

# **NYSERDA WORKFORCE DEVELOPMENT PROGRAM**

## **Process and Market Evaluation Plan**

August 19, 2010

### **I. Introduction**

The detailed evaluation plan presented in this document builds upon prior process and market evaluation activities conducted for NYSERDA programs. In developing this evaluation plan, NYSERDA has incorporated feedback provided by the Department of Public Service (DPS), and has worked closely with its team of independent evaluation contractors to select the most appropriate evaluation approaches based on the current design of the program. This plan was developed to conform to the DPS evaluation guidelines released on August 7<sup>th</sup>, 2008 and to provide the highest level of rigor possible within the available resources.

As the Workforce Development (WFD) Program ramps up to begin meeting its EEPS Program goals, NYSERDA and its evaluation contractors will closely monitor aspects of that process in order to adapt this plan, as needed, to provide the most relevant and useful evaluation. For example, adjustments may be needed to sample sizes or research issues if assumptions about the programs do not develop as initially anticipated. On June 4<sup>th</sup>, 2010 NYSERDA WFD Staff filed a letter with the Public Service Commission Secretary requesting a six month extension of the timeline to commit and disperse program funds. On June 11 DPS issued a response to this request granting the extension to commit and disburse WFD Program funds until June 1, 2012. This extension may marginally impact the timelines of this program evaluation. However, the substance of the evaluation is not expected to be affected by such an extension. As such, NYSERDA views this plan as a flexible, living document that will be updated, as necessary, with appropriate notice to DPS and other interested parties.

This evaluation plan describes the market characterization and assessment (MCA) and process evaluation study to assess the efficiency and effectiveness of the new WFD Program supported by EEPS funding. The evaluation will focus on key indicators identified by the EEPS Workforce Development Working Group and documented in the program theory and logic model, potentially including: increasing the number and penetration of energy efficiency training programs and providers; increasing the number of training programs leading to BPI and other certifications; increasing the number of students participating in and completing energy efficiency training programs; monitoring perceptions of training quality by training participants; assessing the number and types of jobs filled by participants of training programs; and assessing potential barriers to program participation, especially among certain “hard to serve” underemployed or unemployed population groups<sup>1</sup>. An impact evaluation is not planned with evaluation funds set aside for this program since the program is targeting non energy impacts.

### **II. Summary of Goals, Cost and Schedule for Evaluation Activities**

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<sup>1</sup> The terms “hard-to-serve” and “under-served” populations as defined by the Workforce Investment Act (WIA) include individuals with language barriers, the homeless, offenders, etc. Local areas with a priority of service and limited funding would serve these populations first. The low-income designation includes households with an income equal to, or lower than, 80% of state or area median income, whichever is greater (an income of nearly \$60,000 a year for a family of 4 in most counties and higher in several downstate counties).

The overarching goals of NYSERDA's **New York Energy \$mart<sup>SM</sup>** and EEPS program evaluation efforts are to conduct credible and transparent evaluations, and provide NYSERDA program staff and managers, the New York State Public Service Commission (PSC), DPS staff, and other stakeholders with timely and unbiased information regarding program implementation. Specifically, evaluation goals for the WFD Program are to:

- (1) Articulate and understand program theory and logic
- (2) Assess effectiveness of program outreach, marketing, and overall reach of the WFD Program
- (3) Assess effectiveness of training in preparing students for employment in energy efficiency occupations
- (4) Assess overall implementation experience of the WFD Program across training providers and trainees
- (5) Assess experience of Training Partners (TPs) with program selection and implementation process

NYSERDA's evaluation budget for the WFD Program is \$330,006 or 5% of the EEPS funded program budget of \$6,660,114. The large majority of the 5% budget will be spent on studies by independent evaluation contractors. However, a small portion will be set aside to cover evaluation management, staffing, and reporting by NYSERDA. A set aside for statewide studies has not been allocated out of the 5% WFD Program evaluation budget given the unique nature of this program and the current short program duration. As the WFD Program is not expected to separately count direct energy savings, evaluation funding will be allocated roughly equally between process and MCA evaluation. The proposed evaluation contractor budget for the WFD Program is shown in Table 1.

