FTA RESEARCH

FEDERAL TRANSIT ADMINISTRATION

Innovative Transit Workforce Development Program: Key Lessons Learned

SEPTEMBER 2019

FTA Report No. 0139
Federal Transit Administration

PREPARED BY

Axiom Corporation

U.S. Department of Transportation
Federal Transit Administration

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Courtesy of Mary Lee, Special Projects Coordinator, Community Career Development, Inc.

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SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
LENGTH				
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
VOLUME				
fl oz	fluid ounces	29.57	milliliters	mL
gal	gallons	3.785	liter	L
ft^3	cubic feet	0.028	cubic meters	m^3
yd^3	cubic yards	0.765	cubic meters	m^3
NOTE: volumes greater than 1000 L shall be shown in m^3				
MASS				
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")
TEMPERATURE (exact degrees)				
°F	Fahrenheit	5 (F-32)/9 or (F-32)/1.8	Celsius	°C

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This report provides information to assist FTA with identifying lessons learned and successful workforce program models that can guide future decision-making regarding transit workforce development through an assessment of the 40+ $20 million workforce investments undertaken by FTA. The report addresses the impacts of individual project models on identified transit workforce needs and develops recommendations for the continuation or improvement of FTA's workforce development efforts and investments.

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ABSTRACT

This report provides information to assist FTA with identifying lessons learned and successful workforce program models that can guide future decision-making regarding transit workforce development through an assessment of the 40+ $20 million workforce investments undertaken by FTA. The report addresses the impacts of individual project models on identified transit workforce needs and develops recommendations for the continuation or improvement of FTA's workforce development efforts and investments.

EXECUTIVE SUMMARY

The U.S. Department of Transportation and the Federal Transit Administration (FTA) believe that developing and maintaining human capital is as important as the investment in physical capital of buses, railcars, and stations. To address the human capital challenges in transit such as high expected retirements, growing ridership, and increasing technology skill requirements, FTA created the Innovative Transit Workforce Development Program (ITWDP) that funded a series of projects in 2011, 2012, and 2015. These projects were intended to enable the development of innovative approaches to workforce challenges, which, if successful, might merit expansion or replication. Axiom Corporation was asked to conduct a summative evaluation after each round of projects to assess them against their goals and to identify candidates for further investment. After all three rounds were evaluated, Axiom produced this report to provide a summary of lessons learned from the evaluation of the ITWDP. This report was written to provide an assessment of the overall program, address the impacts of individual projects on identified transit workforce needs, and determine recommendations for the continuation or improvement of FTA's workforce development efforts. This was done by reviewing prior reports, conducting interviews, and developing summative evaluations.

The following bullets summarize the findings:

- Common elements of the most successful projects – Projects from among all three rounds that were most successful at training and placing participants into employment were identified; they shared these common characteristics:
  - *Pre-existing relationships among partners* – Most highly-successful projects identified had pre-existing relationships among most, if not all, key partners.
  - *Pre-existing programs* – Four of the six highly-successful projects identified had pre-existing programs that were being expanded or enhanced rather than developed from the ground up.
  - *Clearly defined skills to develop for successful placement* – The highly-successful programs identified a set of skills that were needed by employers and, thus, would lead to placement if acquired.
  - *Leveraging of complementary partnerships* – Successful projects found complementary partners with the expertise, experience, capacity, or funding to fill participant needs that other partners could not implement as effectively.
  - *Provision of wrap-around support services to bolster participants* – The most successful projects provided support or wrap-around services appropriate to the population of participants by design, such as coaching, mentoring, transportation, childcare, stipends, payment of fees, legal assistance, etc.
  - *Opportunity to acquire industry-recognized credentials* – Each program provided participants with one or more industry-recognized credential, earned as part of the program.

