

**Fulton, Montgomery and Schoharie Counties  
Workforce Development Board, Inc.**

**On behalf of the  
Greater Capital Region Workforce Investment Boards**

**REQUEST FOR PROPOSALS  
Third-Party Evaluation**

The Fulton, Montgomery, and Schoharie Counties Workforce Development Board, on behalf of the four Greater Capital Region Workforce Investment Boards (Albany, Schenectady, Rensselaer; Saratoga, Warren, Washington; Columbia-Greene; and, Fulton, Montgomery, Schoharie), requests proposals to provide third-party evaluation services for our Steps Up to STEM project, a Workforce Innovation Fund (WIF) program awarded to this consortium by the United States Department of Labor (USDOL).

**BACKGROUND:** The USDOL Workforce Innovation Fund (WIF) was created to cultivate and test innovative approaches to workforce training and encourage the replication of evidence-based practices in the workforce development field.

In July 2012, the Greater Capital Region Workforce Investment Boards (GCR WIBs) received a three-year United States Department of Labor Workforce Innovation Fund grant for the purpose of addressing the region's STEM skill shortage by increasing the number of disadvantaged youth, low-income adults and dislocated workers who are interested in STEM careers while creating a flexible region-wide STEM talent pipeline system that links the workforce system, employers, educators, and emerging and returning workers through Two-Step Career Plans.

A major component of this project is an objective, third party evaluation of how well our proposed activities lead to the outputs, outcomes and impacts we anticipate occurring, and the ease with which these activities can be replicated by other Workforce Investment Boards across the country.

**PROJECT OBJECTIVES:** The Third-Party Evaluator will be responsible for developing and implementing the evaluation plan for the Steps Up to STEM project that meets the rigors and standards outlined in our Evaluation Plan and further enhanced by the USDOL WIF National Evaluation Coordination (NEC) team. Steps Up to STEM is a new and untested project. Bidders should review the following three (3) attachments to understand the project objectives and evaluation goals:

- **Attachment A:** WIF Steps Up to STEM Technical Proposal
- **Attachment B:** WIF Steps Up to STEM Evaluation Plan
- **Attachment C:** WIF Steps Up to STEM Evaluation Improvement Guide for FMS Workforce Development Board

## **PROPOSAL CRITERIA**

There are four categories to which all bidders must respond. Proposals can be no longer than 20 pages, excluding attachments. Proposals must be double spaced, with 12 point font. Proposals must respond to the following items in the order in which they are listed:

### **General Qualifications**

- The bidder should demonstrate expertise in conducting evaluations similar to our Steps Up to STEM Evaluation Plan by describing other similar evaluation efforts the bidder has undertaken. Please provide a list of at least 2, but no more than 5, previous or current clients that we can contact as references. Please list the required educational credentials for the job titles that will be assigned to this project.
- The bidder should demonstrate familiarity with implementation, outcomes and impact evaluation procedures. Indicate how you will ensure that the evaluation results contribute to the evidence base through a dissemination plan to other practitioners and evaluators.
- The bidder should demonstrate familiarity with Workforce Investment Act programs that focus on One-Stop Career Centers' delivery of intensive services (including referral and support of training programs), as well as programs with a sector based approach that rely on strong collaboration with the business community. Please reference past work that was similar and in which your organization was central. The bidder should demonstrate, via past performance, the ability to carry out all of the individual tasks needed for the evaluation. This includes the ability to understand logic models, develop evaluation design plans, choose the appropriate type of evaluation rigor, create and implement data collection and sampling plans, conduct analyses, write reports, and disseminate results.
- The bidder must agree to abide by the Federal and State requirements for Certification Regarding Lobbying, Debarment, Suspension and other Responsibility Matters, Nondiscrimination and Equal Opportunity Assurance, and Drug-Free Workplace Requirements. (Attachment D)

### **Technical Plan**

The bidder should provide technical details and suggestions that build on the evaluation design identified in Attachments B and C. Please advance and expand on the evaluation details from the original evaluation plan, using the recommendations provided by the Workforce Innovation Fund National Evaluation Coordinator (WIF NEC) as a guide. This part of your proposal should focus on the specifics of the evaluation and how you intend to accomplish the work.

The basic tasks that are expected to be involved in the evaluation should be addressed in this section. These tasks include, but are not limited to:

- development of the full evaluation design, including the analytical methodology to be used for each research question (Note that the WIF NEC hopes to have final evaluation designs by mid-December, 2012);
- refinement of research questions, including identifying areas that require a comparison group and determining how each comparison group should be formed;
- refinement of the process study, including planning for matching the research tasks with the project's timeline;
- establishment of baseline measures for career awareness and unfilled employer demand;

- establishment of collection and analytical methods for post-intervention data;
- development of indicators and data definitions and identification of the data sources and data collection methods;
- identifying potential technical issues, areas of uncertainty, and any possible risks (such as low recruitment of participants, non-response to follow-up surveys, etc);
- coordination with the GCR WIBs on the implementation of the evaluation;
- working with the GCR WIBs in obtaining approval of New York State Department of Labor (NYS DOL) regarding the data security and confidentiality procedures involved with utilizing the One-Stop Operating System (OSOS) for components of this project
- development of data collection instruments;
- determining timing and executing data collection;
- determining the appropriate data and analytical methodology to document a cost-benefit analysis for two-step career plans and employer recruitment and retention;
- determining appropriate analysis methods (including statistical, financial, and qualitative data analysis methods);
- monitoring and reporting of evaluation milestones and progress to the GCR WIBs and the WIF NEC (Note that the successful bidder will be expected to submit all evaluation deliverables, cleaned data, and progress reports to the WIF NEC as well as the GCR WIBs, as appropriate).

The bidder is welcome to suggest new or altered tasks that might improve the overall evaluation plan. We do not expect your technical plan to be a final evaluation design, with all technical issues resolved, however, all potential technical issues, any areas of uncertainty, and any possible risks (such as, low recruitment of participants, non-response to follow-up surveys, etc.) should be noted.

The technical plan should include a discussion of how comparison groups will be selected to address the concerns outlined in Attachment C.

The technical plan should include a discussion of how the baseline and post-intervention data will be collected for the outcomes evaluation, and how this data will be analyzed.

The technical plan should include a discussion on a cost analysis to address the concerns outlined in Attachment C.

The technical plan should include a discussion of our process study to address any concerns outlined in Attachment C to ensure the qualitative research tasks match the intervention's timeline.

### **Management and Staffing Plan**

Bidders should develop a detailed timeline and staffing plan, and describe their experience in managing similar evaluations.

- The bidder should provide an evaluation timeline (which can be a visual chart) which appropriately matches the Steps up to STEM planned interventions.

- The bidder should provide a statement on how they propose to manage the evaluation, including their experience in managing evaluations of a similar type and magnitude.
- The bidder should summarize the names, titles, and roles of key staff and provide their full resumes in an appendix. The bidder should describe which staff members are working on the various tasks.

### **Cost**

Bidders should provide a budget narrative and overall budget total. The budget must be matched to the specific tasks described in your technical plan and also matched to the timeline described in your management plan. The budget should be linked to tasks and show levels of effort (LOEs) for each staff member by task and by month. Total project cost to be negotiated, but not to exceed \$228,750.00. It is anticipated that the total payments for each year will be as follows:

Year One: \$58,000.00

Year Two: \$59,750.00

Year Three: \$111,000.00

### **PROJECT PARAMETERS:**

- The Evaluation Team will be required to be available, by phone or in person, during regular business hours (Monday – Friday from 8 am – 5:00 pm EST) for scheduled meetings.
- Payments to the Third Party Evaluator include all costs incurred in project completion, including but not limited to: supplies and materials, travel costs, and phone costs.
- Third Party Evaluator will acknowledge and agree that contributions to the development of all proprietary information for the GCR WIBs was done in the course and within the scope of the project and that all work product arising and resulting from project efforts is the property of the New York GCR WIBs.
- Third Party Evaluator will acknowledge and agree that all of the work product that is developed, directly or indirectly, as a result of this project with the GCR WIBs, were “works made for hire” as defined in the United States Copyright Act and as such the United States Department of Labor will be deemed as the “author” of such work product for Copyright Law purposes.
- The Third Party Evaluator must collaborate with the WIF NEC in four different ways by:
  1. Providing all evaluation deliverables, including the final evaluation design, progress reports, final data (cleaned of PII), and evaluation findings to the NEC through the NEC’s document sharing system
  2. Attending the two planned evaluator summits (the first is scheduled for October 30-31, 2012 in Washington D.C.)
  3. Participating in quarterly, hour-long evaluator webinars through the duration of the evaluation as well as a WIF evaluator on-line community of practice
  4. Contacting the WIF NEC for any technical assistance needs and responding to the WIF NEC for special requests

**PROJECT TIMELINE:** The project began on July 1, 2012 and will end on June 30, 2015.

**ADDITIONAL INFORMATION:** All questions should be submitted to:

Gail B. Breen, Executive Director  
 Fulton, Montgomery, and Schoharie Counties  
 Workforce Development Board, Inc.  
 Email: [gbreen@fmsworkforcesolutions.org](mailto:gbreen@fmsworkforcesolutions.org)

Questions and answers will be posted at [www.fmsworkforcesolutions.org](http://www.fmsworkforcesolutions.org)

**METHOD OF PAYMENT:**

The contract will be with the project's grant recipient, the Fulton, Montgomery and Schoharie Counties Workforce Development Board. Payments will be made quarterly. Payment covers all costs involved in completing project objectives, including supplies, materials and travel expenses.

Total project cost to be negotiated, but not to exceed \$228,750.00. It is anticipated that the total payments for each year will be as follows:

Year One: \$58,000.00

Year Two: \$59,750.00

Year Three: \$111,000.00

Final Payment will be made upon the completion of all activities and with the approval of the WIF NEC.

**SELECTION PROCEDURE:** Persons or organizations interested in responding to this request must submit a completed proposal following the outlined criteria, along with required attachments.

Proposals will be evaluated on the following point system:

- General Qualifications **Maximum Points: 15**
  - Technical Plan **Maximum Points: 45**
  - Management and Staffing Plan **Maximum Points: 20**
  - Cost **Maximum Points: 20**
- An interview with GCR WIBS staff may be required prior to final selection and award.
  - Bidders must demonstrate the ability to provide the required services at a reasonable cost to the FMS WDB. Costs will be evaluated based not only on competitiveness with respect to their bids, but equally important, the value they reflect in light of services proposed and bidder's capability and experience.

**Reservation Clauses:** The FMS WDB, in order to serve the best interests of the FMS Workforce Investment Area and its regional partners, reserves the right to:

- Postpone or cancel this RFP upon notification to all bidders
- Amend the specifications after their release with appropriate notice to all bidders
- Request bidders to present supplemental information clarifying their proposal, either in writing or in formal presentation
- Waive or modify minor irregularities in proposals received after prior notification to the bidder
- Reject any and/or all proposals received in response to this RFP
- Contact bidders' references as a check on qualifications
- Award the contract to other than the lowest bidder
- Negotiate with selected bidder prior to contract award
- Disqualify any bidder who inappropriately acquires information contained in a competitor's proposal and attempts to use that information to influence the award decision

**Contract Cancellation:** The FMS WDB reserves the right to cancel the contract or any part thereof, at any time, upon thirty (30) days written notice. If, in the judgment of the FMS WDB, the Contractor fails to perform the work in accordance with the contract, the FMS WDB may terminate the contract immediately by written notice for cause. The FMS WDB may elect to provide a corrective action period prior to termination.