**Table 1: Evaluation Contractor Budget for WFD Program**

Evaluation Element	Estimated Budget <sup>1</sup>	
	2010-2011	% of Total Budget
Market Characterization & Assessment	\$152,500	55%
Process Evaluation	\$128,000	45%
<b>Total</b>	<b>\$280,500</b>	<b>100%</b>

<sup>1</sup> Approximately 15% of the total \$330,006 Evaluation Budget will be set aside to cover NYSERDA's internal evaluation management/staffing and reporting costs.

### III. Workforce Development Program Description

The WFD Program will expand NYSERDA's network of energy efficiency training centers and partners across the state to provide training in a number of energy efficiency occupations. The program will also fund curriculum development, equipment purchase, tuition reimbursement for participants, instructor development and certification, student internships and apprenticeships, and other elements to expand and supplement the breadth and quality of energy efficiency training programs. Training will also be targeted to certain hard to serve low income and underemployed citizens through partnerships with the New York State Department of Labor (NYS DOL) and other agency and non-profit group collaborations to be developed.

The immediate goal of the Workforce Development Program is to significantly expand the State's existing energy efficiency training infrastructure, and to train and certify over 6,200 workers to serve the needs of the portfolio of programs funded through the EEPS by December 2011, including those administered by NYSERDA and the utilities paying into the SBC. Concurrently, the program has targeted a portion of these funds to address barriers to workforce training for underemployed workers by partnering with state and other entities to recruit and train underemployed workers to enter jobs in the energy efficiency field. To this end, the WFD Program will partner with the NYS DOL and their Pathways out of Poverty initiative to help select candidates for training and subsequent certification and/or employment opportunities<sup>2</sup>. Additionally, NYSERDA will work closely with the

<sup>2</sup> Pathways out of Poverty is an ARRA-funded program administered by the NYS Department of Labor. Its purpose is to fund programs to provide training, education and job placement assistance for workers, and to prepare individuals seeking "pathways out of poverty" through

NYS DOL to leverage other state and federal funds to develop training for emerging workers through establishing formal relationships and programs with NYS DOL One-Stop Centers and the State's Workforce Investment Boards. Whenever possible, the WFD Program will also develop partnerships with corporations, advocacy groups such as the Workforce Development Institute, and others to add synergies to program implementation and to broaden training opportunities. NYSERDA plans to use three primary mechanisms to expand existing and deploy new training programs through the WFD Program:

- **Training Partnership Program** Training Partnership Agreements (TPAs) with new and existing training providers will be developed through PON 1816, released in December 2009. This PON establishes the criteria required for existing training entities to become licensed training providers for the WFD Program. Proposals from potential training providers will be accepted and assessed on a first-come-first-served basis up to December 31, 2011<sup>3</sup>. These agreements will allow NYSERDA to quickly implement training through providers currently accredited or recognized by an independent third party. Agreements will also enable NYSERDA to work with new training partners offering credentialed training programs and to forge new partnerships with state government agencies, unions and trade groups, manufacturers, colleges, advocacy groups and other entities. Agreements will also be developed with community based organizations and environmental justice communities and organizations. At the same time current training programs will be expanded, starting with the Center for Energy Efficiency and Building Science (CEEBS) program headquartered at Hudson Valley Community College (HVCC), which, through its affiliation with NYSERDA, has provided Building Performance Institute (BPI)-certified programs in a number of building science areas since 2006<sup>4</sup>. The solicitation will also accept proposals to provide basic skills training, train-the-trainer opportunities, internships, apprenticeships, on-line and distance learning, professional development, and practitioner certification. Lastly, the PON will provide funding for individuals seeking professional certification in energy efficiency careers. This certification must be from an approved list of occupations and training must be conducted by a recognized, credentialed provider such as the BPI. Individuals seeking such training may apply until May 30, 2012. **Competitive Solicitations for New Training Providers and New Training Initiatives.** PON 1817, issued June 2010, solicits proposals from new training organizations or entities to develop new initiatives to improve the skills of professionals and tradespersons that are already active in the energy efficiency field, and to help prepare students and new employees for careers in the energy efficiency services sector. Proposers may develop and implement training initiatives as part of a career pathway (*i.e.*, basic skills, technical skills, advanced skills), continuing education opportunity, college credit course, certificate program, two-year degree program, etc. Proposed training should focus on instruction that develops or enhances the energy efficiency skills of current workers, or training that provides basic skills and technical training related to energy efficiency to disadvantaged, unemployed or underemployed workers residing in New York State and will provide energy efficiency services throughout New York State.
- **Request for Proposals (RFP) or “Mini Bids” from Existing Training Providers**<sup>5</sup>. If warranted, NYSERDA will issue an RFP or, “mini bid,” for specific initiatives to help address gaps or new needs as they arise during program implementation (to be administered through Training Partnership Agreements). RFPs could be issued in specific areas such as geographical regions, technical training areas, basic skills training in a new language, HVAC internships, apprenticeship programs for electricians, CEUs for architects/engineers, or energy efficiency training modules for manufacturers among others . An RFP could

