

Capital Region: Inventory of Sector-Based Workforce Strategies 2016

Capital Region Workforce Development Board

Columbia-Greene Workforce Development Board

Saratoga-Warren-Washington Workforce Development Board

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I. Executive Summary

This inventory of sector-based workforce strategies has been developed as part of the regional planning process described in the federal Workforce Innovation and Opportunity Act (WIOA) that was implemented July 1, 2015. In addition to promoting regional planning and regional workforce programming, this new legislation calls for an emphasis of engaging businesses in a sector-based approach to identify needs and provide workforce solutions. Further, this inventory of sector-based workforce strategies involves coordination with the REDC (and their priority sectors) as well as with other organizations in the region involved in sector based workforce strategies. The intent of the inventory is to assist the Regional Economic Development Council in addressing the Governor's priority to "Train the Workforce for Today and Tomorrow" outlined in the 2016 REDC Competition Guidebook.

This inventory identifies specific sector-based workforce strategies that the workforce boards participate in along with their local career centers, as well as other relevant initiatives identified by workforce and training related entities in the region. The Regional Workforce Development Board's priority sectors have been identified by reviewing and comparing local board priority sectors as well as analysis of industry data and labor market information and discussions and presentations by the NYS DOL labor market analyst. The specific strategies carried out by the workforce boards as described herein resulted from outreach to businesses and employer engagement to identify specific workforce needs and then to identify the specific steps and partnerships needed to address those needs. Further, we have reached out to a variety of other business organizations, training facilities, and workforce and partner organizations, including those who participate in our quarterly Greater Capital Region Workforce Coalition meetings, to identify other potential sector-based initiatives that the workforce boards may not be specifically participating in to include as part of the inventory.

The Capital Region REDC has focused on developing a sense of inclusiveness and openness among all the industries in our region. During the first years of their existence they have purposely avoided identifying industry sectors that are priorities over concern that it might stifle creativity and thus eliminate successful economic development strategies. Therefore, the sector strategies identified in this plan can all be considered to support the efforts of the REDC. Certain sectors are prominently acknowledged in REDC documents and sector-based strategies herein related to such REDC sectors have been identified where applicable. Other relevant sector strategies are also included in this inventory. The workforce boards identified applicable sectors through a review of the Capital Region REDC strategic plan and annual updates, participating at and discussing priority sectors at their most recent Workforce and Education subcommittee meeting and by confirming priority sectors with the committee chair.

II. Sector-Based Strategy Descriptions

Strategy - A

1. **Name of Strategy** – Adult Machine Tool Technology (AMTT) Training Program.
2. **The Phase of Development** – Sustained and potentially expanding to include additional more advanced training topics. Initiated in Fall 2013, the AMTT is an intense 500 hour training program which has had three annual iterations to date beginning Fall 2013 with a fourth planned for Fall 2016.
3. **Workforce Demand (need)** – The retirement of baby boom era machinists coupled with the continuing growth of advanced manufacturing has led to an increasing demand for entry level machinists both in New York State and across the nation. Input from local employers indicated a desperate need for the creation of a sustained pipeline of entry level workers to feed both the independent machine shops (some of which have world-wide distribution) as well as other manufacturers from broader industries which have a need for individuals in machining. An initial local survey sample had indicated over 50 hires needed in a two year period and some businesses mentioned that a lack of a pipeline of trained workers was stifling growth. We continue to hear from more employers that support the need for the training as well as more advanced CNC skills for current employees as well.
4. **Relevance of the Demand to REDC and WIOA Priorities** – CNC machining falls comfortably into the realm of STEM occupations and is integral to sustaining the growth of Advanced Manufacturing in this area and the Greater Capital Region. This is a priority for both the REDC and the regional workforce development boards operating under WIOA.
5. **Strategy** – The AMTT training program is a sector based approach to meeting the employment needs of regional employers. It is a collaborative venture between business, education, a non-profit and government. The key to the success the program has enjoyed to date and the success it will continue to enjoy is the involvement of employers. Regional machine shops along with companies engaged in Advanced Manufacturing are canvassed to document the demand for this training and then are actively involved in the program design, curriculum development, identification of the instructor, program promotion, screening and selection of the students, program assessment and hiring of individuals successfully completing the training. The workforce board convened and facilitated discussions with businesses and then eventually with the host educational site, the WSWHE BOCES, and facilitated outreach activities. The board also arranged for tuition assistance through a federal grant in conjunction with local career centers and through additional assistance of the Workforce Development Institute (WDI). BOCES administered the training as an adult continuing education program.
6. **Use of Available Resources to Support the Strategy** – Student tuition for eligible individuals has been funded these past three years to a large extent by a federal Workforce Innovation Fund (WIF) STEM grant. Supplemental funding over this same period of time was provided by grants from the Workforce Development Institute (WDI) and local WOA funds. Tuition is at a reasonable level which will better allow eligible individuals to access tuition support going forward from WIOA funding through One-Stop Career Centers, company tuition reimbursement or self-pay. This program would be an excellent candidate for future NEG grant funds through the state as well. Finally, the program also benefits from business donations of materials and tools.
7. **Critical Elements That Cannot be Addressed with Available Resources** – Sufficient funding resources to support appropriate candidates who could not otherwise attend is important. Access to the training program is only on Saturdays and evening hours during the week. Additional training space would be very beneficial. There is an interest to expand the program to include a more advanced CNC component. Funding for this to serve current employees would also benefit the industry.