**SUBMISSIONS:** Three (3) copies of the complete bid package must be postmarked and received by the Workforce Development Board by 4:00 p.m., on Friday, September 7, 2012. One electronic copy should be sent to: [gbreen@fmsworkforcesolutions.org](mailto:gbreen@fmsworkforcesolutions.org) Proposals may be hand-delivered or sent by mail to:

Gail B. Breen, Executive Director  
Fulton, Montgomery, and Schoharie Counties  
Workforce Development Board, Inc.  
2620 Riverfront Center  
Amsterdam, New York 12010  
(518) 842-3676, Ext. 3026  
Email: [gbreen@fmsworkforcesolutions.org](mailto:gbreen@fmsworkforcesolutions.org)

**Faxed copies will not be accepted.** Bids received after 4:00 p.m. on Friday, September 7, 2012, will not be eligible for funding consideration. Use of certified, registered or express mail is suggested for postmark verification.

All bids and accompanying information become the property of the Fulton, Montgomery, and Schoharie Counties Workforce Development Board, Inc. and will not be returned.

## Description of the Problem or Issue

### Factor 1:

In its February 2012 report, the President's Council of Advisors on Science and Technology noted, "Economic projections point to a need for approximately 1 million more STEM professionals than the U.S. will produce at the current rate over the next decade if the country is to retain its historical preeminence in science and technology."<sup>1</sup> Our four workforce investment boards – the Capital Region WIB, the Columbia- Greene WIB, the Fulton Montgomery Schoharie WDB, and the Saratoga, Warren, Washington Workforce Investment Board – seek to address the urgency in meeting this demand for STEM workers through the proposed Steps Up to STEM program.

Despite unemployment levels at historic levels, employers in the 11-county upstate New York region cannot fill hundreds of skilled positions, especially those requiring grounding in STEM subjects. The Greater Capital Region of New York is suffering from a skills gap. Although there are several reasons contributing to this skills shortage, we will address two fundamental issues with this grant application: the lack of awareness among youth, parents of youth, and dislocated workers of the career potential a STEM education can provide and the immediate need to connect employers to workers with STEM skills.

The National Skills Coalition has described the importance of STEM skills for middle skill jobs throughout the country; this is particularly true in New York State. Requiring more than a high school diploma but less than a four-year degree; middle skill jobs comprise nearly half of the current jobs in New York. "These middle skill jobs are at the roots of a successful STEM strategy, nationally, and in New York."<sup>2</sup>

Known as "New York's Tech Valley," no other region in the state has felt such an acute need for STEM-trained workers than the Greater Capital Region. In 2009, GlobalFoundaries, a chip fabricator, announced the opening of a new plant in Malta. The plant is expected to ultimately create 1,400 jobs – the majority of

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<sup>1</sup> President's Council of Advisors on Science and Technology, "Engage to Excel: Producing One Million Additional College Graduates with Degrees in Science, Technology, Engineering, and Mathematics." February 2012.

<sup>2</sup> National Skills Coalition, "New York's Forgotten Middle Skill Jobs: Meeting the Demands of a 21<sup>st</sup> Century Economy," March 2011.

which will require individuals will STEM knowledge and skills. In September 2011, Governor Cuomo announced a \$4.4 Billion Investment in New York by the “Global 450 Consortium”, which includes Intel, IBM, GLOBALFOUNDRIES, TSMC and Samsung. The agreements center on plans to develop the next generation computer chip technology in New York. Research and development facilities will be located in Albany, and other cities in the state. In addition, Intel separately agreed to establish its 450mm East Coast Headquarters to support the overall project management in Albany.

Aside from this nanotech boom, the region’s growing biotech, green energy and advanced construction industries all currently have mid-level technical positions that are going unfilled.

With the exception of the health care field, the region has limited career path training mechanisms in place for most STEM occupations. Despite the existence of a robust community college system, career paths which focus on the development of STEM skills are generally lacking. Consequently, there is an acute need for specialized certificate training in the STEM fields.

This skills gap confronting the region is particularly true among several targeted populations. Our project activities include efforts to increase the awareness and achievability of STEM career fields to disconnected youth, low income adults, dislocated workers and veterans. Another main focus will be to increase the number of individuals who enroll in and ultimately complete STEM education or training, obtain credentials, find employment and importantly, stay in and advance in these jobs and careers.

**Factor 2:**

STEM competencies cut across sectors and are needed for many occupations. In 2011 alone, there were an estimated 1,403 annual openings in STEM occupations in the region.<sup>3</sup> STEM occupations accounted for 36,201 of the jobs in the Capital Region in 2011 and offered a median wage of \$28.31 per hour. STEM occupations are projected to grow by 6.9% over the next ten years.<sup>4</sup>

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<sup>3</sup> Economic Modeling Specialists, Inc. defines a STEM occupation group that consists of 90 occupations at the 5-digit SOC code.

<sup>4</sup> Economic Modeling Specialist, Inc. Complete Employment 2011.4, [www.economicmodeling.com](http://www.economicmodeling.com)

In particular, the Greater Capital Region has become a growing hub of nanotechnology manufacturing with the recent opening of GlobalFoundries in Malta. The company currently needs to fill several hundred technician jobs by the end of 2012. Other employers in the region, from large companies such as GE Battery and Sematech to small firms like Saturn Industries and Kintz Plastics are similarly confronting a talent shortage in the skilled production category, where positions such as machinists, operators, craft workers, distributors and technicians are going unfilled.

In addition to targeting the skills mismatch to address our employers need for well trained workers, an important aim of the Steps Up to STEM project is to target individuals currently receiving unemployment insurance who can benefit from skill upgrades. By identifying, targeting, and then preparing individuals with relevant STEM skills, the region's employers will have a better qualified talent pool from which to draw on.

## Description of Your Project: Strategic Approach and Logic Model

### Goals and Outcomes

Through the Steps Up to STEM project, our consortium seeks to address the STEM skill shortage in the Capital Area to ensure employers have access to qualified workers needed for success and economic growth. We aim to increase the number of disadvantaged youth, low-income adults and dislocated workers who are interested in STEM careers and create a flexible region-wide STEM talent pipeline system that links the workforce system, employers, educators, and workers through Two-Step Career Paths.

The main goal of the project is to cultivate better **results** for job seekers and employers and to create **better efficiencies** for program delivery. Addressing the STEM skill shortage in the Greater Capital Region of New York State will ensure that employers have access to qualified workers by establishing a new pipeline of STEM talent. Implicit in this goal is the realization that success for all is built on a foundation of career pathways and life-long learning. Our grant application has been designed with better results, program efficiencies and system gains in mind.

### Achieving the Goals of the Workforce Innovation Fund

<b>Better Results</b>	<ul style="list-style-type: none"> <li>• As participants are connected to employment opportunities early in the process, WIA common measures will improve in terms of retention and wage increases.</li> <li>• More credentials will be earned.</li> <li>• Employers will have a comprehensively vetted pool of applicants for hiring.</li> <li>• More STEM employers will utilize the workforce system and value the services.</li> <li>• Small and medium size businesses can increase training programs for employees.</li> </ul>
<b>Program efficiencies and reduced costs</b>	<ul style="list-style-type: none"> <li>• Through extensive use of Tanberg videoconferencing, career planning costs for the region will continue to decrease.</li> <li>• Training costs will decrease through the development of the “employer-specific” stackable credential concept.</li> <li>• Comprehensive Assessment costs will decrease and will have a renewed focus on the entry-level skills employers require.</li> </ul>
<b>Stronger cooperation among funding streams and partners</b>	<ul style="list-style-type: none"> <li>• Career Planning, LMI, and career path message will be consistent across 11 counties, 4 WIBs, and the Adult, DW and Youth funding streams.</li> <li>• Career Planning, LMI, and career path messaging will be consistent across ES, WIA Title I, WIA Title II, and Vocational Rehabilitation (ACCESS-VR).</li> <li>• The Two-Step Career Plan system requires partnership with business and will be consistent across 11 counties.</li> <li>• Economic development and education partners will be actively involved in developing the STEM talent pipeline.</li> </ul>

Our efforts to achieve these goals will result in the following outcomes and impacts:

<b>Outcomes:</b>
<ul style="list-style-type: none"> <li>• Greater interest in and pursuit of STEM career opportunities;</li> <li>• Development and completion of Two-Step Career Paths linking employers and jobseekers through customized training plans;</li> <li>• More strategic screening of entry-level STEM job applicants by the public workforce system;</li> <li>• STEM-related credential obtainment, including “employer specific” credentials; and</li> <li>• Ultimately improved results for workforce system jobs seekers and employers.</li> </ul>
<b>Impacts:</b>
<ul style="list-style-type: none"> <li>• Greater access to a STEM capable regional workforce for employers;</li> <li>• Documented work readiness skills leading to systems change;</li> <li>• More affordable STEM training options available to employers and jobseekers; and</li> <li>• Cost savings for employers and the workforce system via decreased recruitment costs, lower entry-level training investments, and increased retention rates.</li> </ul>

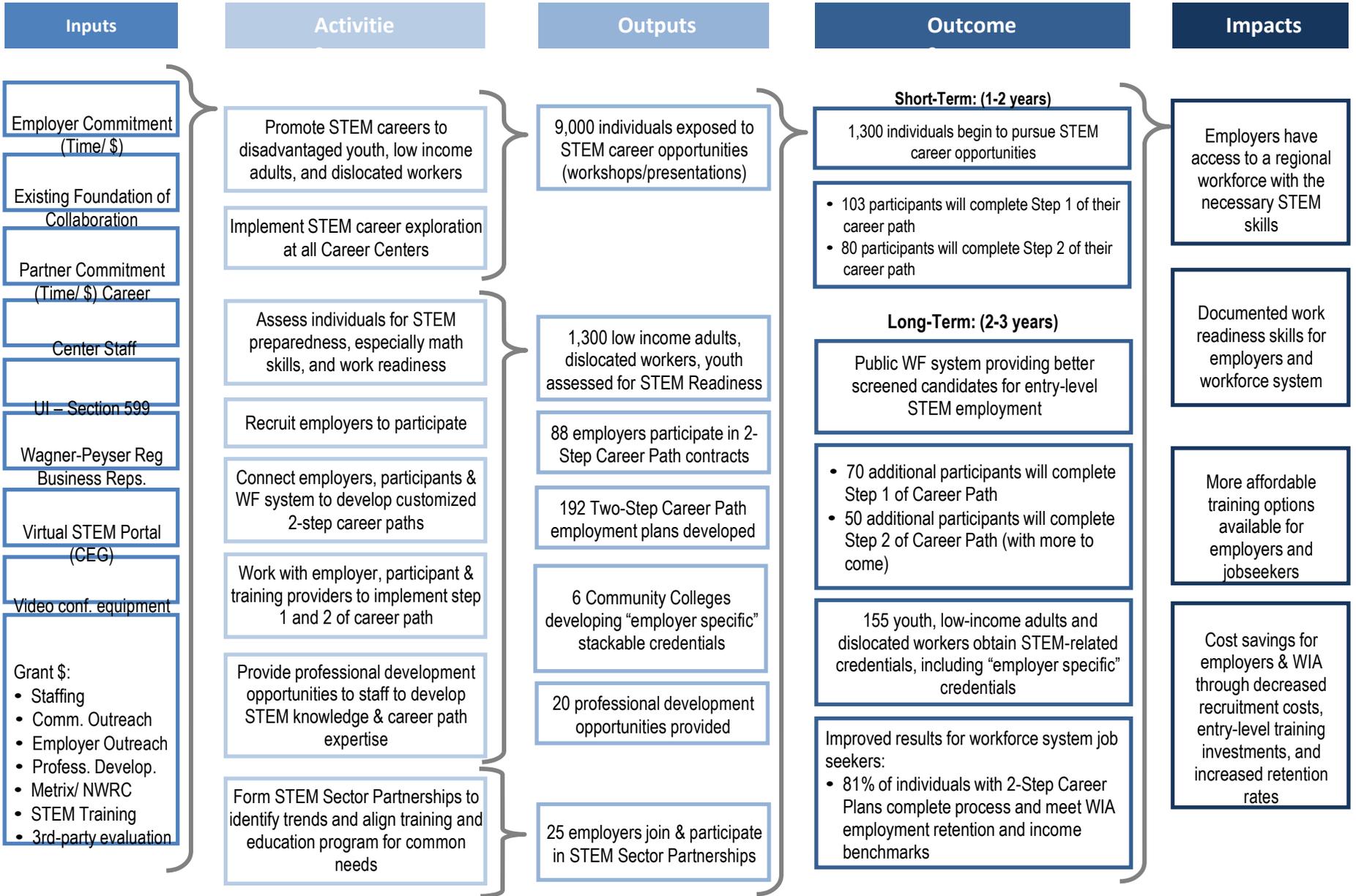
### Strategy and Logic Model

The logic model developed outlines the resources that will be utilized, the activities we will undertake, the targeted outputs, and the program outcomes and impacts we expect to result from our program.