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careers in the energy efficiency and renewable energy industries. Additional remedial and support services are available to this population to assist them in reaching their career goals.

<sup>3</sup> Although the solicitation will close on December 31 2011, the program has until 1 June 2012 to spend the funds associated with the solicitation.

<sup>4</sup> The CEEBS centers are: Hudson Valley Community College, Troy ,NY; OCM BOCES, Syracuse, NY; Broome Community College, Binghamton, NY; Erie Community College, Buffalo, NY; Bronx Community College, NY-NY; Association for Energy Affordability(AEA), NY-NY; Fulton-Montgomery Community College, Syracuse NY; and SUNY Canton, Canton, NY, Monroe Community College; Ulster County Community College.

<sup>5</sup> WFD staff have stated that the mini bid process will only be conducted if the initial PON does not garner a sufficient number of certified training programs.

also target established training partners and will be used to quickly fill gaps for new training needs (to account for new technologies) and to generally help meet the goals set forth in the Commission's Order.

The WFD Program will operate concurrently with NYSERDA's RGGI funded Green Jobs Green NY (GJGNY) Program, which will have some complementary training components and will be administered by the same NYSERDA program staff. The evaluation team will work with WFD Program staff to coordinate evaluation efforts for these programs to leverage opportunities and resources and avoid duplication of effort.

#### **IV. Evaluation Approach**

This section presents the 2010/2011 Process and Market Characterization and Assessment (MCA) evaluation approach and is designed to reflect NYSERDA's plans for the implementation of the Workforce Development Program. The evaluation strategy is designed to afford NYSERDA and its independent evaluation contractors' flexibility to adapt the approaches that best suit the program as implemented and according to final evaluation protocols and funding. As noted, this evaluation will be closely coordinated with NYSERDA's GJGNY Program to leverage opportunities to more efficiently and effectively utilize evaluation resources to expand program knowledge.

Best practice evaluations of work force training efforts should be grounded in Kirkpatrick's four levels of evaluation for assessing training effectiveness<sup>6</sup>. The four levels involve an assessment of:

1. response of the trainee to the training,
2. what was learned,
3. performance in the workplace, and
4. effects of the training in the work place.

Addressing these four levels requires both process and MCA evaluation activities such as surveys and in depth interviews with: NYSERDA program staff, program implementation contractors, trainers, participating and non-participating energy efficiency trainees and potential employers in the energy efficiency marketplace. It also requires broad examination of the energy efficiency market and its need for these training efforts. This evaluation will address the training efforts and their impacts on participants and the market for energy efficiency services using a combination of process and MCA evaluation that assesses the progress of these efforts in relation to the Kirkpatrick levels. The final report will include lessons learned and recommendations for future workforce training efforts.