Strategy - B

1. **Name of Strategy** – Introduction to Craft Brewing.
2. **The Phase of Development** – Sustained and developing. The Introduction to Craft Brewing course ran a successful pilot in January '15-April '16. The next course will begin October 3, 2016. SCCC plans to offer the course twice per academic year. In addition, credit program options are also being developed.
3. **Workforce Demand (need)** – The course is aligned with the employment needs of the ever expanding Capital Region breweries. In addition, this training lends itself to similar job skills in distilleries, wineries, food processing and even some selected eco-friendly product manufacturing. This course prepares an individual for an entry level brewing position which requires the following skills:
 - Overview of Brewing & Packaging
 - Brewing: Raw Materials Sweet Wort Production
 - Brewing: Conversion of Starch to Sugars
 - Brewing: Plant for Sweet Wort Production
 - Wort: Boiling
 - Wort: Clarification, Cooling & Oxygenation
 - Basic Principles of Yeast Fermentation
 - Fermentation Practice
 - Beer Maturation & Storage
 - Processing Beer for Packaging
 - Beer Packaging-General Topics
 - Packaging of Beer
 - Beer Quality: Process Control
 - Beer Quality: Flavor
 - Beer Quality: Microbiological Contamination
 - Beer Quality: Quality Management
 - Plant Cleaning
 - Engineering Maintenance
 - Brewing and the Environment
 - Brewery Safety
 - Food Safety
 - Workplace & Soft Skills

A survey of regional brewers indicated support for the initial round of training and the need to create a pipeline of trained applicants. The craft brewing industry in New York State grew 59% from 2013 to 2014, with a total economic impact estimated at \$3.5 billion, according to a report compiled by the NYS Brewers Association. The report can be viewed at:

https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/NYCraft_Beer_2013_Impact_Study_FINAL4.15.15.pdf

4. **Relevance of Demand to REDC and WIOA Priorities** – Relates to the REDC and Workforce Development regional priority for manufacturing.
5. **Strategy** – This initiative developed through a consortium of capital region breweries (Shmaltz, Rare Form, Adirondack Brewing and Saranac) working together with the Capital Region Workforce Development Boards (WDBs) to create an approach to address their applicant pipeline needs. The partnership expanded to include the Schenectady County Community College's Office of Workforce Development & Community Education to collaboratively create a training curriculum aligned with their specific needs. Fifteen students participated in the initial pilot and fourteen completed. The workforce boards assisted with assessment and screening for potential training assistance. The collaborative worked together to provide an information session to recruit individuals. An information session for the second round of the course is planned for July 25, 2016. The information session will have representatives from the Craft Brewing industry, SCCC's Workforce Development & Community Education and the Capital Region Workforce Development Boards. Potential students will be assessed in basic chemistry and algebra as well as vetted for funding by Workforce Development Board staff. The course will continue to be housed at SCCC and successful completers will be afforded three credits toward SCCC's one year certificate and Associate degree programs in Craft Brewing. Industry experts will offer course instruction as well as continue to manage the course curriculum.
6. **Use of Available Resources to Support the Strategy** – The WDBs were able to fully fund nine out of fifteen training participants.
7. **Critical Elements that cannot be addressed with Available Resources** – The development and implementation of this course has been a collaborative effort from the very beginning. When industry, education and workforce development come together, those seeking training opportunities benefit tremendously. It is our hope that the collaboration will continue as will funding opportunities for qualified participants or employed individual, especially as the one year certificate and Associates degree programs are added.