### Steps Up to STEM

**Goal:** Address the region’s STEM skill shortage to ensure employers have access to qualified workers needed for success and economic growth by:

- Increasing the number of disadvantaged youth, low-income adults and dislocated workers who are interested in STEM careers; and
- Creating a flexible region-wide STEM talent pipeline system that links the workforce system, employers, educators, and emerging and returning workers through Two-Step Career Paths



### Narrative Theory of Change

The Steps Up to STEM strategy for addressing the STEM skill shortage in the eleven counties is two-fold. First, we will increase awareness about STEM careers among both youth and adults, the value and opportunities such careers provide and the resources available to prepare for success in this field. These activities will help maintain and build the region's STEM talent pipeline so that employers have a greater pool of STEM-trained workers. Second, we will facilitate linkages among employers, job seekers, workforce development professionals and education providers to develop Two-Step Career Plans customized to increase an individual's readiness to meet the employer's job/hiring requirements.

Our activities are focused on the premise that better information and understanding of the potential of STEM careers and the commitment and involvement of employers in their workers' educational and career goals will lead to more dedicated and qualified students and employees in STEM fields. The principal activities that will be undertaken as part of the grant are as follows.

***STEM Awareness Campaign:*** To build awareness of the advantages of a STEM career, we will develop a multi-faceted STEM Awareness campaign. To be coordinated by the four WIBs and the Business Intermediary, the campaign will build on the region's recent Technical Careers Awareness campaign, which was part of a Sector Strategies grant. Like that campaign, the STEM awareness campaign will be aimed at both youth and adults. Staff members will work with schools, community organizations, and parent groups to stress the opportunities that lie in STEM-related careers.

One of the activities to be offered will be Summer Tech Camps, which will focus on various STEM career fields such as robotics, computer security/forensics, nanotechnology and green energy. Similar camps have been successfully run regionally through Title II Perkins IV Career Pathways funding, which is unfortunately no longer available.

Another promising summer camp to refer WIA-eligible youth to is the Northeast Parent and Child, Inc. STEM exploration experience called Bridging the Gap, which is endorsed by the Governor's Capital Region

Regional Economic Development Counsel. Youth will participate in an array of career exploration activities that will include tours and presentations by the College of Nanoscale Science and Engineering at the University of Albany, Hudson Valley Community College's Tec-Smart Center, and Global Foundries, the world's newest and most advanced chip-fab company. A major partner and source of in-kind funds is Intelitek, a high tech training software development company.

These efforts will be augmented by the region's Workforce Coalition and the upcoming Tech Valley STEMSmart Alliance, the Capital Region Hub of the Empire State STEM Learning Network.

***Job Seeker Recruitment & Preparation:*** A critical component of the Steps Up to STEM program will be identification, assessment and subsequent training activities for WIA eligible individuals. The region's Career Centers, WIBs and other non-profit organizations will develop a comprehensive series of career planning activities and exploration sessions focused on STEM careers. Through the intake and assessment system currently utilized by the state's workforce system, the Region will identify and target individuals for STEM careers. The "sales pitch" to jobseekers will include an overview of STEM careers (job availability, pay scales, job security), the concept of lifelong learning, and introduction to the Two-Step Career Plan program.

As new customers are enrolled and classified in the workforce system, they are provided with an initial assessment, which determines if the customer needs Job Search Ready Services (JSRS) or Career Development Services (CDS). *Job Search Ready Services* are provided to customers who already have an occupational goal with a favorable labor market outlook; the occupational knowledge, skills and abilities required for the occupational goal; and no barriers that prevent obtaining and retaining employment. Job Search Ready Services prepare the customer for job referral and include résumé preparation and/or interviewing preparation. *Career Development Services* are provided to customers who either: do not possess an occupational goal; do not possess the requisite occupational knowledge, skills and abilities to

readily find work related to their occupational goal; have barriers that potentially prevent obtaining and retaining employment; indicate an interest in training.

To improve the efficiency in the Career Development Services system, we will develop a more consistent definition and application of the CDS services provided in each One-Stop.

Workshops will be required for all CDS customers who are collecting Unemployment Insurance benefits, and newly enrolled WIA youth. In addition to basic career information, a principal focus of the workshops will be the job outlook potential, wages, career paths and life-long learning of STEM careers. Through Tandberg video conferencing equipment available in all career centers, the workshops can be offered cost-efficiently to the entire region on a regular basis.

In addition, workshops and presentations will be conducted by local businesses about career opportunities and skills needed throughout the region; training providers will conduct similar presentations on their STEM offerings.

Grant resources will be used to research and develop a positive, fun, interactive workshop that will help allay math and science anxiety among youth and adults who may be dismissing STEM career options due to past negative school experiences.

Those customers that express an interest in a STEM career after attending these workshops will undertake an in-depth preparation program to ensure they meet the minimum requirements for entry level employment in the STEM career path being pursued. These requirements have been identified, vetted by employers, and outlined in the region's Talent Pipeline report.

Low cost products and services will be used to assess and remediate these required basic skills, including those endorsed by the National Work Readiness Council, on-line Metrix courses, Prove-It assessments, and Khan Academy's videos and exercises. A full assessment and remediation of each participant will cost less than \$100 in materials. The NWRC materials will be used to determine the math, reading, situational judgment and active listening skills of all participants. The Prove It assessments will

determine computer literacy and can incorporate career specific skills such as mechanical reasoning, manufacturing basics, and workplace safety.

Those participants who meet the minimum standards on all required assessment results will move directly to the process of developing their individualized Two-Step career plan. Those who meet all minimum standards, but do not have an acceptable work history will also be given a voucher to take the National Work Readiness Credential exam. Those who do not have a high school diploma will also be referred to Title II Adult Education to prepare for the GED exam.

Participants with assessment results below minimum standards, who have a high-school diploma, GED and/or post-secondary education, will have an individualized pre-vocational instructional plan designed to remediate their deficiencies. The instructional plan may include workshops to prepare for the National Work Readiness Credential test, and/or completion of on-line courses through the Metrix e-learning system.

Once post-tests have successfully been completed, participants in this group who also have a limited or poor work history and/or are under the age of 24 will be given a voucher from grant funding to formally take the National Work Readiness Credential exam.

Participants with assessment results below minimum standards and who have less education than a GED and/or are English as Second Language Speakers will be referred to ESL/GED classes either through WIA Youth Programs or Title II Adult Education. These individuals will be put into a participant pool that requires ESL/GED as one step in their Two-Step Career Plan.

Participants completing the assessment and remediation process will then begin the process of developing their individual two-step career plan. The purpose of the two step career plan is the establishment of both a short-term and a long term career goal. Participants will select the STEM occupational area they are most interested in pursuing. Those participants with an exceptional work history, but limited post-secondary education, including recently separated Vets, will be referred to Empire State

College to begin the process of determining the type and amount of academic credit they may be eligible to receive for their life experiences.

***Employer Recruitment & Participation:*** An important project activity is the recruitment and involvement of employers, particularly those in the manufacturing, biotechnology, and green energy sectors, and securing their participation in the Two-Step Career Plan. A primary aim of Steps Up to STEM will be to help employers recognize the value in working with local WIBs in developing career path training programs for their employees, in the recruitment, employment and training of job candidates. The WIBs currently work with companies willing to “pre-hire” individuals who are planning to enroll in training. (e.g. Kintz Plastics Inc., Meridian Manufacturing, Greno Industries, Inc.).

Regional Business Services Teams currently coordinate the activities of the local WIBs with NYSDOL Division of Employment & Workforce Solutions. The regional teams help align local One-Stop business services to sector initiatives and strategies in the region. The teams share workforce intelligence including:

- Initiatives/strategies for stable, emerging and contracting sectors in the region;
- Relationships with other government and private organizations that can help advance workforce strategies in the region’s sectors;
- Talent pipelines and career pathway opportunities; and
- Marketing to promote services, and hiring and training incentives to business customers.

The Center for Economic Growth (CEG), a private, not for profit organization that promotes economic growth in the region, will play a key role in helping secure the involvement of the business sector. CEG will serve as a Business Intermediary for the grant program and will promote the Two-Step Career Plan program and “employer specific” credentials to area employers and provide employer feedback to the local WIBs regarding successes and challenges. In promoting this concept to employers, the Business Intermediary will focus on developing:

- Recognition among employers that the comprehensive assessment of project participants will provide work-ready status for entry-level jobs.
- Recognition among employers that they must be actively engaged in solving the shortage of STEM qualified workers.
- Recognition that their participation in the development of “employer specific” credentials will lead to a new array of STEM educational options available in the region that provide for short-term (less than 2 year) solutions.
- Recognition that clients served by the workforce system cannot financially manage 2+ years of full-time education and will need some income support.

**STEM-Focused Sector Partnerships:** As employers are recruited to participate in the development of customized career plans of workers, the region will also seek to develop STEM-focused Sector Partnerships in Advanced Manufacturing, Alternative Energy and Health Care. These partnerships will enable a wider range of employers to provide feedback and industry-specific information on a macro-level. This information will be critical to the workforce system, training and education providers and economic development organizations as new programs and curriculum are developed.

**Individualized Two-Step Career Plans:** Central to the Steps Up to STEM program will be the establishment of an individualized training plan for each participant. As employers are recruited to participate in the program, they will outline their workforce needs and requirements. Career Center staff will identify job seekers who meet these needs, but may need additional training for STEM-related skills.

Once connected, the employer, jobseeker and workforce development professional will craft a Two-Step Career Plan based on the individual’s current skills, the skills needed by the employer and the workforce development professional’s knowledge of available training and education programs. The Two-Step Career Plan will be a contract between the workforce representative, the business, and the customer.

Training costs will be shared between the business and the public workforce system. The employer will be responsible for funding a portion of the career plan and grant funding will be used to fund the remaining balance. Possible scenarios include:

- The grant will fund pre-hire training and the business will fund on-the-job training or tuition reimbursement utilizing the company's already-established tuition reimbursement policies.
- The business hires a WIA customer in an entry-level type job, while WIA funds the tuition for the customer to advance in the company upon completion of the training.
- WIA provides On-the-Job Training and the company agrees to provide tuition assistance for future promotional options.
- WIA provides On-the-Job Training; company supports GED/ESL/basic skills training on-site.

As part of the development of the Two-Step Career Plans, the region will work with local community colleges to develop appropriate "employer specific" stackable credentials. The rationale of this approach is that a series of courses in related subject matter and skill development could signify expertise and serve as a credential for employers. Under this activity, the region would create a database of these arrangements, containing such information as job title, subject area, employer evaluation, and related topics. The results of this activity could then be used in negotiations and discussions with other employers. Overall training costs will be reduced since two-year degrees, at least initially, will not be an end result.

The development of Two -Step Career Plans and the requirement that businesses financially contribute to one portion of the career path is a key element in the region's comprehensive career pathway approach. This concept will provide a mechanism to provide better and increased partnerships with regional employers while enabling targeted individuals to advance through their personalized career paths.

