## Performance Measurements Report

### **Problem Description**

This multi-location Career Pathways and Career Ladders (CPCL) project leveraged components of a transit standards-based training framework to develop and then pilot local implementation of stakeholder-based models for two principal areas of workforce innovation:

- 1. Career Pathways for students into frontline transit jobs and careers, linking transit agencies and unions with secondary and post-secondary schools and colleges, and
- Career Ladder Training and Apprenticeship based on national standards for new hires and incumbent frontline workers provided by transit agencies – the primary source of training for transit employees. In addition, the partner organizations identified ways to enhance the integration of the second principal source of frontline transit employee skill development, OEM-provided training, with ongoing workforce development efforts within transit systems.

Locations that participated in the CPCL project were:

Career Pathways

- Philadelphia, PA
  - o Transport Workers Union (TWU) Local 234
  - o Southeastern Pennsylvania Transportation Authority (SEPTA)
  - o Keystone Development Partnership (KDP)
- Salt Lake City Utah
  - Utah Transit Authority (UTA)
  - Amalgamated Transit Union (ATU) Local 382
- West Virginia
  - o State Department of Education Division of Career and Technical Education
  - o Rahall Transportation Institute

#### Career Ladders

- Cleveland, OH
  - o ATU Local 268
  - o Greater Cleveland Regional Transit Authority (GCRTA)
- Des Moines, IA
  - o Des Moines Area Regional Transit (DART)
  - o ATU Local 441

The CPCL project carried out coordinated activities nationally and locally. A national partnership of national and local transit, education and labor organizations, UTCs and cooperating federal agencies developed nationally applicable models and workforce development tools for local use. Local working partnerships with five local transit agencies and related stakeholders such as school systems, local unions, and colleges developed and carried out distinct local implementation models for career pathways and standards-based training and apprenticeship based on their particular history and organizational resources.

The initial goals of the program were to provide opportunities for both potential incoming workers and incumbent workers. Activities were designed to provide outreach, engagement, and hiring for high school students and young people, while also providing career ladder training and apprenticeship opportunities for incumbent workers.

### **Career Pathways Goals**

Local activities for Career Pathways developed, supported, implemented and disseminated a wide range of innovative models, allowing the industry and its partners to compare and contrast results across diverse locations and populations. The goals for career pathways activities included:

- Establishing and strengthening outreach programs, such as job fairs, presentations and curricula and hands-on learning opportunities, to engage high school students in transit job opportunities. Project goals were to reach out to at least 20,000 high school students. Over the course of the CPCL project, programs provided outreach to 43,200 high school students.
  - The West Virginia State Department of Career and Technical Education disseminated a poster, to all of their state CTE schools (40,000 students), created by the Heldrich Center at Rutgers University and then modified – with the Heldrich Center's permission- by the Center to meet West Virginia's needs.
  - UTA in conjunction with ATU Local 382 actively participated in a two- day high school career fair, Construction Career Days at Davis Applied Technology College, which hosted 3200 junior and high school students.
- Engaging young people for frontline transit positions through activities such as job fairs, job shadowing, internships, pre-apprenticeships and mentoring programs. Project goals were to engage 450 high school students. Over the course of the CPCL project, 3,258 students were engaged.
  - During the Construction Career Davis at Davis Applied Technology College, which hosted 3200 high school students, UTA provided a 2013 CNG bus to be used as a visual aid. Students received prizes for identifying engine, brake, and steering parts.
  - During the 6<sup>th</sup> year of the SEPTA TWU Summer Youth program, 15 high school students participated, in the 7<sup>th</sup> year of the program this number was increased to 18. 25 high school students participated in the first year pilot of the SEPTA TWU afterschool program at Mastbaum High School in Philadelphia.
- Recruiting and employing for frontline transit positions through activities such as job fairs, job shadowing, internships, pre-apprenticeships and mentoring programs. Project goals were to hire 15-20 high school students into transit opportunities. While there was extensive outreach to high school students conducted across pathways locations, the project fell short on these goals. Official project statistics have recorded zero hires during the course of this project through outreach activities. In Utah, management and labor representatives both think that some people were hired as a direct result of outreach activities, but the official Human Resources system doesn't track those results. This will be discussed further in the lessons learned section.