Strategy - C

1. **Name of Strategy** – Allied Health Care Trainings
2. **The Phase of Development** – The current strategy is being sustained through private funds and federal grants. We are expanding our trainings to include emerging professions and on line offerings.
3. **Workforce Demand (need)** – Under the Allied Health Care Trainings strategy we aim at addressing the consistent need for entry level positions in the recession proof field of healthcare. Projections for the Capital Region from the NYS Department of Labor show that positions like Home Health Aides (HHA) and Personal Care Assistant (PCA) are expected to grow over 30% in the next several years, while Certified Nurse Aides (CNA) are expected to level off at 15%. However, based on our experience and contacts with healthcare business, the turnover rate for these jobs is quite high and the employment demand far exceeds the availability of potential employees. In addition, these positions can be a spring board for more education and additional stackable credentials in a variety of healthcare related fields.
4. **Relevance of the Demand to REDC and WIOA Priorities** – Relates to the REDC and Workforce Development regional priority for healthcare. We see our strategy as filling a market demand, but also building collaborations between academia and private sectors, thus filling one of the goals of the Capital Regional Economic Development Council (CREDC): Leverage and Collaborate. In addition our focus on pathways and wrap around supports is a prime example of the “Prepare for Tomorrow” CREDC goal.
5. **Strategy** – We have established a consortium, Upstate Partnership for Healthcare Pathways, that brings together three community colleges, Schenectady County, Fulton Montgomery and SUNY Adirondack, to provide the training and two community based organizations, Albany Community Action Partnership and Schenectady Community Action Program. Together we plan to train over 2,200 individuals over the next 5 years. Our Advisory Committee is a clear example of granular connections and links between government supported social services, community based organizations and businesses. The colleges will be providing the education and training. The community action partners will be providing the initial intake and subsequent soft skill training, wrap around services and post instruction follow-up. Affiliation agreements are/will be developed health care facilities for clinical site instruction.
6. **Use of Available Resources to Support the Strategy** – In support of our strategy we are using both private funds from individuals as well as two major federal grants: Health Profession Opportunity Grants (HPOG) and Health Career Opportunity Program (HCOP). Both have been awarded by the US Department of Health and Human Services with the intent of training TANF and low income individuals in healthcare jobs.
7. **Critical Elements That Cannot be Addressed with Available Resources** – With the current redesign of the healthcare services (DSRIP), we need to be nimble in our development of new educational avenues to fulfill the demands of the business and provide students with pathways for a better tomorrow. Development of new curricula is

seldom supported by businesses and the shift from hospital and emergency room care to community based care will require retooling of existing workers and improved training of new employees. New professions such as Behavioral Health Technician and Care Coordinators are emerging and it is a part of our strategy to be able to fulfill the educational demands of our healthcare partners. Resources could be used for planning sessions with medical groups and the development of new educational strategies to have a more direct impact on the healthcare services of the region. Also, this grant is a demonstration study by HHS. Based on a lottery model, 1/3 of initial applicants will be used as a control group for the study and will not receive any benefits. These applicants will be encouraged to utilize the one-stop centers for their education and training support. The grant may not support these individuals so every effort should be made by the community agencies to provide alternative resources to the neediest members of our communities.