In addition to the “employer specific” stackable credentials, training options available under the program will include GED/ESL, Metrix E-Learning courses and certifications, technical credential training programs, and Prior Learning Assessments (PLAs) through Empire State College.

In rare cases, grant funds may also be used to fund a one-step career plan that is not directly tied to an employer if it is training the individual in a high-demand occupation that will lead to a STEM middle skill job without the necessity of additional education.

**Professional Development of Career Center Staff:** Professional development opportunities will be offered to Career Center staff to ensure that they are providing expert guidance to employers and job seekers as they work to develop the Two-Step Career Plans. Professional development will be coordinated by the WIBs, in conjunction with partners from community colleges. In addition, training(s) will be developed to prepare staff to help participants address any phobias or anxieties about math assessments.

#### **Evidence Base for Strategy: New and Untested Idea**

The activities to be conducted under Steps Up to STEM represent an emerging strategy, one that brings together different elements of recent special projects and programs that worked well and/or had the support of economic development and businesses and their associations. We view the STEM Readiness Assessment, employer commitment and the two-step career plan as new innovations to the region which builds on the framework of program activities of recent projects. As a new and untested idea, the hypothesis behind the proposed strategy is based on evidence that there are not enough STEM workers for the jobs in the Capital Region, as confirmed by the recent Regional Talent Pipeline Study<sup>5</sup>, coupled with the knowledge that WIA customers do not consider math/science-based careers with the exception of health care. This is due to a fear or anxiety about the subject matter of STEM courses, and the time commitment involved in preparing for a STEM middle-skill job. The lack of stackable credentials and the

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<sup>5</sup> Kreiger, Alan and Appel, Steven. “Regional Talent Pipeline Study: Report to the Greater Capital Region Workforce Investment Boards,” Kreiger Solutions, LLC, June 2009.

likely remedial coursework that is often needed has reduced the pipeline. Our hypothesis is based on the following:

- Workers in low-paying entry level jobs will be more dedicated if their employer reciprocates their loyalty. This loyalty will be demonstrated by their employer's support of their education and the opportunity for advancement.
- Adult learners are more likely to complete their educational programs when they have a steady income and know they have a concrete benefit upon completion/graduation
- Workers are more likely to complete educational programs with short-term "success points" than programs with no rewards until a final graduation.

The Region's talent pipeline study involved a series of formal focus groups and individual in-depth interviews and more than 400 hours of discussions with business leaders, educators, policy makers, community leaders and workforce officials. It has provided the region with a firm grounding from which to focus on our STEM talent pipeline. While that study focused on five industry sectors, (Advanced Construction, Advanced Manufacturing, Biotech/Biomedical Companies, Energy Companies and Nanotechnology Companies) the findings are especially relevant as we target the STEM career areas. The study produced significant findings including:

- Verifying a shortage of workers for emerging jobs;
- Identifying the desired skill sets for mid-level technicians;
- Confirming insufficient capacity in the training system to meet anticipated demands;
- Noting that successful pipelines already exist in the region that can be built upon; and
- Calling attention to the fact that many segments of the Capital Region's population are not sufficiently engaged in technical careers such as minority populations and women.

As we create a flexible, region-wide STEM talent pipeline system, our proposed Steps Up to STEM strategy shares foundational elements with innovative employer engagement strategies cited as “promising innovations” in the recent findings in the United States Government Accountability Office’s *Workforce Investment Act: Innovative Collaborations between Workforce Boards and Employers Helped Meet Local Needs*.<sup>6</sup> The GAO findings note that the fourteen promising initiatives reviewed in the study shared six key elements that led to sustained collaboration which included focusing on urgent needs, leadership, leveraging resources, employer-responsive services, minimizing administrative burden, and demonstrating results. Our strategy to engage employers in the development of two-step career plans and “employer recognized” credentials demonstrates the key elements noted in the GAO report in the following ways:

- *Focusing on Urgent Needs* – The Two-Step Career Plan offers a solution to regional employers’ shared challenge of finding qualified STEM-capable workers.
- *Leadership* – The GAO report cites a need for a neutral convener to build trust. The Greater Capital Region Workforce Investment Boards are poised as the regional convener of employers, education and training providers, jobseekers, economic development representatives and other workforce and community development professionals.
- *Leveraging Resources* – As evidenced by the fourteen initiatives reviewed in the report, our strategy leverages employers’ contributions as well as grant funding to test a hypothesis that, if successful, can be continually supported by ongoing employer involvement and WIA funds.
- *Employer-Responsive Services* – The Two-Step Career Plan is customized to each employers’ specific needs and offers more accessible, relevant training solutions.
- *Minimizing Administrative Burden* – The project will create efficiencies throughout 11 counties.

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<sup>6</sup> United States Government Accountability Office, Report to Congressional Committees. “Workforce Investment Act: Innovative Collaborations between Workforce Boards and Employers Helped Meet Local Needs,” January 2012.

- *Demonstrating Results* – As in the promising initiatives, the strategy ensures that employers have skilled talent at the end of the engagement; they will also realize significant cost-savings.

## Work Plan and Project Management

### Steps Up to STEM Work Plan

<b>Steps Up to STEM Program Launch</b>			
<b>Activities</b>	<b>Milestones</b>	<b>Implementers</b>	<b>Timeline</b>
Preliminary planning/ project management	Launch meeting of Consortium WIBs	FMS WDB, Cap Reg WIB, C-G WIB, SWW WIB	Month 1
	Sub-contracts finalized to all Consortium WIBs	FMS WDB, Cap Reg WIB, C-G WIB, SWW WIB	Months 1 – 3
	Tanberg video conferencing equipment purchased	FMS WDB	Months 1 – 3
	Training on the use of video conferencing equipment	Cap Reg WIB	Months 1 – 6
	Third-Party Independent Evaluator procured	FMS WDB	Months 1 – 3
	Evaluation Plan finalized	FMS WDB, C-G WIB, Evaluator, National Evaluation Coordinator	Months 1 – 6
	Data report templates developed	C-G WIB, OSOS	Months 4 – 6
	Employer database developed	SWW WIB	Months 4 – 6
<b>Output: 9,000 of individuals exposed to STEM career opportunities</b>			
<b>Activities</b>	<b>Milestones</b>	<b>Implementers</b>	<b>Timeline</b>
Promote STEM careers to youth, low income adults and dislocated workers	Offer Tech Camps to Summer Youth Employment Participants	FMS WDB and Consortium WIBs	Months 13 – 15, Months 22 – 27, Months 34 – 36
	Purchase video conferencing equipment for Capital Area Career Center	FMS WDB	Months 1 – 6
Offer STEM career exploration at all Career Centers	Develop STEM workshop content, including Math Anxiety workshop	FMS WDB	Months 1 – 6
	Recruit employers for presentations	Business Intermediary, Business Services Teams for Consortium WIBs	Months 7 – 36
<b>Output: 1,300 individuals assessed for STEM readiness</b>			
<b>Activities</b>	<b>Milestones</b>	<b>Implementers</b>	<b>Timeline</b>
Assess individuals for STEM preparedness, especially math skills, and work readiness	Utilize NWRC-endorsed materials for math, reading, situational judgment and active listening skills	One-Stop Case Managers	Months 7 – 36
	Utilize Prove It assessments to determine	One-Stop Case Managers	Months 7 - 36

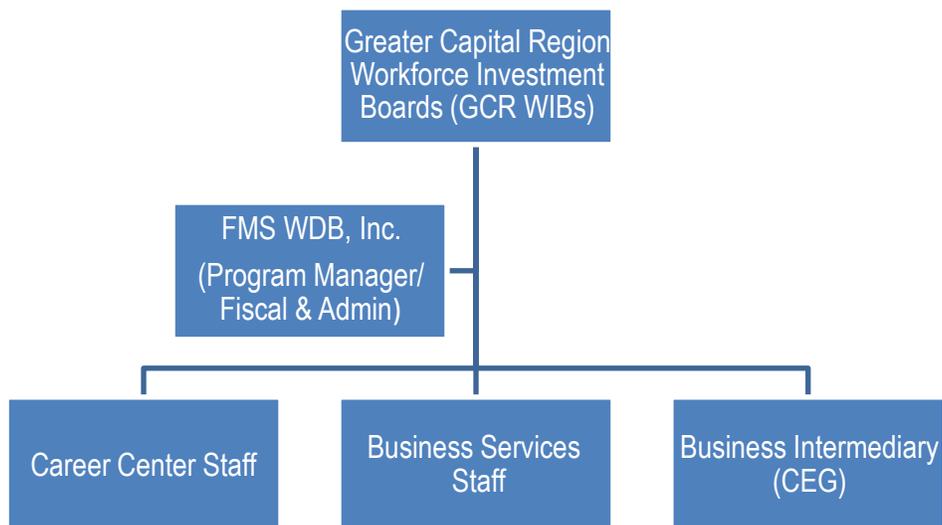
	computer literacy and incorporate career specific skills (e.g. mechanical reasoning, manufacturing basics, workplace safety)		
	Develop an individualized pre-vocational plan for individuals that need remediation	One-Stop Case Managers	Months 7 – 36
	Provide NWRC voucher for individuals who do not have adequate work history, but who otherwise meet minimum standards	One-Stop Case Managers	Months 7 – 36
<b>Output: 88 employers participating in 2-Step Career Plans</b>			
<b>Activities</b>	<b>Milestones</b>	<b>Implementers</b>	<b>Timeline</b>
Recruit employers to participate	Sub-contract with Business Intermediary finalized	FMS WDB, CEG	By Month 4
	Business Intermediary develops and implements business outreach strategy	CEG	Outreach Strategy developed: Months 4 – 6 Outreach Strategy implemented Months 7 – 36
	Promotion of the program to STEM employers during interviews, events, meetings	Business Service Teams for each WIB	Months 4 – 36
<b>Output: 192 Two-Step Career Plans developed</b>			
<b>Activities</b>	<b>Milestones</b>	<b>Implementers</b>	<b>Timeline</b>
Career center staff connect employers and participants to develop customized 2-step career plans	Define employer's hiring needs and requirements	Business Services Representatives, Employers	Months 7 – 36
	Identify potential job candidates from the pool of comprehensively assessed participants that meet employer's needs	One-Stop Case Managers & Business Services Representatives	Months 7 – 36
	Develop Two-Step Career Plans with contracts signed between One-Stop Center, business, & participant	One-Stop Case Managers & Business Services Representatives, Employers, Participants	Months 7 – 36
<b>Output: 6 Community Colleges developing "employer specific" stackable credentials</b>			
<b>Activities</b>	<b>Milestones</b>	<b>Implementers</b>	<b>Timeline</b>
Work with employer, participant and training provider to implement Step 1 and Step 2 of career plan	Develop database of post-secondary credit course sequences of less than 30 credits that meets employer training needs for STEM jobs above entry level	SWW WIB Director & One-Stop Case Managers & Business Services Representatives	Months 1 – 6
	Connect employer & participant to appropriate education/ training provider to access needed training	One-Stop Case Managers, Education/ training provider	Months 7 – 36
	Participant begins training toward "employer specific" stackable credential and/or other training	Participant	Months 7 – 36

	Monitor participant progress via regular follow-up	One-Stop Case Managers	Months 7 – 36
	Hold interim meeting with employer and participant to verify Step 2 is still relevant/ appropriate	One-Stop Case Managers, Business Services Representatives, Employer, Participant	Months 10 – 36
	Connect employer & participant to appropriate education/ training provider to access needed training in Step 2	One-Stop Case Managers, Education/ training providers	Months 10 – 36
<b>Output: 25 employers participate in STEM-Related Sector Partnership</b>			
<b>Activities</b>	<b>Milestones</b>	<b>Implementers</b>	<b>Timeline</b>
Form STEM-related Sector Partnership to identify trends and align training and education program for common needs	Employer signs agreement to serve on the Sector Partnership	Business Intermediary Business Services Teams	Months 4 – 9
	STEM-Related Sector Partnership meetings held quarterly	Employers, Business Intermediary, Business Services Teams	Quarterly, Months 10 – 36
	Feedback from Sector Partnership meetings shared with education and training partners	Business Services Teams, Education partners	As needed, Months 10 – 36
<b>Output: 20 of professional development opportunities provided</b>			
<b>Activities</b>	<b>Milestones</b>	<b>Implementers</b>	<b>Timeline</b>
Provide professional development opportunities to staff to develop STEM knowledge and career path expertise	Train the Trainer sessions on STEM workshops content and presentation styles to Case Managers	FMS WDB Sub-contractor for Development of Math Phobia Curriculum	Months 1 – 6
	Exposure to biotechnology, manufacturing, and green energy businesses	Business Intermediary Business Services Teams	Months 7 – 36

## Project Management

**Professional qualifications required of the project manager and other key personnel:** The Project Manager will be the Executive Director of the Fulton Montgomery Schoharie Workforce Development Board (FMS WDB) and will be supported by the Fiscal Manager of the FMS WDB. The Executive Directors of the FMS, Capital Region, Columbia-Greene, and Saratoga-Washington-Warren WIBs have singularly and collectively managed multiple funding streams and multiple programs funded by local, state, and federal dollars. They are committed to a strategy that is *regional, skill focused, systemic, and collaborative*. Most recently, the Greater Capital Region WIBs were the recipient of a 3 year, \$1.5 million dollar grant from NYS Department of Labor to focus on sector strategies for advanced manufacturing and related high tech careers.