#### Career Ladder Project Goals

Career Ladder Training and Apprenticeship activities consisted of developing, supporting, and implementing and disseminating the following range of innovative models, allowing the industry and its partners to compare and contrast results across diverse locations and populations. Work in these locations established models and provided training that:

- Identified training priorities through standards-based skills gap and training gap analysis so appropriate training can be provided for frontline transit workers to improve skills and move up career ladders. Project goals were to provide skills gap analyses to at least 100 workers. Working together with DART and ATU Local 441. During the course of the CPCL project, 136 skills gap surveys were administered
  - 17 DART employees took skill gap analyses in eight different transit bus areas: preventative maintenance and instruction, electrical/electronics, electronics diesel diagnosis, transmission and drive train, steering and suspension, air brake system, HVAC, and fan drive operations maintenance and troubleshooting. These skill gap analysis helped to identify areas where mechanics needed the most training and refresher courses.

- Designed and initiated standards-based career ladder training for new hires and incumbent workers across
  the areas identified through the skills and training gap analyses. Career ladder training is essential for transit
  agencies to have qualified technicians. Project goals were to initiate career ladder training for 55 new and/or
  incumbent workers and to complete career ladder training for 45 new and/or incumbent workers. During the
  course of the project, 315 career ladder training opportunities were initiated and 315 career ladder training
  opportunities were completed.
  - GRCTA initiated 256 career ladder training opportunities and completed 256 career ladder training opportunities.
  - DART initiated 59 career ladder training opportunities and completed 59 career ladder training opportunities.
- Support workers moving up career ladders through the establishment of strong mentoring programs that are based on careful recruitment and targeted training. Mentoring is a strong element for assisting new and incumbent workers with on the job learning. As such, this project committed to recruiting and providing mentoring for at least 8 mentors.
  - Keystone Development Partnership, under contract with the Center, provided a two one day mentor training session to ten TWU mentors.
- Initiate joint apprenticeship committees and standards-based career ladder training for new hires and incumbents. During the course of the CPCL project, both GCRTA and DART established apprenticeship programs and joint apprenticeship committees. GCRTA established an apprenticeship structure for rail car technicians, while DART established an apprenticeship for bus maintenance technicians. Project goals were to initiate apprenticeship training through these two programs for 35 new and/or incumbent workers. While program goals were not completely met due to unforeseen circumstances pertaining to the finalization of one of the apprenticeship programs, apprentices were ran through both apprenticeships as a pilot (to be discussed further in the lessons learned section).
  - o GCRTA initiated apprenticeship training for four rail car technicians.
  - o DART initiated apprenticeship training for two rail car technicians.

#### **Measures of Quality**

During the proposal phase the project team laid out ways that it could measure the quality of the program and its implications on the locations that were actively participating in the project. This consisted of four different hypotheses to be proven while implementing this grant.

#### Hypothesis 1: Young people involved in pathways activities will have a better understanding of and interest in frontline transit jobs, and demonstrate more substantive knowledge about job requirements and skills than they had before.

Method and Results: To examine this hypothesis, the Center has used a series of interviews, daily worksite logs and final student reflections from the high school students and recent graduates who participated in the 2014 SEPTA-TWU Local 234 Summer Youth Program. The Center's Philadelphia partner Keystone Development Partnership used these interviews, logs and reflections to create a PowerPoint that highlighted, in the students' own words, what students had learned throughout the summer program. This PowerPoint and a short video testimony by a former Summer Youth program participant who is now a second year apprentice in SEPTA's Bus Apprenticeship Program can be found at <a href="http://www.transittraining.net/careers/pathway\_details/transit-summer-youth-programs-provide-career-pathways-experience-in-boston">http://www.transittraining.net/careers/pathway\_details/transit-summer-youth-programs-provide-career-pathways-experience-in-boston</a>.