Strategy - D

1. **Name of Strategy** – Health Care Support: Columbia-Greene
2. **The Phase of Development** – This strategy has faced setbacks and has moved back to the drawing board after initial implementation due to lack of resources.
3. **Workforce Demand (need)** – Nursing Homes, Outpatient Services, Home Health Agencies, the local hospital, Community Based Organizations, Schools, and Prisons all have job openings for Nurses at all skill levels: Certified Nursing Assistants (CNA), Licensed Practical Nurses (LPN), and Registered Nurses (RN) are in-demand throughout Columbia and Greene counties and the entire capital region. Labor market projections show huge growth in this sector and a September 2015 business survey showed current job openings in the broad nursing field to top 230 positions.
4. **Relevance of Demand to REDC and WIOA Priorities** – Relates to the REDC and Workforce Development regional priority for health care. Health Care is considered a major industry in the Capital District. The REDC recognizes that its strength supports economic development attraction efforts among all industries.
5. **Strategy** – Prior to September 2015 the Columbia-Greene area had structures in place to continuously train LPNs, Medical Assistants, and RNs. There was also the ability to quickly implement CNA training programs. The educational partners included Questar III for CNA and LPN training, supported by local Nursing Homes for recruitment, clinical placements, and job placements. Columbia-Greene Community College (CGCC) also had the ability to provide CNA training and offers both an RN and Medical Assistant degree programs, with clinical support offered by local and regional hospitals, and outpatient support facilities. The local Columbia-Greene Workforce Development Board worked with local Nursing Homes to implement a strategy to train CNAs and offer a career pathway, through tuition assistance, so these students could continue to work while pursuing additional training as LPNs, RNs, or Medical Assistants.
6. **Use of Available Resources to Support the Strategy** – Tuition/financial support to operate all of these programs came from a variety of sources: TAP/PELL, WIA/WIOA, and tuition reimbursement programs offered by the health care facilities.
7. **Critical Elements That Cannot be Addressed with Available Resources** – This sector partnership and career pathway for the local industry suffered a severe blow in September 2015, when our educational partner, Questar III determined it was no longer economically feasible to offer an LPN training program. Six of the local Nursing Homes have expressed their concern about the impact this will have on their pool of available applicants. Other regional training programs are limited in the number of students they can enroll, making the upcoming shortage even more concerning. For this sector partnership to resume its efforts to provide the employees needed for all levels of nursing care and to resume career pathway options, a new, local LPN training program is required.

Strategy - E

1. **Name of Strategy** – Certified Registered Central Service Technicians
2. **The Phase of Development** – Conceptual/Initial implementation
3. **Workforce Demand (need)** – Capital Region BOCES’ “Central Sterile Processing Technicians trained as Certified Central Service Technicians” initiative is prompted by needs resulting from new state legislation requiring health care professionals who clean, disinfect, inspect and sterilize surgical equipment to be certified. The law was effective January 1, 2015 and applies to all newly hired central service technicians (a.k.a. central sterile processing technicians) and those who have been in their jobs less than one year.

While there is a grandfather clause in the new legislation, many health care facilities (including Albany Medical Center and numerous stand-alone surgery centers) indicate they will require all central service employees to be certified in order to retain their jobs. Without certification (and the accompanying 678 hours of training and practicum experiences), it’s estimated that more than 100 employees in the Capital Region alone could experience job loss. Albany Medical Center, itself, employs 60 such technicians and, according to the most recent data available from the New York State Department of Labor, there are currently more than 2,325 central service technicians in the state. Depending on the response to the new legislation by health care facilities throughout the state, many more health care professionals’ jobs will be at stake if they are unable to earn certification.

According to the latest data available from the New York State of Labor, there are 850 openings or vacancies for medical equipment preparers (a.k.a. central service technicians or central sterile processing technicians) in the state. The employee shortage will worsen, as more stand-alone surgery centers open and hospitals expand their in-house surgical facilities to meet increasing demand for medical procedures. In fact, the job growth in this field is predicted to be at least 9.4 percent over the next seven years. Locally, Albany Medical Center is following the trend, as it has recently opened 10 new operating rooms (for a total of 36) and will need to hire more central service technicians. And while certification for these technicians is a positive move medically, the new stricter requirements will exacerbate the problem of employee shortages.

It’s important to note the need for this BOCES-led initiative within the context of a serious healthcare crisis that negatively affects patient outcomes. Nearly 100,000 people die each year from hospital-acquired infections (source: Centers for Disease Control and Prevention) and nearly one in every 20 patients gets an infection while hospitalized. Many of these infections are attributed to use of unclean or non-sterile medical instruments. Looking at the issue strictly in financial terms, the U.S. Department of Health and Human Services estimates that hospital-acquired infections alone are responsible for \$28 billion to \$33 billion in preventable health care expenditures annually.