### **Organizational Chart:**



**Competitive Negotiation:** Invitations for the solicitation of proposals, with complete Request for Proposal (RFP) packages, shall be sent to potential service providers contained on the established bidder's list, as appropriate according to the type of goods and services to be procured. Notice of solicitation of RFP's may also be published in local newspapers and will be posted on the website of the respective WIBs. RFP's shall contain a clear and adequate description of the goods and services to be procured;

technical requirements, outcomes, and specifications which bidders must fulfill; and factors to be used in evaluating bids or proposals. When the FMS WDB is acting as the fiscal entity on behalf of a group of workforce boards, all bids are reviewed and scored by representatives of the regional partner WIBs. All selected bidders will be required to participate in negotiations with the FMS WDB Executive Director and Consortium WIB Directors. The award of any contract or agreement shall be contingent upon the satisfactory completion of negotiations and the continued availability of funding.

**Previous experience and/or management capacity to work with Technical Assistance and Evaluation coordinators:** The Director of the Columbia-Greene Workforce New York One-Stop Career Center will be the lead contact person between the project and the independent evaluation team. As an employee of Columbia-Greene Community College, Ms. Wiltse recently served on her college's 10-year Middle States Commission on Higher Education Reaccreditation Self-Study Group. Between 2009 and 2011, Ms. Wiltse served on the Self-Study Steering Committee and functioned as the liaison between the Working Group responsible for evaluating the college's efforts in meeting the fundamental elements of the Assessment of Student Learning standard and the Steering Committee. She was responsible for developing the self-study questions, assisting the Working Group in identifying sources of evidence, and preparing their answers in an outline format. In addition, as a member of the Steering Committee, she was involved with the process of fact-checking and editing the final Self-Study report.

Since 2006, the Middle States Commission on Higher Education has identified three of their 14 standards as their primary focus, with the Assessment of Student Learning standard as one of the top priorities. Although Columbia-Greene Community College has made great progress in instituting Assessment of Student Learning, the college recognized that not all aspects of the Assessment Cycle have been institutionalized. The Reaccreditation Team sited the college for not meeting the Assessment of Student Learning standard, but agreed with the college's recommendations for improvement

**Using Data to Manage Grant Activities:** Performance data will be collected and reported primarily through the NYSDOL One Stop Operating System (OSOS), which allows the GCR WIBs and Program Manager to review data quarterly, bi-annually or annual data reports, as needed. In addition, an employer database will be developed to track employer-worker connections. The leadership team will review these reports and data for any programmatic adjustments that need to be made throughout the grant period. If the program is not on target to achieve the anticipated schedule or outcomes, for instance, the GCR WIBs will review those indicators and make the necessary changes.

FMS WDB, Inc. will monitor expenditures and budgetary data to address any fiscal changes that need to be made.

**Grant Management Practices:** FMS WDB staff have a long and successful history of managing state and federal grants. The FMS WDB Executive Director has over twenty years of grants management experience including a 3-year USDOL grant for "Triage and Assessment" through the SUNY Research Foundation from 1994-1997. Most recently the FMS WDB was the grant recipient and project manager for a 3-year \$1.5 Million dollar grant from NYS Department of Labor to develop Sector Strategies in Advanced Manufacturing. The Fiscal Manager submitted monthly financial reports to NYSDOL and provided fiscal monitoring and oversight of expenditures by individual contractors. The Executive Director provided regular reports to NYSDOL, with quarterly written reports. The FMS WDB ED and Fiscal Manager monitored numerous contracts for satisfactory completion of products and activities before authorizing payment for individual steps and final completion. The FMS WDB is monitored by fiscal and program staff at NYSDOL, and as a 501(c)3 is subject to annual single audits. NYSDOL fiscal monitoring reports have found no deficiencies that required corrective steps. All single audits have been satisfactory and without any findings.

## Strategic Leadership

### Strategic Relationships and Leadership Buy-In

In addition to the leadership provided by the four WIBs, key partners that will be integral to the project include members of the Greater Capital Regional Workforce Coalition. The GCR Workforce Coalition is the result of a ten-year collaboration between the four local workforce investment boards and partners from state, regional and local economic development agencies; educational institutions; local government; organized labor; education; and private businesses. Official partners and their roles and responsibilities related to the grant are:

- Center for Economic Growth (CEG), the region’s economic development organization, will serve as the Business Intermediary and cultivate employer involvement and increase awareness;
- Chief Executives Network (CEN), which is sponsored by CEG and made up of high-tech company CEOs, will work with CEG and the Business Services Representatives to promote the STEM-Related Sector Partnership and the Two-Step Career Plans to their peer network.
- Empire State College, part of the State University of New York (SUNY) and focused on non-traditional teaching and learning, will be an important partner in serving veterans, providing Prior Learning Assessments and developing short-term, stackable “employer recognized” credentials.
- Community Colleges including Fulton-Montgomery CC, Schenectady County CC, Columbia-Greene CG, Adirondack CC, Hudson Valley CC and SUNY Cobleskill will provide critical training programs in STEM-related subjects; and
- Boards of Cooperative Educational Services (BOCES) in the Capital District will be key partners. BOCES HFM BOCES, Capital Region BOCES, WSWHE BOCES, Questar III will provide critical training programs in STEM-related subjects.

### Strategic Communication

Coordination of Step Up to STEM activities and program partners will be maintained through:

- Regular meetings of the GCRWIBs and of the GCR Workforce Coalition and its committees;
- Clearly defined roles, responsibilities and implementation plan for both the GCRWIBs and the Coalition membership. This includes the roles and responsibilities of the grant and of the standing committees which grew out of the GCR's Talent Pipeline report issued in 2010;
- Email communication using both Informz e-mail membership blasts and traditional e-mail;
- Tanberg video conferencing and other interactive technologies across the region.

### **Integration into Formula-Funded Activities**

An exciting aspect of the Steps Up to STEM program is the ease in which it can be maintained once the grant funds are exhausted. The Career Planning and Comprehensive Assessment activities are of such low costs per person that regular formula funds will be able to maintain these efforts. If the NWRC indicates a positive correlation to success in entry level jobs, the assessment aspect of the proposal may be expanded to include non-STEM related training.

It is our belief that the employer based training approach will result in less time marketing and promoting additional career plans. The database of "employer specific" credentials will make it easier and less time consuming in developing training-plans. Since training costs for ITA should be lower under this approach, formula funds should be available to continue the efforts.

The leadership of the four workforce areas has coordinated activities for the last 8 years, and will continue to do so after the grant is over.

## **Performance Accountability Framework**

### **Data Collection and Reporting**

**Comprehensive Data Collection Approach** –The NYSDOL One Stop Operating System (OSOS) will track quantitative data from the project. We have received commitment from OSOS that each requested data element will be available on a quarterly, bi-annual, or annual basis, as needed. In addition, the GCR WIBs will compile an employer database to track worker-employer connections. Through this employer

database and through data provided by the One Stop Operating System (OSOS), the Director of the Columbia-Greene Workforce New York One-Stop Career Center will track, record, and store activities and outputs data.

The GCR WIBs will also use survey tools and/or focus groups to determine the degree to which the program resulted in employer savings in the form of decreased recruitment costs, entry-level training investments and increased retention rates.

**Data to Be Collected:**

<i>Existing Data</i>	<i>New Data</i>
<ul style="list-style-type: none"> <li>• Employment data</li> <li>• Employment retention rates</li> <li>• Income results of program participants</li> <li>• Credential attainment</li> </ul>	<ul style="list-style-type: none"> <li>• Retention rates and employer feedback on NWRC completers</li> <li>• Employer recruitment costs and entry-level training investments</li> </ul>

**Data to Show Progress on Grant Activities:** The Region’s performance toward grant goals and target outputs and outcomes will be monitored throughout each step of the STEM talent pipeline system – from intake and assessment, to the development and completion of Two-Step Career Plans, to obtaining credentials and successful employer-worker connections that result in retained employment. These data will allow the GCR WIBs to clearly relay progress in quarterly reports.

**Leading Indicators:** The project team will look to output data and short-term outcome data for early indicators of success. The longer-term success of the project will be indicated by our long-term outcomes and impacts. Specifically, these indicators include:

<b>Early Indicators</b>	<b>Ultimate Outcomes</b>
<ul style="list-style-type: none"> <li>• Number of individuals exposed to STEM opportunities</li> <li>• STEM readiness assessments</li> <li>• Development of Two-Step Career Plans</li> <li>• Employer involvement in the Two-Step Career Plans and STEM-related</li> </ul>	<ul style="list-style-type: none"> <li>• Completion of the Two-Step Career Plans (Steps 1 and 2)</li> <li>• Credential attainment, including “employer recognized” credentials</li> <li>• More affordable training options</li> <li>• Cost savings for employers and</li> </ul>

sector partnership	the workforce system
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**Management Information System (MIS)** - As indicated above, OSOS will be able to accommodate our data needs and that each requested data element will be available on a quarterly, bi-annual, or annual basis, as needed. The employer database will be developed immediately upon award of the grant and will be complete within three months of the program's launch.

**Measuring Costs and/or Efficiencies** – We will measure participating employers' recruitment costs, entry-level training investments, and retention rates for entry-level employees to determine whether this program will provide cost savings for employers in the long term. Each participating employer will provide information for these three topics before the program and at the end of year 3. Answers will be weighted based on the length of time the employer was involved with the program and the number of employees placed with them. Additional opinion questions regarding overall program efficacy and impact will be administered through a combination of surveys, interviews, and focus groups toward the end of Year 3.

In addition, the third-party independent evaluator of our program will conduct a return on investment analysis (CBA) to compare the costs and benefits (employment retention, wages, etc.) of the Two-Step Career Plans developed through this program to the costs and benefits of other employment and training strategies being utilized by the WIBs.

**Utilizing Data to Manage Grant Activities** – Progress toward achieving output targets will be evaluated throughout the program and detailed in program status reports, delivered at Month 12 and Month 24. Factors will be assessed against the project timeline and target performance outcomes and may include, but are not limited to, strengths in development, barriers to implementing activities, whether available resources can sustain project activities, and how strategies or activities not successfully implemented be adapted or modified to the realities of the project.

