assistant (CNA), and Nationally Registered Certified Medical Assistant (NRCMA). Each year Stafford Schools solicits grant opportunities from the Stafford Hospital Foundation and other healthcare entities to facilitate career and program development. Healthcare business partners provide students with sites for supervised clinical experiences related to their chosen field. The opportunity for students to obtain dual enrollment credit through Germanna Community College also is available.

Germanna Community College is recognized as having one of the best nursing programs in the state and offers programs leading to a number of healthcare-specific degrees, licensures, and certifications. Programs include the: Nursing Associate of Applied Science Degree; Practical Nursing; the LPN to RN Program; Dental Assistant; Surgical Scrub Nursing; Pharmacy Technician; General Studies for Radiologic Technology; Vocational Health Care; and, Certified Nurse Aide. Through a collaborative agreement with Northern Virginia Community College, Germanna students can enroll in a dental hygiene programs. The College's Center for Workforce and Community Education offers non-credit Phlebotomy and Certified Nurse Aide (CNA) classes as well as several on-line programs including Medical Coding and Medical Transcription. The

Center offers a Leadership in Healthcare Program to support the transition of healthcare individual contributors to management positions. A Nurse Refresher program has been added to prepare nurses for their return to clinical practice. Germanna also is looking at ways to address the impact of advanced information technology on the health care delivery system, i.e., healthcare informatics.

The University of Mary Washington offers undergraduate traditional and adult degree programs with relevant majors/programs of study such as Biology, Biochemistry, Chemistry, Pre-Dental, Pre-Med, and Pre-Veterinarian. Quite interestingly, the overwhelming majority of University of Mary Washington undergraduate students who major in the life sciences and apply to medical, dental, and veterinary schools are accepted. In response to the increasing number of regional healthcare providers, the University of Mary Washington offers the MBA with a group of electives in Healthcare Management. Other undergraduate and graduate business and technology degree programs prepare graduates for accounting, finance, management, human resources, and IT positions in healthcare organizations. In partnership with VCU in the fall of 2009, the university began hosting the VCU Bachelor of Science in Nursing Weekend Program which is designed for nurses who work full time. Classes are offered one weekend a month on the UMW Stafford Campus and eligible students can complete degree requirements in as little as three semesters or as long as six years.

Mechanics and Skilled Technical Trades

Stafford County Schools offers a variety of trade and industrial programs including automotive technician, carpentry, masonry, electricity, small engine repair, graphic imaging, and drafting. All three automotive technician programs boast ASE certified instructors. The carpentry, masonry, electricity, and drafting teachers at Stafford High School collaborate to design and construct a new home each year through the Bringing Occupational Opportunities to Schools Program (BOOTS). BOOTS House #20 will be constructed beginning in September. In addition, each student in the program earns their OSHA 10 card. The Stafford Schools' newest program, Small Engine Repair, utilizes the Briggs & Stratton curriculum. The graphic imaging technology program and instructor recently earned national PrintEd Certification and provides

printing services for the school division. Both drafting instructors are ADDA certified and a number of drafting students earn their ADDA certification each year.

Germanna Community College currently offers several programs that can directly benefit this industry group by providing apprenticeship programs that prepare machinists, electricians, and industrial maintenance technicians. The College also offers both 10-hour and 30-hour OSHA training, AutoCAD, and PLC training. Additionally, classes for obtaining a building contractor's license and license recertification are offered. Automotive Diagnostician and Technician Certificates are also available. Given the recent opening of the GCC Stafford County Center, the College will explore ways on how to best offer all of these classes in Stafford County. For example, the Industrial Maintenance program is largely computer-based but also has a weekly practical, hands-on component. The College will need to provide Stafford County Center students with the opportunity to interact with the instructor and participate in the hands-on component. More recently, GCC began offering academic credit towards an Associate's Degree in Technical Studies for students enrolled in technical and trades programs and the College anticipates the approval of this degree program this year.

As noted above, the University of Mary Washington provides an array of academic degree and professional development programs that prepare individuals for the supervisory and management responsibilities associated with operating a business.