4. **Relevance of Demand to REDC and WIOA Priorities** – Relates to the REDC and Workforce Development regional priority for healthcare
5. **Strategy** –Capital Region BOCES will use relationships with area employers including more than 70 medical. Certification for the occupation includes taking 278 hours of coursework, engaging in 400 hours of practicum experiences and passing certified registered central service technician (CRCST) exam. This is a significant change from a job that previously required only a high school diploma or General Equivalency Diploma (GED). The technicians are experiencing additional changes in their jobs with the continued technological advancements in medical supplies and instruments and the growth in the number of pieces of equipment.
6. **Use of Available Resources to Support the Strategy** – To promote employment in the field, the Capital Region BOCES will draw on its nearly 60 years of health care training and the resulting extensive relationships with area employers. These working relationships with more than 70 medical facilities will continue when BOCES develops its central service technician program, as will the BOCES' annual health career fairs, which typically include 32 or more employers. In addition, participants in the program can tap the expertise of BOCES' full-time health occupations placement coordinator.
7. **Critical Elements That Cannot be Addressed with Available Resources** –

Strategy - F

1. **Name of Strategy** - Hudson River-Adirondack Region EPA Environmental Workforce Development Job Training Program
2. **Phase of Development** - Sustained - The City of Glens Falls received an EPA Environmental Workforce Development Job Training Grant in 2012 under the auspices of which 3 training sessions were conducted between 2014-2015 with 71 qualified participants 49 of whom successfully completed the program. The City has received a second 3 year grant and anticipates training an 90 additional individuals over the period 2016-2019.
3. **Workforce Demand (need)** - The Hudson River-Adirondack Region is home of the largest Superfund project, the Hudson River Dredging Project, in the country. In addition, an estimated 1900 other potential brownfield sites which require remediation exist within the region. These sites include vacant and contaminated industrial and commercial properties creating a backlog of brownfield investigation and clean up without which they offer little or no potential for future development and job creation.
4. **Relevance of the Demand to REDC and WIOA Priorities** - Relates to the REDC and Workforce Development regional priority for supporting occupations in manufacturing. Also strongly supports other relevant reasons for conducting the training include addressing the above stated need for contamination remediation.
5. **Strategy** - Key sector partners to be involved in candidate recruitment, screening and selection have already been identified and include: Warren County NYS Department of Labor, Local 773 Plumbers and Pipefitters Union and affiliated contractors, Warren & Washington Counties Veterans' Service Coordinators, NAACP, Glens Falls Chapter, Warren & Washington Counties DSS, Warren County Employment & Training Administration, Saratoga-Warren-Washington Workforce Development Board and the related Career Centers. Training is hosted at the Local 773 Plumbers and Pipefitters Union training center. The intensive training regimen includes STEM related courses in math and chemistry which are intended to provide a knowledge basis for follow-up core courses such as the 40-Hour Hazardous Waste Operations & Emergency Response, OSHA 10-Hour Construction Industry Health and Safety Training, Confined Space Entry Training, Asbestos-Handler Operation & Maintenance and Emergency Spill Response.
6. **Use of Available Resources to Support the Strategy** - The strategy will be supported by a 3 year, \$200,000 by an EPA Environmental Workforce Development and Job Training Grant.
7. **Critical Elements That Cannot be Addressed with Available Resources** - Additional resources would need to be identified to sustain future program offerings