  - *Dedicated placement services or processes* – The highly-successful projects had either personnel or specific processes to help participants move from the training to potential employment.
  - *Post-placement retention support* – All highly-successful programs offered support after training and placement in a timeframe that ranged from three months to one year after placement.
- **Role of support services in project success** – When reaching out to underserved or disadvantaged populations, services play a critical role in the success of transit agencies being able to recruit, train, and retain individuals facing barriers to employment. Programs successful at employing these populations take a holistic approach to address not only technical skill gaps, but also other potential barriers to success in training and employment. Often, this can be accomplished by leveraging partnerships.
- **Role of partnership in projects** – Successful projects generally credit partnerships for their success and for furthering the project's ability and reach. Generally, there were three types of partners: transit agency/employer to provide subject matter expertise and jobs, education/training design partners to provide instructional design expertise, courses, and instructors, and workforce/support service organizations to provide recruitment and support services. Some of the strongest-performing projects had one or more partners from each category. When functioning properly, each has a clear, complementary role in supporting the project.
- **Project goals and performance measures** – Effective goals are challenging, clear/specific, and appropriate to task complexity and have commitment and ongoing feedback. Some goals set by the ITWDP projects were too vague or too difficult to measure. If goals are set effectively, performance measures follow and operationalize the goals. Some projects indicated the types of measures they would track but set no specific targets to reach. A minimum set of suggested measures is recommended for training and employment and training development projects.
- **Targeting and sizing the ITWDP projects** – Analyses showed little relationship between Federal investment in the project and the numbers of persons placed into employment. This could be due to the targeting and sizing of some projects. Targeting involves accurately identifying a problem to address with the implementation of the project. In a few cases, despite what appeared to be sensible problem statements, the agency had alternatives to creation of a new program or there was no clear problem to address. Transit workforce projects should meet agency needs first and foremost. Ineffective targeting limited the impact of some projects. Sizing involves scaling a project appropriately so if targets are met, the project will have a positive impact for the transit agency. FTA may wish to set minimum required levels of anticipated impact for project applicants or have applicants with lower target numbers justify how the project approach merits the investment. Questions for consideration are offered herein.

- **Sustaining projects with local funding** – Finding alternate funding sources after Federal funds are depleted can affect the ultimate impact of a project as it continues after the initial investment. It also provides the agency with more control. Approaches used by project leads to find local funding to sustain their projects are identified and described herein.

SECTION

1

Introduction

This report provides a summary of lessons learned from the evaluation of Innovative Transit Workforce Development Program (ITWDP) projects. The U.S. Department of Transportation and the Federal Transit Administration (FTA) believe that developing and maintaining human capital is as important as the investment in physical capital. With the resurgence of public transportation in recent years, transit systems face a number of challenges, including rapidly-changing technologies (to vehicles, right-of-way, and customer information services), an aging workforce, and increasing ridership. These challenges make attracting and preparing new talent increasingly important.

Innovative Transit Workforce Development Program

To help address these challenges, FTA published a series of Notices of Funding Availability soliciting proposals for the ITWDP. Three rounds of funding were awarded for 45 projects—in FY2011 – $3.0 million for 12 projects, FY2012 – $7.0 million for 17 projects, and FY2015 – $8.3 million for 16 projects. Recipients included transit authorities, institutions of higher education, Native American tribes, and non-profit organizations, individually or as consortia. Recipients were expected to partner with one another along with the public workforce investment system, labor organizations, or other appropriate entities to enact workforce solutions. Proposed projects could create a new nationally or regionally significant workforce development program or augment or replicate a successful existing program that would have benefits for transit agencies or the transit industry. Although the focus of the grants varied slightly from year to year—for example, FY2011 allowed leadership development, whereas later years focused on frontline workforce—overall, FTA prioritized proposals focused on one or more of the following areas:

- Targeting areas with high rates of unemployment
- Helping persons in local communities directly benefit from employment opportunities created by construction and operation of new transit capital projects in their region
- Providing career pathways that support the movement of targeted populations (e.g., new transit industry entrants and other underserved populations) from short-term employment to sustainable careers
- Helping to increase through outreach and training the employment of minorities, women, individuals with disabilities, veterans, low-income populations, and other underserved populations in public transportation activities

- Addressing gaps in areas with current or projected workforce shortages in fields related to public transportation
- Pre-employment training/preparation/tracking; and/or recruitment and hiring

The first two years (FY2011 and FY2012) did not require a funding match, but matching was considered favorably in proposal selection. The 2015 program, authorized by both SAFETEA-LU and MAP-21 Federal transportation legislation, had a minimum 50% non-Federal cost share for all funds awarded, and applicants were informed that higher percentages would be looked upon favorably.