An energy impact evaluation is not planned with the evaluation funds set aside for this program. Instead the evaluation will focus on market changes among energy efficiency contractors. The MCA evaluation team will assess the broader impact of the program on building and home performance contractors, including how WFD training efforts have resulted in increases in certified staff to perform additional energy efficiency work. The MCA evaluation team will approach this goal by adding questions to MCA evaluation surveys, where possible, targeting such EEPS programs as: Energy Star Homes, Home Performance with Energy Star, EmPower, and the Multifamily Program. EEPS programs administered by the utilities will also benefit from NYSERDA's WFD program activities. NYSERDA's initial conversations with utility evaluation representatives indicate that the utilities are willing to consider adding questions to their evaluation surveys to help assess the effects of the NYSERDA EEPS WFD Program activities. NYSERDA will also pursue this opportunity to more fully assess the effects of the WFD Program activities.

#### **Market Characterization and Assessment (MCA)**

MCA evaluation efforts will begin by developing a program theory and logic model to accurately reflect the current

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<sup>6</sup> Kirkpatrick, J. *The Kirkpatrick Four Levels: A Fresh Look after 50 Years 1959-2009*, (2009) Available at <http://www.kirkpatrickpartners.com>

program design and state of the energy efficiency market, while identifying key program indicators of success for further study. The MCA team will also conduct a study to assess baseline measurements of key indicators including: the current size, capacity, and staffing needs of the energy efficiency services workforce; market awareness of training opportunities; employer and trainee perceptions of training value; perceived barriers to workforce training; and the current market demand for training and for trained contractors. Through baseline and follow up interviews with potential employers, the MCA evaluation will assess the effectiveness of WFD Program activities including any changes in employer hiring patterns resulting from WFD Program activities (*e.g.*, do employers actively seek candidates who have completed training/certification programs?). As the WFD Program evaluation effort commences, evaluators will also review program-sponsored baseline research and other available secondary sources of information to identify possible leveraging and cost-saving opportunities. In particular, the MCA evaluation team will utilize, when possible, relevant market data provided by the current New York State Department of Labor (NYSDOL) Labor Market Initiative survey to supplement knowledge of the energy efficiency market and to help refine knowledge of the job descriptions defined within this market, as well as to help refine other program objectives.<sup>7</sup>

### ***Research Objectives***

The research objectives for the WFD Program MCA evaluation are listed below. In order for the market evaluation to provide the greatest value, other relevant or necessary objectives may be added or objectives listed below modified as the timing for research draws closer.

1. Understand and articulate program theory and logic through the development of a WFD Program Theory and Logic Model Report
2. Assess baseline market conditions, including:
  - a. Market awareness of energy-efficiency training opportunities (both those funded by the EEPS WFD Program and other sources) and perceived value of training activities (*e.g.*, what level of training/certification/licensing is needed), market demand for trained/certified employees (disaggregated by market sector and geography when practical), barriers to greater availability and participating in training
  - b. Size of the existing energy efficiency workforce including current and anticipated staffing needs
  - c. Capacity of the existing energy efficiency training infrastructure (*e.g.*, Center of Energy Efficiency and Building Science (CEEBS) centers, and other Training Partners such as the International Brotherhood of Electrical Workers (IBEW) and other labor unions, the Workforce Development Institute, City University of New York (CUNY), etc.)
3. Assess WFD Program activities and accomplishments through a follow up study including interviews with potential employers to:
  - a. Verify basic program accomplishments (*e.g.*, number of trainers trained, number of students who start/complete training programs, number of trainees who attempt certification, etc.)<sup>8</sup>
  - b. Review, in partnership with the NYS DOL, trainee employment patterns (*e.g.*, number of students employed after attending training program, quality of work experience (*e.g.*, job title and tenure) etc.)
  - c. Assess the degree to which training fulfills the Kirkpatrick third and fourth levels of training effectiveness: assessing performance in the workplace and estimating the effects of the training on the workplace.

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<sup>7</sup> The work scope for the DOL study can be found at: <http://www.labor.ny.gov/workforcenypartners/pdfs/sesp.pdf>. As the WFD evaluation and this study progress, NYSERDA will coordinate further discussion with NYS DOL to ensure optimal coordination.