Strategy - G

1. **Name of Strategy** – Clean Technologies and Sustainable Industries Early College High School
2. **The Phase of Development** – Sustained and expanding. Launched as a pilot in 2011-2012, the program is now a fully developed Early College High School Program.
3. **Workforce Demand (need)** – Students enrolled in the program choose pathways in industry sectors that lead to Associates Degrees in fields that are workforce priorities for our economic development region. Students simultaneously complete their high school degree while working towards their Associates Degree from Hudson Valley Community College in the fields of Clean Energy, Mechatronics, Computer Information Systems and Entrepreneurship, Leadership and Innovation.
4. **Relevance of the Demand to REDC and WIOA Priorities** – As indicated in the CREDC URI Report, the Capital Region will invest in its education cluster to develop an innovative workforce solution that will address the national middle skills gap. The Clean Technologies and Sustainable Industries Early College High School directly supports the region’s initiative regarding the development of the Partnership for TALENT, and is regarded by the region as an example of “Excellence in Teaching” focused on preparing a future workforce that will drive economic growth in the Capital Region and New York State. The Governor has identified P-TECH and Early College High Schools as a strategy for advancing workforce development in New York State.
5. **Strategy** – This program is supported through the collaborative efforts among partners in K-12 education, higher education, business and industry, nonprofit organizations and government. Currently, there are over 45 partners across sectors that support various aspects of programming.
6. **Use of Available Resources to Support the Strategy** – The program draws on a variety of resources to support implementation including current and prior grant funds from the New York State Education Department, NYSERDA, JP Morgan Chase, scholarships and sponsorships from partners in business and higher education and local support from districts throughout the economic development region that enroll students in the program.
7. **Critical Elements That Cannot be Addressed with Available Resources** – The capacity for continued sustainability over time is the top critical element. Grant funds run on various cycles, and every effort is made to develop new resource engines as prior funding opportunities close. As the focus remains on full implementation with strong fidelity, supporting this initiative with regard to continued success requires a long term commitment to building human capital, advancing facilities and further curriculum and program development. This a daily challenge, and as the program is at enrollment capacity any additional expansion would require significant resource investment.

Strategy - H

1. **Name of Strategy** – Business Central
2. **The Phase of Development** – In initial implementation, since October 2015.
3. **Workforce Demand (need)** – A variety of industry sectors will be able to address needs for immediate applicants but also offer internships for area college and high school students to address career exploration and awareness, work-related training and future job connections.
4. **Relevance of the Demand to REDC priorities** – All sectors are addressed with this initiative.
5. **Strategy** - SUNY Adirondack has hired a Coordinator of Career Connections to support matching students and community members with local employers – either through employment or internships. Using our College Central Network (CCN) online platform, businesses are able to post their specific hiring needs and interact with one office for their workforce hiring needs. Students are able to work with the Coordinator on resume writing, interviewing skills and application submissions. SUNY Adirondack developed a Memorandum of Understanding with the Adirondack Regional Chamber of Commerce, Queensbury High School, Glens Falls High School, WSWHE BOCES and the local Rotary to provide opportunities for students to engage with businesses and area professionals. An internship fair is planned for Fall 2016. In addition to using CCN, SUNY Adirondack is pilot testing HRD 178 Applied Learning Internship – Career Exploration course, with Queensbury High School during Fall 2016. High school seniors will be enrolled in this course and gaining college credit while exploring their career of choice. If successful, this course will be rolled out to more schools within our service region.
6. **Use of Available Resources to Support the Strategy** – The college has renovated space within the Regional Higher Education Center for Business Central, as well as hired the Coordinator. The campus is in initial site development stages for a new Regional Workforce Readiness Center (WORC) – this Center will house the Office of Continuing Education and Workforce Innovation, as well as Business Central.
7. **Critical Elements That Cannot be Addressed with Available Resources** – Additional resources could be made available for paid internships. So many of community college students are working multiple jobs to make ends meet, while attending school full-time. If they could receive a paid internship, they could be earning money and credits toward graduation while applying their classroom learning to their field of study.