These progress reports will allow program managers to monitor activities and associated outputs, make measurable adjustments to approach, address complaints or significant issues, and ensure the program is on track to achieve desired outcomes, impacts, and goals.

## Consortium Applicants

### Consortium Members' Roles and Responsibilities

The Greater Capital Region Workforce Investment Boards have been working together on regional initiatives since 2002 and have a history of successful collaborations, especially on grant-funded programs such as the Workforce Innovation Fund. Although the eleven-counties share a regional economy, the four WIBs serve diverse populations and operate under varying governance structures. Three of the WIBs are unincorporated, one of which partners with a local community college for fiscal services. The counties range from urban (Albany County) to suburban (Saratoga, Washington Warren Counties) and to rural (Fulton, Montgomery, Schoharie, and Columbia-Greene Counties).

Despite this diversity, our four workforce boards have cultivated a unique partnership that has become institutional, rather than transactional. The partners have been working together prior to the Steps Up to STEM program and will continue to do so after the grant period has ended. The consortium members' specific roles and responsibilities include:

- **Capital Region WIB (Albany, Schenectady, Rensselaer Counties)** – will act as the lead contact and coordinator for all policy related issues that may arise in dealing with educational institutions regarding two-step career plan development of “employment specific” credential training; will act as the lead contact for all policy related issues regarding the employer marketing undertaken by the Business Intermediary, Business Services Representatives, and Regional Business Service Teams; and will maintain mailing lists of Coalition Partners, and will generate mailings for meeting announcements, information sharing, and coordinate details for GCRWIBs Coalition Meetings.

- **Columbia-Greene WIB** – will be responsible for overseeing data collection and evaluation components of the grant; will work with **NYSDOL** NYOSOS/REOS Central Support Unit to generate quarterly reports for program monitoring and evaluation purposes; will act as the lead contact and trainer for all of the consortium’s one-stop and business services staff regarding data collection requirements and methodologies; and will act as the lead contact and trainer for clarifying the definition of classifying a customer as in need of Career Development Services among all one-stop centers.
- **Fulton, Montgomery, and Schoharie Counties Workforce Development Board, Inc.** – will act as the lead contact and trainer for ensuring STEM Career Planning workshops and comprehensive assessments are consistent in content and quality among all one stop centers; and will act as the lead contact and coordinator regarding the operation and use of the videoconferencing equipment.
- **Saratoga, Warren, Washington WIB** – will act as the lead contact and coordinator regarding the development of a database defining all “employer specific” credentials that are developed through grant activities.

## ATTACHMENT B

### Step Up to STEM Evaluation Plan

#### I. Goals of Evaluation

The following evaluation plan describes our internal processes and proposed methodology for tracking and evaluating program activities, outputs, outcomes, and impact. The primary purpose of this evaluation is twofold: One, we seek to build evidence-based practices into our program, throughout the life of this grant and beyond; and, two, we seek to determine whether, and in what ways, this program can be scaled to the broader workforce development community in the future.

Ultimately, the evaluation process will provide us with a thorough understanding of whether our activities led to the predicted outcomes and impacts, and will result in a list of recommendations and best practices for STEM careers, business engagement approaches, and improved labor market outcomes.

#### II. Internal Processes

##### Competitive Procurement Process

*The Consortium has an established procurement policy to competitively secure a qualified evaluator. Invitations for the solicitation of proposals, with complete Request for Proposal (RFP) packages, shall be sent to potential service providers contained on the established bidder's list. Notice of solicitation of RFP's may also be published in local newspapers and will be posted on the website of the respective WIBs.*

*The RFP shall contain a clear and adequate description of the goods and services to be procured; technical requirements, outcomes, and specifications which bidders must fulfill; and factors to be used in evaluating bids or proposals. All bids are reviewed and scored by representatives of the regional partner WIBs. All selected bidders will be required to participate in negotiations with the FMS WDB Executive Director and Consortium WIB Directors. The award of any contract or agreement shall be contingent upon the satisfactory completion of negotiations and the continued availability of funding.*

Factors used to assess the qualification of a bidder for this program evaluation will include a combination of the following:

- Ability/willingness to work collaboratively with partners and national evaluator;
- Experience with program evaluation design and implementation;
- Experience with statistical methods;
- Time and staff capacity;
- Demonstration of contextual understanding of our particular program and our needs; and
- Overall evaluation philosophy—a collaborator who will utilize the experience and expertise of our program staff and will look for ways to improve the program for the larger workforce system; not simply declare it a success or failure.

We expect our third-party evaluator to adhere to the highest technical standards, in line with our proposed methodology. Our evaluator will be granted the support and latitude necessary to complete each report with integrity, in light of all positive and/or critical findings.

**Staff Support**

The Director of the Columbia-Greene Workforce New York One-Stop Career Center will be the evaluation liaison—the lead contact person to facilitate contact between the evaluation team and other stakeholders, including the project team, the national evaluator, employers, program participants, and data sources. She will facilitate a program kick-off meeting with the evaluator to review and refine evaluation strategy and methodology. In addition, she will provide streamlined access to the information, data sources, and stakeholders necessary to assist the evaluator in conducting a thorough and quality evaluation.

**Past Experience with Evaluation**

The Director of the Columbia-Greene Workforce New York One-Stop Career Center recently served on her college's 10-year Middle States Commission on Higher Education Reaccreditation Self-Study Group. Between 2009 and 2011, she served on the Self-Study Steering Committee and functioned as the liaison between the Working Group responsible for evaluating the college's efforts in meeting the fundamental elements of the Assessment of Student Learning standard and the Steering Committee. She was responsible for developing the self-study questions, assisting the Working Group in identifying sources of evidence, and preparing their answers in an outline format. In addition, as a member of the Steering Committee, she was involved with the process of fact-checking and editing the final Self-Study report.

Since 2006, the Middle States Commission on Higher Education has identified three of their 14 standards as their primary focus, with the Assessment of Student Learning standard as one of the top priorities. Although Columbia-Greene Community College has made great progress in instituting Assessment of Student Learning, the college recognized that not all aspects of the Assessment Cycle have been institutionalized. The Reaccreditation Team sited the college for not meeting the Assessment of Student Learning standard, but agreed with the college's recommendations for improvement.

**III. Study Methodology****Implementation Evaluation**

We believe knowing *why* our program is successful in achieving its target outcomes is even more important than simply knowing that it does. In addition, because we expect to build evidence-based practices into our program, we recognize that even well-planned and thoroughly considered programs must be fine-tuned as new evidence arises. For these two reasons, we will work with our evaluator to conduct a comprehensive quality analysis of program implementation over the 36-month period.

The implementation evaluation will examine the core activities undertaken throughout the program and the outputs produced by each activity. The objective of the implementation evaluation is to improve the effectiveness of program activities by monitoring progress throughout the life of the program; engage stakeholders and ensure

their insight is incorporated into program decisions; and provide evidence for why program elements are or are not producing expected outputs.

Progress toward achieving output targets will be evaluated throughout the program and detailed in program status reports, delivered at Month 12 and Month 24. The evaluator will examine how the program has been implemented at each stage, and to what extent the program is aligned with the original plan. Factors to be assessed include, but are not limited to, the following elements:

- Strengths in development;
- Barriers to implementing activities;
- Whether available resources can sustain project activities;
- How strategies or activities not successfully implemented be adapted or modified to the realities of the project; and
- Customers' and other stakeholders' perceptions of progress and satisfaction.

These progress reports will allow program managers to monitor activities and associated outputs, make measurable adjustments to approach, address complaints or significant issues, and ensure the program is on track to achieve desired outcomes, impacts, and goals.

A more detailed implementation evaluation will occur during the final 12-month evaluation period (through Month 36). The final report, which combines implementation and impact evaluation, will retrospectively delve into detailed qualitative and quantitative considerations and include, but are not limited to, the following aspects:

- Overall performance and perception of Consortium staff;
- Whether the program reached its target population;
- Which components of the project were most important to program success;
- Non-WIB partner perception of program quality, activities, and related successes and barriers; and
- Evidence of systemic change.

To provide the broader workforce community with valuable information to bring the program to scale in other areas, additional implementation factors to be evaluated include:

- Which unique regional factors affected the program's success (geography, industry mix, constituencies, unique partnerships, etc.) and may not be available elsewhere;
- Which project strengths can be built upon in a larger workforce context;
- The presence of gaps in services/program activities that should be modified if other areas wish to implement the program; and
- Strategies for effective replication.

### **Summary of Data Sources and Approach**

The project team will compile an employer database to track worker-employer connections. Through this employer database and through data provided by the One Stop Operating System (OSOS), the Director of the Columbia-Greene Workforce New York One-Stop Career Center will track, record, and store activities and outputs data. She will provide this data to the third-party evaluation team for review on a quarterly basis. Based on the results, the team will gather additional qualitative feedback from staff and other stakeholders through surveys, interviews, and/or focus groups, as appropriate.

In addition, exposure to STEM career opportunities, and resulting awareness, will be measured primarily through the number of individuals who attend STEM-related workshops and presentations. As a proxy measure of awareness, we will also track the change in number of visits to the Tech Valley STEM Smart Alliance website every six months, through their established website tracking system.

### **Outcomes and Impacts Evaluation**

The Director will support the evaluation team in assessing both the anticipated outcomes, as outlined below, as well as any unanticipated or important interim outcomes. Combined with the Implementation Evaluation, described above, the Outcomes and Impacts Evaluation will allow the evaluator to determine the short- and long-term program achievements at various stages of program deployment. It combines numerical considerations with,

perhaps most important, considerations of quality to ensure that program components are beneficial and effective for stakeholders.

### **Summary of Data Sources and Approach**

**OSOS** – Our quantitative evaluation is based largely on data provided by the One Stop Operating System (OSOS), the NYSDOL management information system. We have received commitment from OSOS that each requested data element will be available on a quarterly, bi-annual, or annual basis, as needed. As noted above, the Director will ensure that the evaluator has access to all data provided and will back-up all data tables to ensure data fidelity.

OSOS will provide the evaluator with sufficient and timely data to measure the following outcomes:

- Increase in STEM-related training support by the public workforce system, through the completion of STEM career paths;
- Increased awareness of STEM careers and training opportunities;
- Increased number of youth, low-income adults and displaced workers assessed job ready for entry-level STEM employment and/or training, and who obtain STEM-related credentials;
- The value of NWRC as a predictor of success for employment retention in entry-level jobs; and
- Improved results for workforce system job seekers in employment attainment and job retention.

**Employer Database** – Employer participation will be tracked through a new database, established and maintained at the Columbia-Greene Workforce New York One-Stop Career Center. The database will include updated information on employer engagement, including participation in 2-Step Career Paths and the number of workers connected to each employer. Each WIB will provide a quarterly tally of employers, associated number of program participants, and participants' 2-Step Career Path completion status.

**Surveys** – Our evaluator will conduct a pre-post employer survey to determine the degree to which the program resulted in employer savings in the form of decreased recruitment costs, entry-level training investments and increased retention rates. The survey will also ask employers about their perceptions of program

effectiveness in building a regional workforce with the necessary STEM skills, and their support for sustaining programs, or elements of programs, such as these in the future.

***Interviews and Focus Groups*** – During the final six months of the program, our evaluator will conduct a thorough quantitative and qualitative assessment of program impacts through interviews and focus groups. The evaluation team will compile practical steps and recommendations to bring this program to scale with future workforce boards and to achieve efficiencies in the broader workforce system. The evaluation team will gather feedback to assess lessons learned from staff, employers, WIA customers, and other stakeholders. Elements to be examined include the following:

*Impacts*

- What impact did this program have on STEM business decisions, particularly in the areas of location, retention, and expansion?
- Do employers now have access to a more qualified STEM workforce?
- Did program benefits outweigh the costs?
- Do stackable credentials support STEM higher education attainment?
- Can NWRC be used as a successful screening tool for entry-level employment?