Summer Youth program Participant Daily Worksite Logs and final student reflection paper samples can be found in Appendix A. Student names have been removed from the documents to protect their privacy. In a content review of these documents, certain key points emerge, including:

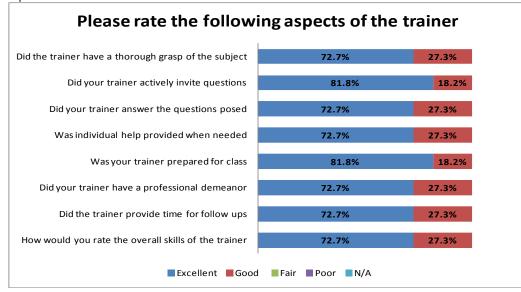
- All participants described their summer experience in extremely positive terms. Some excerpts from final reflections:
  - "I came into this program willing to learn and walked away with not only work experience but life lessons."
  - o "[G]reat experience."
  - o "[A]mazing experience."
  - o "[F]un and educational."
  - o "[C]hance of a lifetime."
- Participants demonstrated a better understanding of and interest in SEPTA and frontline jobs than they had before. In addition to the specific substantive areas described in the next bullet point, comments by participants included:
  - o "I would like to ...come back here as an apprentice."
  - o "I have an entirely new outlook on SEPTA."
  - "The skills that I developed here [were] very good for me and useful and I hope that I come here again to learn more."
  - "I would love to come back here for another summer and even better if I could have a full time job here."
  - "Working here this summer I realize that it takes a lot in order to keep the trolleys running on the streets."
- Participants demonstrated more substantive knowledge about job requirements and skills than they had before. The weekly logs attached to this report establish the extensive experience gained by participants in the specific shops to which they were assigned. The logs are extensive and detailed and must be read in their entirety to fully appreciate the range and depth of the participants experience and what they learned. For the purpose of illustration, below is an example of one specific activity (out of many daily activities) excerpted from a Monday log for different participants working in different shops:
  - "Began work on undercarriage of vehicle 9015 cut out Blower Duct #1 by removing rusted area & began fabricating new metal pieces to replace.
  - [W]e checked a traction motor for the Broad Street line. The motor had low readings, so we decided to let it bake out the humidity. After that we used the sandblaster to clean parts. We also painted outer and inner grease retainers."
  - o "Took the AC compressor out of the bus and cleaned the combustion chamber."
  - o "Repaired and replaced radius rods and drag link. Cleaned work area."
  - "Cleaned and inspected evaporator and condenser units, learned how to properly gear a safety harness or a fall arrest system."
  - o "Take apart and cleaned LRV park activator."
  - "Placed an HVAC air conditioning unit on LRV trolley and made adjustments to make air pressure at correct range. Tested HVAC unit cooling on trolley to see if trolley cooled correctly."
  - "Assist with DPU inverter overhaul for pcc2. Observed testing of the communication control unit (CCU) for Market Frankford line. Helped perform final test for HBU auxiliary inverter. (pcc2.) PPE issued; safety glasses and gloves."
  - "Dismantling calipers. Dismantling calipers is a messy process that would require scrapers, a large piece of paper under the unit protecting the desk, and lots of solvent before proceeding with the dismantling."
  - "I worked on a DC series motor. I put new brusholder blocks on the motor along with new brusholders."

Together, all interviews, logs and reflections establish that young people involved in the Summer Youth Program pathway activity develop a better understanding of and interest in frontline transit jobs and demonstrate more substantive knowledge about job requirements and skills than they had before. It should also be noted that TWU Local 234 mentors were critical in ensuring that the participants had positive, reality-based and truly substantive

learning experiences. A review of the documents makes clear that students learned both work-related and liferelated skills from the mentors, while receiving ongoing support from the mentors throughout the summer.

# Hypothesis 2: Quality training programs based on national standards and local skills gap analysis data is likely to receive positive reactions from program participants and lead to learning gains.

**Method and Results:** Over the course of this project, Greater Cleveland Regional Transit Authority (GCRTA) provided over 200 training opportunities to rail vehicle technicians. Included in these training opportunities was training for new rail mechanics, body mechanics, electricians, and electronic technicians. Eleven GCRTA employees completed training evaluation survey questionnaires in these various standards-based training areas and completed training evaluation survey questionnaires. The results were overwhelmingly positive, with all applicants rating the trainer and the training material as either good or excellent. All participants, except one would be highly likely to participant in future training classes. The overall ratings of the training classes were either excellent or good. These positive training evaluation results reflect the overall satisfaction of participants in a joint labor-management training program that is based on national standards. Refer to the charts below for a more detailed breakdown of survey responses.