Strategy - I

1. **Name of Strategy** – Agriculture Initiatives
2. **The Phase of Development** – This strategy is expanding.
3. **Workforce Demand (need)** – The local agriculture industry has long sought local support for supporting business growth. The industry is being supported through development of an Agricultural Business AAS degree, non-credit workforce training and community based programming. Students will gain a broad based knowledge of business fundamentals, with direct agriculture application. The degree involves site visits to area agriculture businesses, as well as a required internship. Program graduates may develop their own agriculture small business or lend business support to existing businesses to promote, increase and expand farm to market efforts. Workforce training – in peer to peer workshop, as well as supply chain management, has been on-going this past year. Area businesses have received direct workforce training to improve their products and their businesses.
4. **Relevance of the Demand to REDC and WIOA Priorities** – Warren, Washington and Saratoga counties, as well as NYS in general, are heavily focused on agriculture and emerging agritourism.
5. **Strategy** – The college hired a Coordinator of Agricultural Initiatives to begin networking with local farmers to determine workforce needs. These efforts resulted in development of the AAS degree, with associated transfer agreement with SUNY Cobleskill's Agricultural Management BT degree. The AAS degree is at SUNY Central for review. This degree involves a master plan amendment, requiring governor and State Education department approvals. On the non-credit side the college received a SUNY Workforce Development grant to support the Adirondack Grazers Cooperative in a regional demonstration project impacting farms in 16 counties. This training, supply value chain modelling, was designed to develop benchmarks, best practices and established metrics for quality pasture fed regionally produced beef. In addition, the Office of Continuing Education has expanded its Farm and Garden series with ever increasing number of registrations.
6. **Use of Available Resources to Support the Strategy** – SUNY Adirondack received a \$100,000 donation from private sources to expand its agriculture offerings. The college will continue support of the Coordinator of Agriculture Initiatives, and once approved, begin offering the credit program.
7. **Critical Elements That Cannot be Addressed with Available Resources** –he Adirondack Grazers demonstration project could benefit from funding to support expansion of the pilot project. Additional farmers could be trained using a train the trainer model. Additional resources could be made available for paid internships. So many of community college students are working multiple jobs to make ends meet, while attending school full-time. If they could receive a paid internship, they could be earning money and credits toward graduation while applying their classroom learning to their field of study.

Strategy - J

1. **Name of Strategy** – STEM Initiatives
2. **The Phase of Development** – This strategy is looking to become sustainable and expanding.
3. **Workforce Demand (need)** – Three local manufacturer's and machine shops received hands-on, specialized Programmable Logic Controller (PLC) training via a SUNY workforce development grant that concluded summer 2015. Current employees increased their PLC knowledge and gained problem solving skills which supports efficiency within the production environment.
4. **Relevance of the Demand to REDC and WIOA Priorities** – Advanced manufacturing and STEM in general, will always be priorities for a sustainable economy. This specific project supports manufacturing in the region.
5. **Strategy** – SUNY Adirondack formed a consortia between area businesses to leverage their individual needs within the grant request. A portable PLC trainer, with PLC equipment and display monitor, was created to support this initial request as well as support future industrial training needs. This PLC trainer, along with configured PC laptops, provide a mobile learning lab.
6. **Use of Available Resources to Support the Strategy** – The college, through a donation from Irving Tissue, has hired a Coordinator of STEM Initiatives. This staff member will be promoting PLC training, as well as networking among area STEM organizations to assess workforce and pipeline challenges.
7. **Critical Elements That Cannot be Addressed with Available Resources** – Additional PLC training could be provided to current and future STEM staff. The SUNY workforce development grants are limited in nature and there is more need than funds available.

Strategy - K

1. **Name of Strategy** – Tourism Industry Employment Pipe Line Initiative
2. **The Phase of Development** – The sector based Tourism Industry Employment Pipe Line Initiative is still in its conceptual stage.
3. **Workforce Demand (need)** – The tourism and hospitality industry in Saratoga Springs is one of three industry sectors identified by a workforce study conducted by Camoin Associates to be of critical importance to the economy of Saratoga County. Conducted in collaboration with the Saratoga Economic Development Corporation, the Saratoga Chamber of Commerce, the Saratoga Convention & Tourism Bureau and the Saratoga-Warren-Washington Workforce Development Board, the study reviewed employment patterns, significance, and economic impact of various sectors in Saratoga. The tourism and hospitality industry is the largest cluster analyzed, and one of the most important to the economy of Saratoga. With a wealth of assets to offer visitors, tourists come from across the country and world to experience the racing, Adirondacks, and Saratoga's natural springs. In 2014, nearly 700 businesses in the tourism and hospitality cluster were operating in Saratoga County, each employing an average of 17 employees (both full and part-time). Most industry sectors employ between 15 and 25, however, several of the more prominent tourism sectors that are dominated by one business employ much larger number of employees, including the Saratoga Casino and Raceway. Compared to the US economy, the percentage of workers in the tourism and hospitality cluster in Saratoga County is 24% more than the national average, for a location quotient of 1.24. In addition to the nearly 2,000 new jobs, approximately 4,300 jobs will need to be filled due to replacement demand in the industry for a total of 6,300 openings over the next ten years. Skills needed include customer service training, more technical skills required than in the past and a growing need for high-end, professional wait and culinary staff. There is also a low awareness of opportunities to move up career ladder.
4. **Relevance of the Demand to REDC priorities** – Hospitality and tourism is referenced as significant by the REDC.
5. **Strategy** – The study was conducted by Camoin Associates in collaboration with the Workforce Board and the Saratoga Economic Development Corp. Resulting discussion which included private sector members and education resulted in the selection of this sector as a first initiative. The core team of Camoin, the workforce Board and SEDC are charged with identifying initial steps to address the need for developing a recruitment and awareness strategy as well as to address the need for customer service and skills training.
6. **Use of Available Resources to Support the Strategy** – Staff resources of the above named entities will initiate the activities and others may be brought on board. We are considering the use of some online and computer based resources to help address some of the training needs. More details will need to be planned out going forward.