*Lessons Learned*

- What changes, if any, were made to the program along the way, and what happened as a result?
- Were certain demographic groups better served by the program than others?
- Were certain partners and/or program elements more or less successful in achieving desired outcomes?
- What changes should be made to structure and design moving forward?
- What recommendations do you have for other WIBs who want to implement a similar program?
- What additional resources, partnerships, or approaches would have made the program more successful?
- What, if anything, would we have done differently if we could design the program again from scratch?
- What steps should be taken to scale this program out to other areas?

***Short-Term Program Outcomes (1 - 2 Years)***

1. **1,300 low-income adults, dislocated workers, and youth move to STEM readiness assessment.**

To measure job readiness, we will examine the number of individuals in each group who pass the National Work Readiness Credential (NWRC) preparation post-test and computer literacy assessment. Data will be provided through OSOS on a quarterly basis.

**2. 103 participants complete Step 1 of their career path.**

This information is tracked by OSOS and will be provided quarterly to the program and evaluation teams. Data will be gathered and retained at the Columbia-Greene Workforce New York One-Stop Career Center.

**3. 80 participants complete Step 2 of their career path.**

This information is tracked by OSOS and will be provided quarterly to the program and evaluation teams. Again, data will be gathered and retained at the Columbia-Greene Workforce New York One-Stop Career Center.

**Long-Term Program Outcomes (2 - 3 Years)**

**1. Through NWRC, public workforce system provides better-screened candidates for entry-level STEM employment.**

Once each year, OSOS will provide the employment retention rates for NWRC individuals and retention rates to individuals who enter employment without the NWRC. Data will be analyzed in the aggregate and will also be broken out by youth, low-income adults, and displaced worker populations. The evaluator will compare each set of populations using an independent samples t-test, or other appropriate analysis, to determine whether a statistically significant difference in retention rates is present.

In addition, we will assist the evaluator in deploying a survey to the program's participating employers to gather data on the employment retention rates of NWRC and non-NWRC new hires. Assuming a response rate of at least 30%, the evaluator will conduct an independent samples t-test to determine statistical significance for retention rates.

**2. 70 additional participants complete Step 1 of their career path.**

This information is tracked by OSOS and will be provided quarterly to the program and evaluation teams. Data will be gathered and retained at the Columbia-Greene Workforce New York One-Stop Career Center.

### **3. 50 additional participants complete Step 2 of their career path.**

This information is tracked by OSOS and will be provided quarterly to the program and evaluation teams. Data will be gathered and retained at the Columbia-Greene Workforce New York One-Stop Career Center.

### **4. 155 youth, low-income adults and dislocated workers obtain STEM-related credentials, including “employer-specific” credentials.**

This information is tracked by OSOS and will be provided quarterly to the program and evaluation teams. Data will be gathered and retained at the Columbia-Greene Workforce New York One-Stop Career Center.

### **5. Improved results for workforce system job seekers: 81% of individuals with 2-Step Career Paths complete process and meet WIA employment retention and income benchmarks.**

This step will compare the employment retention and income results of program participants to all other WIA-funded customers in the region through OSOS data. Because privacy issues arise when tracking and reporting income data, the evaluation liaison will facilitate a strategy session between OSOS representatives and the evaluation team to determine the most effective way to ensure customer privacy while providing an accurate and useful dataset.

## **Impacts**

### **1. Employer access to a regional workforce with the necessary STEM skills.**

Outcomes measures will give us quantitative insight into the number of workers assessed STEM-career ready, the number of workers completing Two-Step Career Paths, and the number of workers who obtain STEM-related credentials. In light of these figures, we will facilitate employer surveys and interviews to determine whether employers believe the program resulted in greater access to a STEM-ready workforce. The evaluation team will inquire as to which program components were more or less successful in achieving this impact, and how the program could be improved.

### **2. More affordable training options available for employers and jobseekers.**

The evaluation team will examine a regional database of community college credit bearing course sequences, below degree or certificate-level, that provide “non-official” but stackable credentials as determined by local

business for job promotion above entry level. The increase of such course sequences ultimately provides faster access to training for the workforce as a whole.

### **3. Cost savings for employers & WIA**

To measure whether this program will provide cost savings for employers in the long term, we will assist the evaluator in measuring participating employers' recruitment costs, entry-level training investments, and retention rates for entry-level employees. Each participating employer will provide information for these three topics before they engage with the program and then again toward the end of Year 3. Answers will be weighted based on the length of time the employer was involved with the program and the number of employees placed with them. Additional opinion questions regarding overall program efficacy and impact will be administered through a combination of surveys, interviews, and focus groups toward the end of Year 3.

In addition, our evaluator will conduct a return on investment analysis (CBA) to compare the costs and benefits (employment retention, wages, etc.) of the two-step career plans developed through this program, to the costs and benefits of WorkKeys and other assessment systems.

### **4. Documented work readiness skills for employers leads to system change.**

The outcomes evaluation will determine whether the NWRC is indeed a predictor of employee success, as we predict it to be. Assuming positive results of the NWRC evaluation of Long-Term Outcome #1, the program will have produced evidence for a reliable indicator of worker quality, which reduces employer transaction costs in hiring entry-level employees.

#### IV. Key Evaluation Activities by Year

##### Year 1

**Months 1 through 6:** Procure the third-party evaluator. Review and refine the evaluation plan. Work with the evaluator to ensure all data collection methods are in place, including surveys. Work with evaluator and data sources to establish baseline data for quarterly output and outcome metrics.

**Month 12:** Work with the evaluator and data sources to establish baseline data for annual metrics. Receive *Program Status Report 1* from the evaluator, which outlines activities performed and associated output progress to date (implementation), a summary of baseline data, and additional steps to be taken.

##### Year 2

**Month 18:** Receive *Program Status Report 2* from the evaluator, which outlines process and output progress to date, activities performed, baseline data, and additional steps to be taken. Review the information as a consortium and make identifiable adjustments to process if necessary. Work with the evaluator to ensure evidence-based process adjustments are measurable and evaluated in light of any changes.

**Month 24:** Receive *Year 2 Annual Impact Report*, which builds on the Program Status Report structure. In addition to process and outcome measures, the Impact Report will provide the evaluator's complete analysis of the Consortium's achievement of short-term outcomes, the program's notable successes, and areas for improvement.

##### Year 3

**Month 30:** Receive Program Status Report 3 from the evaluator. Review the information as a consortium and make measurable and identifiable adjustments to process if necessary. Work with the evaluator to ensure evidence-based process adjustments are measurable and evaluated in light of any changes.

**Months 30-36:** Support the evaluator in conducting a comprehensive evaluation of all quantitative and qualitative considerations. Elements include, but are not limited to, full analysis of short- and long-term program outcomes, including any unanticipated impacts; review of any changes made to process and the results of those changes; demonstration of program efficiencies; gaps in achievement and reasons for those gaps; evidence for

impact achievement; and lessons learned from program staff, individual participants, employers, and other key stakeholders, as identified.

In addition to an in-depth analysis of this program's accomplishments and progress toward program goals, the *Final Impact Report* will place this program's success in the context of the broader workforce system and will identify the resources, partnerships, constituencies, and elements of system design most responsible for areas of success and areas needing improvement. It will conclude with a thorough list of recommendations and next steps for our consortium, as well as best practices and recommendations for other workforce boards interested in implementing a similar program.

### **Incorporating Evidence-Based Practices**

As noted above, the evaluator's Program Status Reports in Year 1 and Year 2 will serve to inform the Consortium about the progress made toward outcomes that result from various activities. Each report will be followed by a stakeholder meeting to discuss necessary adjustments in approach that may increase program quality and outputs and will lead to the achievement of desired short- and long-term outcomes. Any change in approach will be closely tracked and thoroughly examined in the subsequent *Impact Report*.

## V. Results

We believe this evaluation process, as outlined above, will allow us to provide the following results:

- Gather valuable data to determine achievements in program performance, outcomes, and impacts;
- Incorporate lessons learned throughout the duration of the program;
- Make identifiable, measurable adjustments to strategy to improve short- and long-term outcomes;
- Identify the program's unintended effects, both positive and negative;
- Integrate stakeholder feedback into future program decisions;
- Determine key elements of program implementation most responsible for desired outcomes; and
- Provide the broader workforce development community with detailed recommendations, best practices, reasonable performance expectations, and suggestions for improvement, in order for other workforce boards to scale our efforts or translate our program design to other communities.

# ATTACHMENT C

## EVALUATION PLAN IMPROVEMENT GUIDE FMS WORKFORCE DEVELOPMENT BOARD – PROJECT TYPE A

### SGA-REQUIRED ITEMS

The table below provides a list of the required items for confirmation of the grant award. These are stipulated in the SGA.

#### Requirements from the SGA Evaluation Plan Factors

- BUDGET: Evaluation budget is low. Would suggest increasing budget by 25%.

### RECOMMENDED EVALUATION PLAN IMPROVEMENTS

The National Evaluation Coordinator, Abt Associates, Inc., completed the following table, noting in which areas the grantee's original evaluation plan needs improvement. Abt's recommendations refer to both the original SGA and professional evaluation standards relevant to the type of intervention and evaluation proposed. Comments identify omissions that require consideration and errors that must be corrected in the original evaluation plans and the grantee's responses to SGA's evaluation requirements.

Evaluation Plan Factor	Recommendations for Improvement
<p><b>Logic Model</b> Does the logic model sensibly and accurately reflect the inputs, activities, outputs and outcomes for the specific innovation beyond the general program operations?</p>	<p><i>No comments; the plan includes a logic model with established targets for key outputs and outcomes.</i></p>
<p><b>Research Questions</b> Does the evaluation design include a reasonable number of research questions that are logical and linked to the specific innovation? Are there hypotheses about expected outcome changes due to the innovation?</p>	<ul style="list-style-type: none"> <li>• The evaluation plan contains many broad research questions. It would be helpful to make these questions more specific. For example, the question "Do stackable credentials support STEM higher education attainment?" could be more specific by adding some information on what it means to support STEM higher education attainment.</li> <li>• It would be helpful to add detail on the types of evidence that will be used to answer these questions. For example, one question is "Do employers now have access to a more qualified STEM workforce?" The evaluators may approach this question through anecdotes from focus groups, through more formal data analysis, both, etc., but it would be helpful to clarify.</li> </ul>

Evaluation Plan Factor	Recommendations for Improvement
<p><b>Evaluation Design (Type)</b> Is the evaluation type appropriate enough for the proposed innovation to accurately measure anticipated outcomes and answer evaluation questions? Are the designs from previous evidence sources (if they exist) described?</p>	<p><i>No comments; the evaluation design/type is appropriate</i></p>
<p><b>Evaluation Design (Rigor)</b> Are the analytic methods detailed and appropriate to the evaluation design type and proposed innovation? Is the source(s) of the control or comparison group, random assignment or other selection procedures, and mitigation of selection bias described? Are confidentiality issues addressed? For non-experimental designs, does the source of the comparison group cover the entire treatment group? Have potential comparisons voluntarily applied for something comparable?</p>	<p><b>Process Study</b></p> <ul style="list-style-type: none"> <li>• <i>No comments</i></li> </ul> <p><b>Outcomes Evaluation</b></p> <ul style="list-style-type: none"> <li>• It would be helpful to be clear about the level of rigor for each of the analyses. You may want to remove references to “impact” for analyses which will compare pre- and post-outcomes without any type of comparison group.</li> <li>• For each analysis with a comparison group, it would be helpful to add details on how the comparison group will be formed. For example, when the evaluator compares the employment retention rates for NWRC individuals with individuals who enter employment without the NWRC, it would be helpful to be more specific about the comparison group. As is, it is difficult to assess whether the comparison group is a “fair comparison”. Comparison of program participants to outcomes achieved by “other WIA funded customers” needs refinement to ensure comparability.</li> <li>• The evaluator may want to use the same pre-post employer survey with a comparison group of employers in the region. If surveying additional employers is prohibitively expensive, the evaluator may want to ask the participating employers the same set of questions (regarding recruitment costs, training costs, retention, etc.) for non-STEM employees who are likely unaffected by the intervention.</li> <li>• Describe how performance targets were established. (Using this innovative “untested” model, what is the basis for projecting that 81% will meet WIA employment retention and income benchmarks?)</li> <li>• Place additional emphasis on ways to examine the efficacy</li> </ul>