<sup>8</sup> This information is expected to be well covered in program tracking records and will not constitute a significant evaluation effort.

A key component of the MCA evaluation efforts will be to establish baseline measurements of key performance indicators in the first year of program operation. These measurements can then be used in subsequent evaluations to assess program progress over time (*e.g.*, state- and regional-level employment patterns and response to training and certification programs). As noted above these evaluation efforts will utilize data and findings from the NYS DOL study, as well as other relevant NYSEERDA studies, to leverage the data and findings to further support program objectives and to support findings.

### ***Activities***

In mid-2010 a program theory and logic model will be developed that summarizes current program design and market conditions, program intervention strategies, and expected market outputs and outcomes. The theory and logic model will guide subsequent program evaluation activities with data collection efforts designed to target key measurement indicators and researchable issues identified in the model. The theory and logic model will also identify other programs and/or funding sources (*e.g.*, GJGNY) that may be leveraged by the WFD Program and note program refinements that may be necessary to access those opportunities. In addition, the theory and logic model will identify external influences, such as other programs or policies designed to foster green job growth, and how they relate to the WFD Program in terms of anticipated and observed changes in market operation.

The second phase of the MCA evaluation will include a baseline assessment of market needs among energy efficiency services industry employers, exploring topics related to staffing patterns, required skill sets, availability of skilled labor, and anticipated evolution of the marketplace. The survey of employers will also assess awareness and knowledge of NYSEERDA and other related training efforts in New York. As noted previously, the second phase of the MCA evaluation will utilize data and findings from the DOL study, the GJGNY needs assessment study, as well as other relevant NYSEERDA studies, to extend research findings and further support program objectives.

The third phase of the MCA evaluation will include a follow up study to examine the market response to training efforts, energy efficiency employer staffing needs, availability of skilled labor, and anticipated evolution of the marketplace in response to training. For example, it will be important to assess how retention in training programs, completion of training, and certification, (where necessary) lead to employment in a similar field. The study will address how energy efficiency employees and employers achieve their objectives as they relate to Kirkpatrick's third and fourth levels which assess the effectiveness of training on trainee performance in the workplace, and on how the training affects the overall performance of the workplace.

### ***Populations/Samples***

As discussed previously, the MCA evaluation of the WFD Program will involve primary data collection with energy efficiency services industry employers. Data collection for the baseline study will occur during early 2011 after all training proposals have been received and reviewed by NYSEERDA<sup>9</sup>. The follow-up study exploring market response to training efforts will occur in 2012. This approach will allow the MCA Team to focus data collection efforts on the market sectors specifically targeted by the training proposals accepted by the Program. It will not be possible for the evaluation to identify specific populations that will be targeted until training organizations are selected.

The MCA Team will work closely with NYSEERDA's survey data collection contractor, to identify potential sample frames and develop sampling procedures to effectively represent the target populations. At present, it is expected that the MCA Team will develop descriptions of the target audience for program-sponsored training activities to identify the market sectors most active in the WFD Program and then use reverse SIC/NAICS code lookups and other methods to develop sample frames and population size estimates for the target groups. This process will be enhanced through conversations with WFD Program staff to determine if additional market sectors have been targeted but not engaged by the program. If so, the target group samples will be expanded to include data points

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<sup>9</sup> The deadline for submitting TPA application is August 1, 2010 but training programs are not expected to ramp up for a few months after contracts are finalized.

within these additional market sectors. The final samples for each target group will be designed to meet 90/10 absolute confidence/precision criteria on an upstate-downstate regional basis with the capability to be segmented by market sector if needed.