Tourism and Hospitality

Stafford County Schools provides students with a varied curriculum that supports the tourism and hospitality industry including sports, entertainment, and recreation marketing; hotel marketing; business management and supervision; principles of business and marketing; information technology; fashion marketing; accounting; business law; economics and personal finance; web design and multimedia technology; and culinary arts. Each of these curricular areas is supported at each high school with additional experiences provided through the cooperative education program. One of the three culinary arts programs has earned national American Culinary Foundation certification under the instruction of a certified chef. Available certifications for these programs include Serv-Safe, START, NPCCS, IC³, MOS, and WISE. In addition, all Career and Technical Education courses require students to develop competencies

to support learning about all aspects of industry in their related career and workplace readiness skills. As adopted by the Commonwealth of Virginia for 2010 - 2011, these 21 workplace readiness skills stress personal qualities and people skills such as positive work ethic, integrity, teamwork, self-representation, diversity awareness, conflict resolution, and creativity and resourcefulness. Professional knowledge and skills incorporates speaking and listening, reading and writing, critical thinking and problem solving, health and safety, organizations/systems/climates, lifelong learning, job acquisition and advancement, time/task/resource management, mathematics, and customer service. The acquisition of technology knowledge and skills includes job-specific technologies, information technology, internet use and security, and telecommunications. Knowing that the local business community has identified many of these skills, Stafford Schools will continue to infuse the soft and the hard skills into the curriculum. While short term goals are designed to meet the community's current needs, long term goals include partnership development to create a Career and Technical High-Tech Center where students and community members are able to better prepare for the needs of the expanding technical work force in Stafford.

Germanna Community College currently offers many of the programs requested by this industry focus group including Spanish, introductory MS Office classes, Accounting for Non-accountants, and Quick Books. Further, this past year GCC created the Customer Service Academy which offers an eight module training program specifically designed for this business group. The College has worked with local businesses to introduce the Career Readiness Certificate as an employment assessment tool to improve the quality of new hires. In the coming months, GCC must continue working more closely with the Stafford business community to make sure that the College's programs are readily available at our Stafford County Center as well as other convenient locations throughout the county.

As noted above, the University of Mary Washington provides an array of academic degree and professional development programs that prepare individuals for the supervisory and management responsibilities associated with the tourism and hospitality industries.

Next Steps

A review of focus group participants' responses and perspectives provided SWEP representatives with information that will result in actionable next steps that will occur within the next three to six months.

- More specifically, it is apparent that employers, regardless of industry group, lack an awareness of the array of education and workforce development programs and services that are readily accessible and can be provided by the Stafford County Schools, Germanna Community College's Stafford County Center, and the University of Mary Washington's Stafford Campus.
- Each educational entity will provide the County's Department of Economic Development with a list of education and workforce development program and service offerings that will be posted to a designated link on the Department's web site. The Department will also produce an informational publication to be distributed to Stafford County employers. As noted below, Germanna Community College has a number of programs that can be easily adapted and presented at their Stafford County Center. These would include IT and IS certification programs and professional development classes. Germanna also has a two-year engineering degree program that has full articulation with the University of Virginia and other state universities. Additionally, the University of Mary Washington has hosted the Commonwealth Graduate Engineering Program for more than 20 years which offers graduate engineering degree programs via distance learning technology. The UMW Stafford Campus also has offered project management certification courses since 2004 and has successfully offered information security and assurance certification courses that fulfill the Department of Defense Directive 8570.1 starting in 2008.
- In partnership with the Fredericksburg Region Society for Human Resource Management (FRSHRM), workshops that focus on recruiting, interviewing, and hiring best practices will be conducted. These targeted workshops will be offered at convenient times and places and at a nominal cost to participants. Additionally, SWEP, in collaboration with FRSHRM, will identify other human resource topics that employers will find of value and interest.