Projects were designed to run for 18–24 months, although it was frequently the case that project directors would ask for extensions to complete approved work tasks. Each program was required to specify in its proposal the outcomes it intended to reach, and although some suggestions were offered in the Notice of Funding Availability (e.g., number impacted, number trained, etc.), there was no single set of required outcome measures, as projects could vary from the development of a leadership competency model to the delivery of technical training.

Summative Program Evaluations

In 2013, FTA contracted with Axiom Corporation to conduct a summative evaluation of the ITWDP projects awarded in FY2011. The evaluation gauged the effectiveness of projects and helped justify the Federal investment. Axiom reviewed the workforce development projects and determined their goals, the measures in place to achieve the goals, and the potential impact on local or national transit workforce development needs. Axiom reviewed all available documentation provided by FTA related to the programs as a primary data source. Telephone interviews were conducted with one or more representatives from each program; these semi-structured interviews followed protocols that covered a common set of topics for consistency, but questions for each topic reflected the specific and varied nature of the grantees' programs. For example, each protocol covered program implementation, but the questions differed to reflect whether the program was a competency modeling effort, a youth outreach project, or a leadership-training program. The data were analyzed, and findings were summarized in a report. This process was repeated in 2016 for FY2012 projects and in 2018 for FY2015 projects. In total, 42 projects were evaluated.

Key Areas of Interest for Lessons Learned

Following completion of the three summative evaluations, Axiom reviewed them to identify lessons learned. Key questions to examine included the following:

- What were the common elements of the most successful projects?
- What role did support services play in project success?
- What role did partnerships play in the projects?
- What types of goals and performance measures were used?
- What can be learned about targeting and scaling projects from the ITWDP?
- In what ways did projects try to sustain their programs with local funding?

To answer these questions, Axiom examined the project reports resulting from the program and referred to interview notes and other materials collected as relevant to identify trends. The original summative evaluations did not involve site visits or the opportunity to verify information provided by project personnel; the information collected was self-reported. However, with this information, general trends were identified that may be useful for guiding future workforce programs. Because each project was unique in its design, implementation, goals, and measures, it is often not possible to aggregate data across projects or create "apples to apples" comparisons. Nevertheless, Axiom attempted to support the key lessons in this report with examples, quotations, and (where possible) quantitative data.

All three years of projects funded by ITWDP are shown in Table 1-1.

Table 1-1

Projects Funded by ITWDP, 2011, 2012, and 2015

Lead Applicant	Project Name	Project Location	Funded Amount
2011 Projects			
Florida DOT	Certified Transit Technician Program	Tampa, FL	$188,881
Denver Regional Transportation District	Regional Workforce Initiative Now (WIN)	Denver, CO	$486,465
University of Massachusetts, (UMass Transit Center)	Public Transit Certificate Program for College Students	Amherst, MA	$127,284
Community Coordinated Transportation Systems (River Cities Public Transit)	Center for Transit eLearning (C-TEL)	Pierre, SD	$275,000
New Jersey Transit	Transit Academy and Youth Outreach Programs	New Jersey	$183,900
New Orleans Regional Transit Authority	Streetcar Maintenance Training Program	New Orleans, LA	$400,000
Los Angeles Metropolitan Transportation Authority	Metro University: Developing the Next Generation of Transportation Professionals	Los Angeles, CA	$480,000
Niagara Frontier T ransportation Authority	NFTA Leadership Training Program	Buffalo, NY	$50,000
Pennsylvania DOT	Pennsylvania Innovative Leadership Development Program	Philadelphia, PA	$200,000

Table 1-1 (cont.)