**Data Collection**

Primary data collection will be managed by NYSERDA’s survey data collection contractor. The data collection process will be conducted by telephone and will consist of the following steps undertaken by the survey data collection contractor: 1) format the final survey instruments and program them into a CATI system, 2) pretest the final instruments with subsets of the target group samples and consult with the MCA Team as needed to resolve any issues that are identified, 3) conduct full-scale data collection efforts and provide regular progress updates to the MCA Team during implementation, 4) process the raw survey data into final data files, including coding of open-ended responses and general data cleansing, and 5) deliver to the MCA Team final data files in SPSS and SAS formats including all variable names, variable labels, value labels, and weights relevant to each data collection effort along with the associated codebooks.

Surveys will be designed to be completed in approximately 15 – 20 minutes. Pretest interviews will be included as completed interviews unless major revisions to the instruments are made.

Current estimates regarding sample sizes, expected sampling precision, and anticipated survey fielding dates for the MCA evaluation are summarized in Table 2. These estimates will be finalized prior to undertaking the planned evaluation, and once the MCA Team more thoroughly analyzes program participation data including the final training proposals accepted by the WFD Program. Final details regarding the sample development process and resulting sample sizes will be documented in the final project work plan.

**Table 2: Workforce Development Program Solicitation Market Evaluation Survey Specifics (Baseline Assessment)**

Target Group	Estimated Population Size	Estimated Sample Size <sup>1</sup>	Expected Sampling Precision <sup>2</sup>	Administration By	Expected Start of Fielding
Energy Efficiency Services Industry Employers	>1000	140	90/7	Survey Team	Early 2011

<sup>1</sup> Final population and sample sizes will be determined through conversations with program staff and initial market characterization exercises. For budgeting purposes, it is assumed that the population size of each Target Group is large enough that 70 completed surveys will be required in each of the upstate and downstate regions (*i.e.*, 140 completed surveys per Target Group) to achieve 90/10 absolute confidence/precision criteria on an upstate-downstate regional basis.

<sup>2</sup> Assumes proportional sampling, two-tailed test, finite population correction.

The MCA Team will coordinate with the Process Evaluation Team to the extent possible to fully leverage other planned data collection efforts. Doing so will achieve economies of scale by minimizing data collection costs, and ensuring consistency of approach and question wording to facilitate comparison of results across evaluation efforts, while minimizing the burden placed on different respondent groups.

## Process Evaluation

The process evaluation will be formative and will be integrated with the MCA study. Early process evaluation efforts will include assessment of pre- and post-training surveys administered by the TPs and interviews with training organizations, trainees, as well as non-participating training organizations. By interviewing and surveying participant trainees, training organizations, and non-participating training organizations the Process Evaluation Team plans to assess the effectiveness of WFD Program design, training curriculum, and training experience from the participant and organizational perspective.

### *Research Objectives*

A preliminary list of possible research objectives for the WFD process evaluation is listed below. In order for the process evaluation to provide the greatest value, other relevant or necessary objectives may be added or objectives listed below modified as the timing for research draws closer. As with the Market evaluation, the process evaluator will coordinate with other concurrent programs such as GJGNY to encourage efficient use of evaluation resources.

The objectives for the Process evaluation will be to:

1. Document WFD Program implementation, progress, and participant satisfaction and make recommendations for program improvement
  - a. Assess experience of training entities in joining training partnerships and implementing programs
  - b. Assess how training partners learned about program
  - c. Assess satisfaction of training partners, including satisfaction with programs they offered
  - d. Assess trainee satisfaction with curriculum usefulness and appropriateness
  - e. Assess trainer satisfaction with programs
  - f. Assess potential barriers to training for students
  - g. Document lessons learned and provide recommendations for ways to improve workforce training implementation
2. Assess effectiveness of training in preparing students for employment
  - a. Assess the degree to which training fulfills the first two Kirkpatrick levels of training effectiveness: response of the trainee to the training, and assessing what was learned.
  - b. Assess trainings attended relative to recruitment effort (expected students attending vs. predicted via recruitment data)
  - c. Assess training partner student retention (compared to expected percentage of completes)
  - d. Assess trainer perception of usefulness of training programs as job preparation
  - e. Assess employer perception of usefulness of training
  - f. Document lessons learned and provide recommendations for ways to improve the effectiveness of training

A key component of the process evaluation efforts will be to assess the first year for each training effort and provide feedback to the trainers on student response to the curriculum. Additionally, evaluators will assess the TP response to the WFD Program on the process of rolling out training programs and how to derive best practices to inform future programs. Finally, evaluators will assess the results of training on employment outcomes and employers; *i.e.*, how well training prepared trainees for employment in their chosen energy-efficiency field, and how satisfied employers are with the results of training on employee performance.