- Given the regional (and national) concern about the gap between the skills required in today's workplace and those exhibited by potential and incumbent employees, information about the National Career Readiness Certificate can be obtained at <http://www.act.org/certificate/index.html>. Based on industry employability criteria, this nationally recognized certificate is a portable skills credential, assuring employers that a job applicant actually has the basic skills needed for initial success on the job. (Job applicants can make an appointment to take this online test at Germanna Community College's Fredericksburg Campus.)
- Given the focus on essential soft skills and the need for exemplary customer service, Germanna Community College's recently developed Customer Service Academy will schedule workshops at their Stafford County Center. The workshops will address effective interpersonal communication and teamwork skills. There also is a defined need for workshops on topics such as oral and written communications as well as managing multiple generations in the workplace.
- Given focus group participants' concerns about employees' levels of technological capability, a series of workshops will be scheduled to address computer competencies. Classes will range from basic computer workshops to higher level certification courses. A 20-hour course will be scheduled to address employers' concerns regarding older employees that struggle with technology changes in the workplace. This course, aimed at the computer wary, will take a more focused and interactive approach to help the novice users gain confidence and build fundamental computer skills.

Recommended Long-Term initiatives

The SWEP focus group process has been extremely valuable, especially when identifying education and workforce development gaps that can be addressed within the next three to six months. However, industry-specific requirements require a more studied and customized approach. In order to address Stafford County employers' long term needs, SWEP representatives will continue to meet and work with either individual employers or groups of employers with common needs to better understand their requirements and to propose

customized education and workforce development solutions that, when assessed, will have definable business outcomes.

In Closing

A constellation of significant economic factors have an ongoing impact on the ever-changing workforce. SWEP will monitor and respond to employers' needs that will contribute to Stafford County's prosperity and support business expansion and attraction, resulting in additional jobs and continued economic development.

Equally as important as gaining information about the most valued and needed education and workforce development programs was determining how to best offer the education. For example: Do Stafford's companies need online programs? Should educators hold classes on-site during the work day? Will employers provide released time so employees can attend programs designed to improve workplace capabilities? A major component of SWEP's efforts was to understand how to make educational opportunities convenient, accessible, attractive, and affordable. To this end, the County, Stafford Schools, Germanna Community College, and the University of Mary Washington are committed to improving the competencies of employees, enhancing the capabilities of our employers, and significantly contributing to the County's long-term economic growth and prosperity.

Stafford Workforce Education Partnership Team Members

- Kathleen M. Burant, Director of Career and Technical Education, Stafford County Public Schools
- Russell James, Dean, Business & Workforce Services, Germanna Community College
- Joel Griffin, Vice Chair, Stafford County Economic Development Authority
- Jeanne Wesley, Ph.D., Vice President, Workforce Development and Community Relations, Germanna Community College
- Mark J. Safferstone, Ph.D., Executive Director, UMW Center for Professional Development
- George Hinckley, Senior Advisor, MTCSC
- Timothy J. Baroody, Deputy County Administrator, Stafford County Government
- Bethany Miller, Business Retention and Expansion Manager, Stafford County Economic Development

Participants by Industry Group

Federal Contractors

General Dynamics

The Reger Group

MITRE

McQ Systems Innovations, Inc

SBG Technology Associates

Dulos, Inc.

BAE

MTSCS

SRA International

Healthcare Practitioners

Aquia Family Chiropractic Center

Eagle Eye Vision Centers

Stafford County Fire & Rescue

Family First Healthcare

Medical Imaging of North Stafford

LifeCare Medical Transports

Greenfield Assisted Living

VaCora L. Rainey, DDS PLC Family and Cosmetic Dentistry

Mechanics and Skilled Technical Trades

Quantico Military Systems Command

Virginia Paving Company

Ed Lawrence Construction Company

Falls Run Stone & Stucco

Development Consulting Services, PLC

Stafford County Utilities

Stafford County Fleet Services
Associated General Contractors of Virginia

Hospitality and Tourism

The Gauntlet Golf Club
Potomac Point Winery
Hartwood Winery
George Washington's Fredericksburg Foundation
Gari Melcher's Home and Studio
TownPlace Suites Marriott

(Example Focus Group MS PowerPoint Presentation (attached))