## Please rate the following aspects of the training class

Did this class meet your expectations 45% 55% Was the level of instruction appropriate 55% 45% Was the length appropriate Did the class begin on time 73% 27% Was all of the equipment working properly 73% 18% 9% How would you rate the class materials 36% 64% Excellent Good Fair Poor N/A



#### Pre and post-test assessments

In addition to rail mechanics completing standard new rail car mechanic training, GCRTA also piloted their rail vehicle technician apprenticeship program with four rail car technicians. This local apprenticeship program was structured after the DOL approved national rail vehicle technician apprenticeship framework. As part of this framework, GCRTA and ATU Local 268 agreed to pilot the written assessment of Module 203 Propulsion Dynamic Braking as a pre- and post-test for new rail vehicle technicians entering the pilot apprenticeship program. Prior to training, new rail vehicle maintenance technicians scored on average 59 percent on the Module 203 written assessment. Following this pretest GCRTA followed the rail vehicle technician standards and used the Module 203 primer created by the National Rail Car Training Committee to provide training to these four technicians. After training, trainee scores improved to an average of 75 percent, a 27 percent improvement. For a more detailed feedback of the pre and post-tests, please refer to the charts below. Additional information on the GCRTA pilot experience can be found in TCRP Report 170: Establishing a National Transit Industry Rail Vehicle Technician Qualification Program— Building for Success.

## Module 203- Propulsion & Dynamic Braking Pilot Pre-Test Written Assessment Feedback

|                                     | <u>&amp; Dy</u> namic Braking<br> | Average Percentage | 59.0        | %   |
|-------------------------------------|-----------------------------------|--------------------|-------------|-----|
|                                     | _                                 |                    | Noods       |     |
| Subject Areas Percentage            |                                   |                    | Noode       |     |
|                                     | Strong                            | Adequate           | Improvement | N/A |
|                                     | -                                 | ·                  | ·           |     |
| Background Theory and Knowledge 69% |                                   |                    |             |     |
| Common Propulsion Components 67%    |                                   | -                  |             |     |
| AC Propulsion Components 50%        |                                   | -                  |             |     |
| DC Propulsion Components 50%        |                                   |                    |             |     |
| Diagnostic Tools 47%                | 0                                 |                    |             |     |

## Module 203- Propulsion & Dynamic Braking Pilot Post-test Written Assessment Feedback

| م<br>Agency Name<br>Written Assessment Module<br>Number of Candidates Assessed  | GCRTA<br>203-Propulsion & Dynamic Braking<br>4 |        | Date of Assessment<br>Average Percentage | August 19, 2013<br><b>75.0%</b> |     |
|---|--|--------|--|---------------------------------|-----|
| Subject Areas   | Percentage                                     | Strong | Adequate                                 | Needs<br>Improvement            | N/A |
| Background Theory and Knowledge<br>Common Propulsion Components<br>AC Propulsion Components<br>DC Propulsion Components<br>Diagnostic Tools | 77%<br>83%<br>67%<br>75%<br>67%                |        |  |                                 |     |
| Comments:   |  |        |  |                                 |     |

# Hypothesis 3: Standards-based career ladder training will improve safety and state of good repair of the capital equipment at the participating agencies, particularly in targeted training areas.

**Method and Results:** Testing of this hypothesis involved training satisfaction surveys with workers and their supervisors to determine if standards-based career ladder training has improved safety and the state of good repair of capital equipment. These surveys are distinct from the course evaluations in that they focus on the overall training experience of trainees and supervisors and the impact of the training program on maintenance performance, rather than any single course.

#### **Supervisor Training Satisfaction Survey**

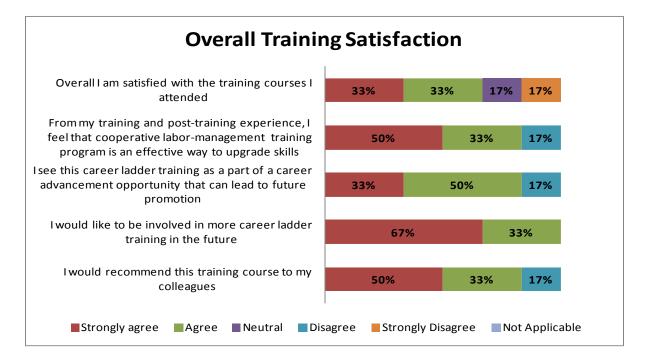
The Center administered training satisfaction surveys to a total of four supervisors from the two Career Ladders locations that participated in this project. All but one supervisor were satisfied with the process and the results of the program. While the majority of supervisors agreed that the training provided through this project improved safety, raised the quality of maintenance work and improved job skills, they were split on whether it helped the shop keep up with scheduled maintenance, reduced the number of comebacks, and reduced the number of parts usage. Of the three supervisors who found the question applicable, two supervisors agreed that they were able to assign relevant tasks to workers who came back from training classes. Supervisors were split between agree and neutral on whether there was good cooperation between supervisors and workers when plans had to be changed to accommodate training activities. There was no clear distinction on whether training has helped build mutual trust between supervisors and workers in job related tasks and whether training has brought workers up to speed with the latest technologies.