Projects Funded by ITWDP, 2011, 2012, and 2015

Lead Applicant	Project Name	Project Location	Funded Amount
2011 Projects			
Utah Transit Authority	Blended Learning Leadership Training Program	Salt Lake City, UT	$113,193
Greater Cleveland Regional Transit Authority	GCRTA Public Management Academy	Cleveland, OH	$286,687
Chicago Transit Authority	Transit Leadership Competency Model and Integrated HR Practices	Chicago, IL	$208,590
2012 Projects			
Southern California Regional Transit Training Consortium	Distance Education Technician Program	Long Beach, CA	$673,713
OMNITRANS	Regional Transit Workforce Development Program	San Bernardino, CA	$340,000
Community Career Development, Inc.	Bus/Rail Operator Training Academy	Los Angeles, CA	$443,289
Washington Metropolitan Area Transit Authority	Transit Works Program	Washington, DC	$795,334
Jacksonville Transportation Authority	Hybrid Technology Workforce Training and Implementation	Jacksonville, FL	$247,197
Corporation to Develop Communities of Tampa, Inc.	Meeting Today's and Tomorrow's Job Needs in Mass Transit	Tampa, FL	$234,281
International Transportation Learning Center (ITLC)	Consortium for Signals Training Courseware Development	Silver Spring, MD	$425,000
International Transportation Learning Center (ITLC)	Career Pathways and Career Ladders for the Frontline Workforce	Silver Spring, MD	$722,500
Minneapolis Community & Technical College	Minnesota Metro Transit Partnership	Minneapolis, MN	$427,444
Confederated Salish & Kootenai Tribes	CSKT Transit Training Program	Pablo, MT	$255,668
North Dakota DOT	ND Statewide Transit ITS Workforce Training Program	Bismarck, ND	$269,423
Rutgers University	Transit Virtual Career Network	New Brunswick, NJ	$659,784
Southwest Ohio Regional Transit Authority	Hybrid Technology Maintenance Education Program	Cincinnati, OH	$206,973
Lawrence County Social Services, Inc.	Gen Y Transit Workforce Connection	New Castle, PA	$187,850
University of Tennessee	Transit – Your Ride to the Future	Knoxville, TN	$225,442

Table 1-1 (cont.)

Projects Funded by ITWDP, 2011, 2012, and 2015

Lead Applicant	Project Name	Project Location	Funded Amount
2015 Projects			
Los Angeles Trade-Technical College, CA	Institute for Advanced Transportation Technology Training	Los Angeles, CA	$750,000
Community Career Development, Inc.	Moving Employees into Transit-Related Opportunities	Los Angeles, CA	$331,313
Santa Clara Valley Transportation Authority	Discover Opportunities in Transit!	Santa Clara Valley, CA	$200,000
Bay Area Rapid Transit	Transit Career Ladders Training	San Francisco, CA	$750,000
Denver Regional Transportation District	Regional Workforce Initiative Now (WIN)	Denver, CO	$663,256
Jacksonville Transportation Authority	Back-2-Work	Jacksonville, FL	$200,000
Chicago Transit Authority	Second Chance	Chicago, IL	$750,000
Massachusetts DOT	Massachusetts Construction Career Development	Hopkinton, MA	$750,000
International Transportation Learning Center (ITLC)	Integrating Career Pathways in Public Transportation: Rail Car Maintenance and Beyond	Silver Spring, MD	$750,000
International Transportation Learning Center (ITLC)	Signaling Career Pathways: Putting Veterans and Women on Track and Advancing Signals Technicians	Silver Spring, MD	$574,182
Metropolitan Council/Metro Transit	Transit Technician Program	Minneapolis - St. Paul, MN	$203,210
Jersey City Employment Training Program, Inc. (JCETP)	Workforce Development Training Program	Jersey City, NJ	$604,896
Metropolitan Transportation Authority	Workforce Investment Now (WIN NY)	New York, NY	$739,605
Niagara Frontier Transportation Authority	Skilled Laborer Jobs Training Program	Buffalo, NY	$303,000
Greater Cleveland Regional Transit Authority	Career Pathways Program	Cleveland, OH	$407,780
Grand Gateway Economic Development Association	N2N Automotive University	Big Cabin, OK	$399,933
Intercity Transit	Village Vans Program	Olympia, WA	$200,000

SECTION

2

Lessons Learned Across Innovative Transit Workforce Development Program (ITWDP) Projects

This section examines areas across the three rounds of ITWDP funding to identify lessons learned that can guide future decisionmaking regarding workforce development programs by FTA. This summary analysis provides an assessment of the overall program, addresses the impacts of individual projects on identified transit workforce needs, and develops recommendations for the continuation or improvement of FTA's workforce development efforts.