**Activities** Specific timing of survey efforts will be coordinated with program rollout and training schedules in order to collect the most reliable information for the evaluation. This section outlines initial plans for these evaluation activities and their expected timing based on currently available information regarding program rollout.

During spring and summer 2011, NYSERDA’s independent Process Evaluation Contractor will begin to work with WFD Training Partner staff to ensure the exit surveys are structured to provide value to the evaluation and subsequently to assess the results of pre and post training exit survey data to assess the effectiveness of training programs provided under the WFD. These surveys will be implemented by the trainers at the conclusion of each training effort. Completed surveys will be delivered to NYSERDA on an ongoing basis.

The evaluation will also include phone interviews with a sample of training participants to assess response to the training and assess the level of learning and whether they have found jobs in the fields targeted by the training. These surveys will be conducted between six and 12 months after completion of training.

The evaluation team will also conduct interviews with trainers to assess their perspectives on curriculum development and to solicit their overall feedback on the success of training efforts. These interviews and the surveys of trainees are expected to be conducted in early 2011.

**Populations/Samples**

The breadth of impact anticipated from workforce training requires a variety of data collection efforts. Sampling strategies will be consistent across each training activity to provide comparability. However this could reduce the specific value to each training activity. Timing is also critical since input should be provided to trainers as soon as possible after training efforts are initiated to ensure that trainers can improve their curricula based on initial feedback and also develop a mindset founded on the concept of continual improvement. Thus, the evaluation will include an interim report reviewing findings from the post training surveys. As the workforce training effort grows, sampling of participants and targeted employers can be conducted at the 90/10 confidence/precision level.

**Data Collection**

Data collection will begin with interviews of NYSERDA program staff in early 2011. These interviews will yield important information about the status of program implementation, particularly the early selection of Training Partners and will aid in determining the optimal timing for the rest of the process evaluation interviews.

Interviews with trainers and trainees will require an initial analysis of the pool of training partners chosen through this process and the trainees that enroll in the programs. The evaluation will likely focus on eight of the anticipated 10-12 selected training partners –including the involved trainers, their students and the students’ employers. Under the current program timeline, training partners will be selected on an ongoing basis between early 2010 and early 2012 and are expected to be implementing training early in 2010 and accelerating as the number of Partnerships grows over time. The timing of the evaluation will be based on the program achieving a level of training activity sufficient for evaluators to assess early progress through a formative study that can inform later program activities.

Interviews are expected to last approximately one hour with trainers and program staff and 20-25 minutes with trainees. Interviews with employers will take about 10-15 minutes.

Current estimates regarding sample sizes, expected sampling precision, and anticipated survey fielding dates for the Process evaluation are summarized in Table 3. These estimates will be finalized prior to undertaking the planned evaluation, and once the Process Evaluation Team more thoroughly analyzes program participation data. Final details regarding the sample development process and resulting sample sizes will be documented in the final project work plan.

**Table 3: Workforce Development Program Process Evaluation Survey Specifics**

Target Group	Estimated Population	Estimated Sample Size	Expected Sampling	Administration By	Expected Start of Fielding
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	Size		Precision		
NYSERDA Program Staff	2	2	NA	Process Team	Early 2011
Workforce Training Partners	12	8	NA	Process Team	Mid 2011
Post Training Surveys	6,200	census	95/5	Trainers	Ongoing
Trainer Interviews	44	21	90/10a	Process Team	Mid 2011
Trainee Interviews	~3,000	232b	80/10a,c	Survey Team	Mid 2011
Employer Interviews	~2,500	100d	NA	Process Team	Late 2011/Early 2012

a Assumes proportional sampling, 2-tailed test, finite population correction, with absolute precision.  
b Assumes 29 trainees for each of the eight training partners studied.  
c Results for each individual training course taught will likely reach 90/10 sampling precision given finite population correction.  
d Assumes approximately one employer for every two trainees interviewed.