Three of the four supervisors did provide comments to explain the background of their responses. One supervisor commented "With the diversity of today's workforce, one of the most important issues in providing quality training is improving technicians' skills and communication. A language barrier can be the most important factor and possible failure in establishing any type of training. The administration of training sessions do not take in the consideration the different languages that our technicians have and sometimes the message is not translated. Therefore the wrong information or not useful information is obtained by the technicians. After some training sessions, I have noticed technicians with additional questions because they did not understand the instructor or the printed material because of the language difficulty. The Learning Center and the collaborative labor-management partnership need to establish guidelines and goals for training session and review procedures to see if the information is processed correctly and

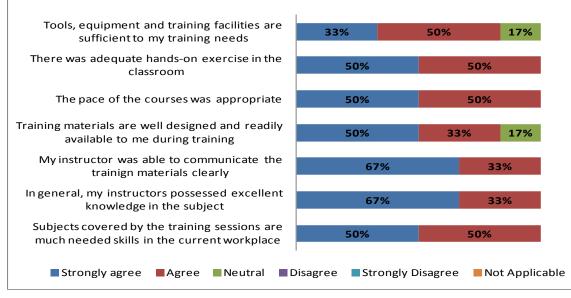
understood by the technicians." Another expressed the need for more space and equipment for training coupled with the mechanic shop allowing people more time to actually attend training. The final supervisor commented that the training was only conducted on a few new employees, making it hard to adequately measure productivity.

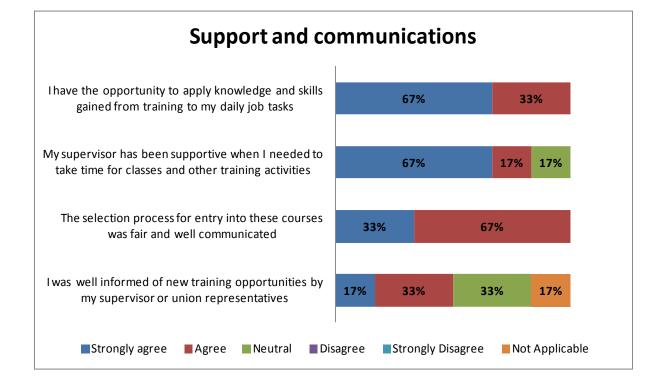
#### Worker Training Satisfaction Survey

The Center administered satisfaction surveys to a total of six employees from the two Career Ladders locations that participated in this project. Of those six employees, four were satisfied with the training courses that they attended through the course of this project. Almost all survey participants agreed that training had a significant impact on their relationships with supervisors, their ability to perform maintenance tasks, and safety. A more detailed breakdown of survey responses can be found in the charts below.

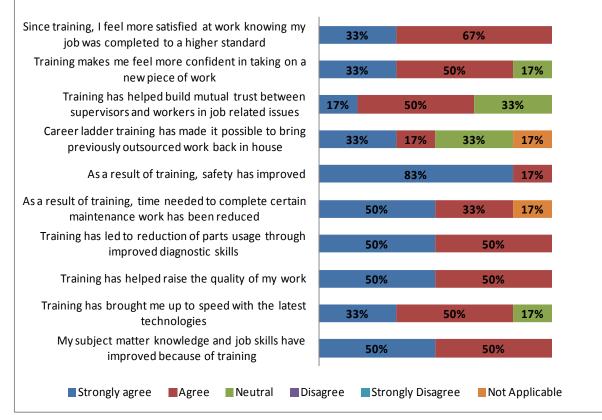


## **Classroom Experience**









Quantitative performance metrics based on maintenance records were not available from the participating agencies due to the relatively short duration of project. The Center will attempt to continue to work with agencies after the conclusion of the project to gauge post-training improvements quantitatively using data from their maintenance information systems.