7. **Critical Elements That Cannot be Addressed with Available Resources** – Video based messaging to be used in movie theatres was one approach to be considered. Other needs will be identified as the project progresses further.

Strategy - L

1. **Name of Strategy** – Workforce
2. **The Phase of Development** – Expanding
3. **Workforce Demand (need)** – The talent pipeline for middle skill, technical, and engineering manufacturing and tech jobs is strained by two trends. One, there are more middle skills job openings than applicants. Feedback from the manufacturing community suggests curriculum programs and the needs of the manufacturing and technology companies is not well aligned. Finally, demographic challenges, with nearly flat population growth, a lower labor force participation due to aging population, and lack of retention of young talent.
4. **Relevance of the Demand to REDC and WIOA Priorities** –Manufacturing and tech jobs.
5. **Strategy** – This is a major focus of the Capital 20.20 URI that CEG will be tackling. CEG will be refocusing our MEP Workforce efforts on gathering data to build a stronger picture of the needs at manufacturing and tech companies and present this information to our regional schools. The Chief Executive’s Network (CEN) Manufacturing; Talent Connect; WIB’s; National Grid; WDI; Community Colleges; P-Tech programs; BOCES; Tech Valley High School, and others will be involved to ensure a broad and regional approach
6. **Use of Available Resources to Support the Strategy** – CEN members provide programmatic insight. Funding comes from various sources.
7. **Critical Elements That Cannot be Addressed with Available Resources** – Development of Regional Data will be a key resource needed on an ongoing basis.

Strategy - M

1. **Name of Strategy** – Productivity & Quality
2. **The Phase of Development** – Expanding
3. **Workforce Demand (need)** – Although productivity programs like Lean and 5S and quality programs like Six Sigma and ISO have been well established, there is still significant opportunity to deploy these programs within manufacturing and technology companies. With continued on-shoring, there is pressure to maximize productivity, efficiency and effectiveness to remain competitive in a global marketplace. Additionally, OEM's are turning more to smaller companies as suppliers and are demanding rigorous quality standards well below Tier 1.
4. **Relevance of the Demand to REDC and WIOA Priorities** – Advanced Manufacturing
5. **Strategy** – CEG services includes programs to help these companies develop their Lean culture and acumen throughout the company (manufacturing production and elsewhere); taking continuous improvement to the level beyond Lean with Six Sigma; Quality programs such as ISO, aerospace, food safety, and medical device standards; and, specialized offerings such as Lean Accounting with Jerry Solomon. The Chief Executive's Network (CEN) members provide programmatic insight.
6. **Use of Available Resources to Support the Strategy** – CEG has one of the strongest continuous improvement and quality teams in the state. In addition, CEG is respected with global thought leaders such as Orest Fiume and Jerry Solomon, and CEG routinely brings them to the Region which benefits companies here. Funding comes from various sources.
7. **Critical Elements That Cannot be Addressed with Available Resources** – Funding for access to the latest 3-D printing and other technology is important for prototyping and Lean product development. This is especially important for manufacturers that are working on highly confidential new products. Development of Regional Data will be a key resource needed on an ongoing basis

III. Capital Region Workforce Development Board Contacts

Capital Region Workforce Development Board – Robert Wildermuth
rcw@capreg.org

Columbia-Greene Workforce Development Board – Katy Drake
drake@mhccable.com

Saratoga-Warren-Washington Workforce Development Board - Bill Resse & Lou Buck
wressewib@gmail.com
lbuckwib@gmail.com