If the program implementation process rolls out as currently planned, the Process Evaluation Team expects to complete an interim report in late 2011 with results from post-training surveys, and interviews with staff, training partners and trainers. A final report will be delivered in early 2012 with full results of the evaluation.

## V. NYSERDA Evaluation Process

This evaluation plan is an early, but important step in NYSERDA’s evaluation planning and implementation process. It is NYSERDA’s understanding that DPS Staff wish to be involved as a reviewer/participant in the following parts of the evaluation process: detailed evaluation plans, project kick-off meetings, work plans (including sampling, statistics and modeling issues), data collection instruments, interim results reports (as applicable), presentation of evaluation results, and draft evaluation reports. NYSERDA will conduct evaluation planning and implementation in an open and transparent manner, and will invite DPS Staff participation in the designated aspects of the process and any others upon DPS’ request.<sup>10</sup> Should DPS Staff choose to modify the level or manner of their involvement, NYSERDA should be notified about the change(s). DPS Staff should also choose when and how to involve their evaluation advisor consultant team in NYSERDA’s evaluation processes, should directly provide any materials and information necessary for their advisor consultant team to fulfill this role, and should notify NYSERDA about the type and level of advisor consultant involvement.

An important goal of NYSERDA’s evaluation effort is to provide early feedback to program staff to help inform and improve program implementation. NYSERDA accomplishes this goal in several ways:

1. Ongoing communications between the NYSERDA evaluation staff and evaluation contractors to identify issues that need to be brought to the attention of NYSERDA program staff, DPS Staff, and other involved parties.
2. Interim results reports may be generated, sometimes at the request of NYSERDA program staff and

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<sup>10</sup> In order to maintain transparency, and allow for confirmation checking and follow-up analysis, evaluation data will be maintained by NYSERDA and made available to DPS on an as-needed basis. NYSERDA will continue to maintain its secure “data warehouse” which includes data files, code books, and analysis files which can be made available in electronic form to DPS upon request. In order to provide a comprehensive record of each study conducted, the data warehouse also holds copies of final evaluation reports and appendices, including blank survey instruments, although these documents will be made available to DPS and publicly upon completion of each evaluation project.

sometimes by initiative of NYSERDA's evaluation team and contractors, where early results are required or deemed useful prior to completion of the full evaluation effort.

3. Presentations of draft evaluation results held with NYSERDA evaluation contractors, evaluation team, program staff, and DPS Staff before evaluation reports are written provide feedback on the programs as soon as possible, and provide evaluation contractors with additional perspective and context that will be useful in reporting final recommendations.

Upon completion of final evaluation reports, the NYSERDA evaluation team will also provide support and assistance to program staff with regard to implementation of recommendations and program improvements.

## **VI. Reporting**

Final reports will align with requirements set forth in the DPS evaluation guidelines, and will include: methodology, key results, recommendations, summary and conclusions, and appendices with detailed documentation.

Upon completion of each major evaluation study effort, findings and results will be communicated by NYSERDA's evaluation contractors and evaluation staff to NYSERDA program staff. Actionable recommendations and information on program progress toward goals will be provided as input to the program design and improvement process. NYSERDA's evaluation staff will follow up regularly with program staff on recommendations arising from the evaluation and the status of their consideration or adoption of these recommendations.

NYSERDA's evaluation staff will prepare quarterly and annual reports to the Public Service Commission, DPS and the EAG summarizing the results on all programs and from all evaluation studies occurring in the most recent quarter or year. Quarterly reports will be filed with the Commission within 45 days of the end of each calendar quarter. The annual report will substitute for the fourth quarterly report, summarizing program and portfolio progress throughout the calendar year. The annual report will be filed with the Commission within 60 days of the end of the calendar year.