Hypothesis 4a: Career pathways activities and models developed across different transit agencies operating in different contexts will produce lessons learned and best practices that will benefit and be applicable to career pathways work in new and varied transit locations. Hypothesis 4b: Career ladder training and apprenticeship models developed across different transit agencies operating in different contexts will produce lessons learned and best practices that will benefit and be applicable to the establishment of apprenticeship and training programs in new and varied transit locations.

**Method and Results**: Both Hypotheses 4a and 4b were supported through a range of activities related to the final "Making Connections—Career Pathways/Career Ladders Roundtable Conference" held September 16-18 in Silver Spring, Maryland. The Conference included the Center's project partners from the five Pathways and Ladders locations, in addition to outside participants from other transit and transportation agencies, unions and transportation-related organizations, non-profits and government agencies. Conference activities and related and follow-up meetings included:

- Formal day-long interactive discussions among project location partners and outside participants regarding lessons best practices in the field and lessons learned from activities in project locations;
- Formal half-day meeting with labor and management partners from the five Pathways and Ladders project locations;
- Informal networking sessions prior to, during and after the final conference; and,
- Formal follow-up meetings and discussions after the conference.

#### **Broad-Based Migration of Lessons Learned and Best Practices**

The meeting was kept small so that all participants would have time to engage in discussion about Pathways and Ladders lessons and practices, as "kick-off" commentators and/or discussion participants. Using a format that included short kick-off comments and extensive interaction throughout the day, attendees addressed significant issues, asked questions and shared information around the following topics:

- Creating and Building on Career Ladders and Pathways in Transit: An Examination of Need, Opportunities and Frameworks
- Outreach and Engagement: Effective Practices and Stakeholder Buy-In
- Mentoring for Pathways and Ladders
- The Critical Role of the Apprenticeship and Rigorous Career Ladder Training
- Education Programs as Partners and Stakeholders in the Pathways and Ladders System
- Stakeholder Engagement: Opportunities and Challenges

The following organizations participated in the CPCL final conference: AFL-CIO, Albert Shanker Institute/American Federation of Teachers, Amalgamated Transit Union, Amalgamated Transit Union Locals 268 (Cleveland,) 382 (Utah,) 441 (Des Moines,) 1277 (Los Angeles,) and 1300 (Baltimore,), American Public Transportation Association, Des Moines Area Regional Transit Authority, Economic Policy Institute, Greater Cleveland Regional Transit Authority, Jobs for the Future, Keystone Development Partnership, Massachusetts AFL-CIO, Leadership Conference on Civil and Human Rights, Mountwest Community and Technical College, National College Credit Recommendation Service, Regional Transportation District-Denver WIN Program, Southeastern Pennsylvania Transportation Authority, Transport Workers Union Local 234 (Philadelphia), Transportation Communications Union/International

Association of Machinists and Aerospace Workers, U.S. Department of Education Office of Career, Technical, and Adult Education, U.S. Department of Labor Office of Apprenticeship, U.S Department of Transportation Federal Transit Administration, Utah Transit Authority, and Wider Opportunities for Women.

The extensive and in-depth discussion about lessons learned and best practices throughout the meeting in formal sessions as well as informal networking time was not the only set of accomplishments that came out of the September meeting. This meeting also helped lay the groundwork for presentations and preparation central to the October 7, 2014 federal forum, hosted by the U.S. Departments of Transportation, Education and Labor and supported by Jobs for the Future and the Transportation Learning Center on "Strengthening Skills Training and Career Pathways across the Transportation Industry." Conference evaluations indicate that participants found the meetings interactive discussions interesting and valuable. Significant contributions from this meeting to preparation of the federal forum included:

- A preview presentation by Center Research Director Xinge Wang of key data that constituted the cornerstone of her lead talk at the October 7 meeting. The preview allowed the Center to perform a "dry run" and obtain feedback on the data and format in preparation for the October 7 meeting.
- In addition to the Center's data presentation, EPI's Valerie Wilson incorporated the Center's analysis into EPI's own research to develop a data presentation explaining how increased investment in transportation infrastructure funding will have a significant positive impact on job opportunities, especially for African-American and Latino workers.
- Several "kick-off" commentators from the transit CPCL meeting also had presenter roles in the October 7
  meeting and were able to use the perspectives gained through this to come in more prepared and informed
  to the October 7 meeting. This background also provided useful background for a number of others who
  had the opportunity to participate in both meetings.