Evaluation Plan Factor	Recommendations for Improvement
	<p>of the Two Step Career Plan which is a key building block of the proposed design.</p> <p><b>Cost Analysis</b></p> <ul style="list-style-type: none"> <li>• More detail on the cost analysis is needed. The plan includes only a passing reference to the cost analysis.</li> </ul>
<p><b>Data (Definitions and Measurement)</b> How are the specific innovation indicators (especially outcomes) defined? Are the proposed measurements for outcomes valid and appropriate? Are they reliable? Are their unit(s) of analysis sensitive enough to note changes from the innovation?</p>	<ul style="list-style-type: none"> <li>• Establish some baseline measures of career awareness and unfilled employer demand (average length of time previously required to fill a STEM job).</li> </ul>
<p><b>Data (Sources and Collection)</b> Are the data sources fully described for each measurement? Are these new or existing administrative sources (like an MIS or financial reporting)? Are they sources unique to the innovation and evaluation? Will the sources produce the defined data or a proxy? Are the specific methods for collecting the data from each of the sources proposed? Are these methods reliable and, if necessary, secure? How often and how are they collected? What is the baseline collection? Does the evaluation plan include appropriate strategies for dealing with missing data? Are sample data collection instruments described?</p>	<ul style="list-style-type: none"> <li>• It would be helpful to add detail on what information will be collected from whom and when.</li> <li>• Some of the data elements (e.g., data from employers on training costs for entry level STEM professionals) will be extremely challenging to obtain. It would be helpful for the evaluator to pilot the data collection instruments early in the evaluation period to ensure that it is possible to obtain reliable and consistent data.</li> </ul>
<p><b>Analysis (Sampling)</b> Where applicable (for experimental and quasi-experimental studies), is there a sampling plan that describes the purpose and method of sampling, includes power calculations, and provides appropriate anticipated sample sizes?</p>	<ul style="list-style-type: none"> <li>• It would be helpful to add information on the size and scope of data collection. Consider obtaining more specific estimates from potential evaluators during the procurement process.</li> </ul>

Evaluation Plan Factor	Recommendations for Improvement
<p><b>Analysis (Methods)</b> Are there impact formulas, cost-benefit calculations, or other preliminary analytical assumptions provided? Are the analytical software or other tools described, and appropriate for the kinds of data and evaluation design?</p>	<ul style="list-style-type: none"> <li>The plans do not contain information on the planned methods of analysis. Once the Research Questions are specified in more detail (see above), it would be helpful for the evaluator to map out what analyses are planned to answer each Research Question.</li> </ul>
<p><b>Evaluation Timeline</b> Is the evaluation timeline feasible and appropriately aligned with the intervention's components and schedule?</p>	<ul style="list-style-type: none"> <li>While the evaluation plan contains a broad timeline (with milestones for each project year), it would be helpful to add detail. Since the evaluation will include some pre- post-analyses, it would be especially helpful to specify what constitutes the pre-period and the post-period for each aspect of the program. Once this information is added to the timeline, it will be easier to assess whether the milestones shown are feasible.</li> </ul>
<p><b>Evaluation Budget</b> Is the evaluation budget reasonable and mapped to specific evaluation tasks or milestones?</p>	<ul style="list-style-type: none"> <li>Evaluation budget is low. Would suggest increasing budget by at least 25%.</li> <li>A clearer linkage of the budget to specific tasks with narrative description of levels-of-effort and other costs may help verify expected overall costs.</li> </ul>
<p><b>Evaluation Contribution</b> How will the evaluation enhance the broader workforce system? Does the evaluation plan include a dissemination plan?</p>	<ul style="list-style-type: none"> <li>Fully explain how funding the proposed program evaluation will provide knowledge that can be used to enhance the broader workforce system.</li> </ul>
<p><b>Independent Evaluator</b> Has the third-party evaluator been procured? Do they have experience with this type of evaluation?</p>	<ul style="list-style-type: none"> <li>Clearly describe your process for procuring the services of a third-party evaluator, including the levels of capacity and expertise you will require.</li> </ul>

## **SUMMARY OF RECOMMENDED IMPROVEMENTS**

The table below provides a short-list of priority items for the grantee and grantee's third-party evaluator to improve the evaluation design. Though not required for confirmation of the grant award, these priority items are necessary for a strong program evaluation. This list may be helpful in procuring the third-party evaluator, as well.

<b>Priority Evaluation Design Improvement Items</b>
<ul style="list-style-type: none"> <li>• For each analysis with a comparison group, provide details on how the comparison group will be formed.</li> </ul>
<ul style="list-style-type: none"> <li>• Consider using the same pre-post employer survey with a comparison group of employers in the region. If surveying additional employers is prohibitively expensive, consider asking the participating employers the same set of questions (regarding recruitment costs, training costs, retention, etc.) for non-STEM employees who are not affected by the intervention.</li> </ul>
<ul style="list-style-type: none"> <li>• Establish baseline measures of career awareness and unfilled employer demand.</li> </ul>

## **FEDERAL CERTIFICATIONS**

The funding for the awards granted under this contract is provided by the United States Department of Labor which requires the following certifications:

### **A. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION-LOWER TIER COVERED TRANSACTIONS**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statement in this certification, such prospective participant shall attach an explanation to this proposal.
3. The prospective lower tier participant shall pass the requirements of A.1. and A.2., above, to each person or entity with whom the participant enters into a covered transaction at the next lower tier.

### **B. CERTIFICATION REGARDING LOBBYING - Certification for Contracts, Grants, Loans, and Cooperative Agreements**

By accepting this grant, the signee hereby certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The signer shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of facts upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction

imposed by Section 1352, Title 31, U.S.C. **Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.**

### **C. DRUG FREE WORKPLACE**

By signing this application, the grantee certifies that it will provide a Drug Free Workplace by implementing the provisions at 29 CFR 94, pertaining to the Drug Free Workplace. In accordance with these provisions, a list of places where performance of work is done in connection with this specific grant will take place must be maintained at your office and available for Federal inspection.

### **D. NONDISCRIMINATION & EQUAL OPPORTUNITY ASSURANCE**

As a condition to the award of financial assistance from the Department of Labor under Title I of WIA, the grant applicant assures that it will comply fully with the nondiscrimination and equal opportunity provisions of the following laws:

- (1) Section 188 of the Workforce Investment Act of 1998 (WIA) which prohibits discrimination against all individuals in the United States on the basis of race, color, religion, sex, national origin, age disability, political affiliation, or belief, and against beneficiaries on the basis of either citizenship/status as a lawfully admitted immigrant authorized to work in the United States or participation in any WIA Title I - financially assisted program or activity;
- (2) Title VI of the Civil Rights Act of 1964, as amended which prohibits discrimination on the basis of race, color, and national origin;
- (3) Section 504 of the Rehabilitation Act of 1973, as amended, which prohibits discrimination against qualified individuals with disabilities;
- (4) The Age Discrimination Act of 1975, as amended, which prohibits discrimination on the basis of age; and
- (5) Title IX of the Education Amendments of 1972, as amended, which prohibits discrimination on the basis of sex in educational programs.

The grant applicant also assures that it will comply with 29 CFR Part 37 and all other regulations implementing the laws listed above. This assurance applies to the grant applicant's operation of the WIA Title I - financially assisted program or activity, and to all agreements the grant applicant makes to carry out the WIA Title I-financially assisted program or activity. The grant applicant understands that the United States has the right to seek judicial enforcement of this assurance.

### **E. BUY AMERICAN NOTICE REQUIREMENT**

The grant applicant assures that, to the greatest extent practicable, all equipment and products purchased with funds made available under the Workforce Investment Act will be American made. See WIA Section 505 – Buy American Requirements.

#### **F. SALARY AND BONUS LIMITATIONS**

In compliance with Public Laws 110-161, none of the federal funds appropriated in the Act under the heading ‘Employment and Training’ shall be used by a subrecipient of such funds to pay the salary and bonuses of an individual, either as direct costs or indirect costs, at a rate in excess of Executive Level II. This limitation shall not apply to vendors providing goods and services as defined in OMB Circular A-133. See Training and Employment Guidance Letter number 5-06 for further clarification. Where applicable, the grant applicant agrees to comply with the Salary and Bonus Limitations.

#### **G. VETERANS’ PRIORITY PROVISIONS**

Federal grants for qualified job training programs funded, in whole or in part, by the U.S. Department of Labor are subject to the provisions of the “Jobs for Veterans Act” (JVA), Public Law 107-288 (38 USC 4215). The JVA provides priority of service to veterans and spouses of certain veterans for the receipt of employment, training, and placement services. Please note that to obtain priority service, a person must meet the program’s eligibility requirements. Training and Employment Guidance Letter (TEGL) No. 5-03 (September 16, 2003) and Section 20 of the Code of Federal Regulations (CFR) Part 1010 (effective January 19, 2009) provide general guidance on the scope of the veterans priority statute and its effect on current employment and training programs. Where applicable, the grant applicant agrees to comply with the Veteran’s Priority Provisions.

### **STATE CERTIFICATIONS**

#### **H. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND OUTSTANDING DEBTS**

The undersigned, as a duly sworn representative of the contractor/vendor, hereby attests and certifies that:

- 1) No principal or executive officer of the contractor’s/vendor’s company, its subcontractor(s) and/or successor(s) is presently suspended or debarred; and
- 2) The contractor/vendor, its subcontractor(s) and/or its successor(s) is not ineligible to submit a bid on, or be awarded, any public work contract or sub-contract with the State, any municipal corporation or public body for reason of debarment for failure to pay the prevailing rate of wages, or to provide supplements, in accordance with Article 8 of the New York State Labor Law.

3) The contractor/vendor, its subcontractor(s) and/or its successor do not have any outstanding debts owed to the Department, including but not limited to, contractual obligations, fines related to Safety and Health violations, payments owed to workers for public works projects or the general provisions of the Labor Law, unemployment insurance contributions or other related assessments, penalties or charges.

**I. CERTIFICATION REGARDING "NONDISCRIMINATION IN EMPLOYMENT IN NORTHERN IRELAND: MacBRIDE FAIR EMPLOYMENT PRINCIPLES"**

In accordance with Chapter 807 of the Laws of 1992 the bidder, by submission of this bid, certifies that it or any individual or legal entity in which the bidder holds a 10% or greater ownership interest, or any individual or legal entity that holds a 10% or greater ownership interest in the bidder, either:

(answer Yes or No to one or both of the following, as applicable.)

1. Has business operations in Northern Ireland:

Yes

No

If Yes:

2. Shall take lawful steps in good faith to conduct any business operations they have in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to nondiscrimination in employment and freedom of workplace opportunity regarding such operations in Northern Ireland, and shall permit independent monitoring of its compliance with such Principles.

Yes

No

**J. NON-COLLUSIVE BIDDING CERTIFICATION**

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his or her knowledge and belief:

1. The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;

2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and

3. No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit to bid for the purpose of restricting competition.

I, the undersigned, attest under penalty of perjury that I am an authorized representative of the Bidder/Contractor and that the foregoing statements are true and accurate.

Signature of Authorized Representative \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_