A fter the Career Pathways and Career Ladders Conference, the Center attended a meeting with Maryland Transit Administration (MTA) and ATU Local 1300. Follow up plans coming out of this meeting was to continue to work with MTA and ATU Local 1300 to establish a bus operator apprenticeship and to develop career pathways opportunities for high school students.

#### **Lessons Learned and Applicability Across Industries**

Before discussing broader lessons learned across all project activities, it is important to note some specific lessons learned concerning the ability to generate hiring and apprenticeship numbers within a relatively short period of time in this case, during the eighteen-month grant period. It takes a substantial amount of time and ground work to set up and support and infrastructure and processes for creating new outreach and apprenticeship programs and for strengthening in significant ways existing pathways and ladders program. The project partner locations have spent a tremendous amount of productive time building or substantially altering apprenticeship programs and engaging in effective outreach and engagement programs. The initial strength of these programs is evidenced by the fact that the project greatly exceeded its numbers in the areas of outreach and engagement.

However, the project did not reach its numerical goals in the areas of hiring and apprenticeship, numbers that actually are overlapping categories; often new hires go directly into apprenticeship programs. We believe there are two major reasons for these numbers falling short. In regard to apprenticeships, at a time when an agency is focusing on and committing resources to either starting or substantially changing an apprenticeship program, it is not likely to be hiring new workers into those new of changing programs until those programs are fully developed and established. It was unrealistic to assume in the context of the eighteen-month project period that agencies could do all the work necessary to make the progress they wanted to and did make programmatically and then still have time to bring new workers into the newly-established or redesigned programs. The Career Ladders locations are

committed to proceeding with hiring into these programs, but, realistically, very little hiring could happen and very few apprentices could start during the short grant period.

We learned similar and additional lessons in the Career Pathways segment of the project. The similar lesson was that programs starting, expanding and strengthening outreach just need more lead time to turn that outreach and expansion into actual hiring numbers. We also learned that in working to track hiring numbers, our partners need to develop better tracking mechanisms so that they can see whether and in which cases their new hires come to them as a result of their outreach and engagement activities.

Our work on youth outreach and engagement has underscored one additional lessons relating not just to hiring numbers but also to the need to address potential barriers to real and workable career pathways for young people who are interested in entering frontline technical transit jobs right out of high school, or at least before the age of twenty-one. In particular, our partner locations have started to look at their internal age requirements for hiring and the criteria that some mechanical employees and apprentices must qualify for full Commercial Drivers' Licenses. These issues have been raised by the Center as well in a number of different transit and transportations forums, so the issue is part of a larger discussion as to how to eliminate some of these barriers to hiring motivated and qualified young people.

In addition to these lessons regarding hiring, the broader lessons learned by project partners are discussed in detail in the Project Partners Highlights section of the final report. Partners set out the lessons they had learned generally, as well as specific insights regarding programs for young people and how they can and will move forward with this important work. The final conference also spurred other transit and transportation industry participants to use some of these lessons learned and models that were communicated at the conference to explore with the center a variety of initiatives, as discussed in the last section of the discussion of Hypotheses 4a and 4b, above.

The models and practices developed, strengthened and highlighted through this project's activities clearly apply to the larger transportation industry, not just in the transit sector. Transportation organizations have expressed significant interest in project initiatives, as evidenced by the number of presentations on the Career Pathways and Career Ladders project-related work, and the response to those presentations at APTA-sponsored conferences as well other attended by transportation industry leaders, particularly the major October 17 transportation conference sponsored by the U.S. Departments of Transportation, Education and Labor.

Other organizations that work across a number of different industries have also expressed interested in the models developed through work that has come out of the FTA project. Center's staff has been invited to several meetings with top leadership and staff of the AFL-CIO to discuss our projects to help inform their work in supporting pathways and apprenticeships across a number of industries. The Center's report, "Pathways to Equity: Effective Transportation Career Partnerships" was commissioned by the Leadership Conference Education Fund, affiliated with the Leadership Conference on Civil and Human Rights, because the story about these pathways--including pathways built through our Philadelphia partner's pathways work—is instructive across many industries and among organizations seeking to create greater opportunity for all. The Center will continue to pursue opportunities to carry these lessons learned to industries and organizations that can benefit from and build upon the significant work that has been done in transit.