Elements of the Most Successful Projects

Examining successful projects for commonalities can provide useful information as to what elements can serve as a model for future programs to maximize their likelihood of success. Success can be defined in different ways. Originally, the intent of the program was to examine models and innovative approaches to transit workforce development, and programs were evaluated relative to their own proposed goals. Projects covered a wide range of areas, from leadership development to youth pipeline creation to frontline technical training development. However, half of the projects were designed to train and employ transit or transit construction personnel. Therefore, an important measure of success is the extent to which such projects were successful training and placing participants in employment.

Based on these criteria, six projects over the three rounds of funding were notable. The programs and their outcomes are summarized in Table 2-1.[1]

[1]It is worth noting that several projects successfully developed quality technical training programs, including the International Transportation Learning Center, Pennsylvania DOT, Jacksonville Transportation Authority, and Florida DOT. However, the aim of these projects was development, not implementation; a different set of characteristics can be identified for these programs.

Table 2-1

ITWDP Projects Most Successful at Training and Placement

Project	Federal Funding (FY)	Outcomes
Denver Regional Transit District – Workforce Innovation Now (WIN)	$486,465 (2011)	751 served 323 enrolled 208 completed training 268 placed
Community Career Development – Bus/Rail Operator Training Academy	$443,289 (2012)	220 trained 196 placed
Community Career Development – Ladders of Opportunity	$331,313 (2015)	305 enrolled 199 placed 233 certifications earned 78 supervisor training 70% took supervisor test
CTA – Second Chance and Priority Careers	$750,000 (2015)	286 enrolled 236 trained 112 placed 1,400 credentials earned
JCETP – Workforce Development Training Program	$604,896 (2015)	469 enrolled 210 placed
Workforce Snohomish – Puget Sound Region Ladders to Opportunity Initiative	$476,776 (2015)	444 pre-apprenticeship training 235 placed

Each of these programs enrolled and provided services to hundreds of participants and placed more than 100 people—in most cases, 200 or more—in apprenticeships or employment in transit or transit construction fields.

Examination of these programs based on their documentation and interviews with leadership identified a number of elements these programs had in common:

- **Pre-existing relationships among partners** – Most projects identified above had pre-existing relationships among most, if not all, key partners. For example, Denver's WIN program reported that all partners had been working together for years, as did CCD for its 2012 project (adding new employers for 2015). Workforce Snohomish reported prior relationships among several partners. JCETP reported a strong working relationship with key service providers. Pre-existing relationships meant partners could enter a relatively short performance period with existing trust and experience, understanding the capabilities and limitations of their partners and minimizing time lost and misunderstandings.
- **Pre-existing programs** – Some projects had pre-existing programs that were being expanded or enhanced rather than developed from scratch (e.g., Jersey City and Snohomish; Snohomish used pre-existing pre-apprenticeship programs). In a program designed for an 18–24-month period of performance, having a pre-existing program is an advantage for obtaining

outcomes. First, the concept has been proven already, so there are not likely to be surprises. Second, partners have defined their roles, understand them, and have experience executing them. Third, the program can make tweaks or add cohorts rather than invest time developing curricula and figuring out how to recruit participants, leaving more time to provide services and find placements.

- **Clearly defined skills to develop for successful placement** – The highly-successful programs could identify a set of skills that were needed by employers that would lead to placement if acquired, identifying positions in demand and the skill requirements needed to fill them. For example, Denver Transit Partners identified skills needed given the transit system's expansion. CCD's transit partner (Los Angeles County Metropolitan Transportation Authority [LACMTA]) specifically needed participants to pass the Operation Central Instruction (on-the-job training) to successfully fill operator positions. For Snohomish, the State mandated pre-apprenticeship program elements to prepare students for apprentice in construction. JCETP had union partners identify their requirements for entry. CTA needed to fill a high number of mechanic and operator positions, so entry-level skills were identified for these positions. This type of clarity of the specific set of skills (hard and soft) that must be acquired for placement allows the projects to be direct and efficient and to accurately select participants or identify areas to remediate (e.g., test for numeracy; ensure background problems will not prohibit hiring, etc.).
- **Leveraging of complementary partnerships** – Virtually all successful projects point to the benefits of strong partners. Complementary partners have expertise, experience, capacity, or funding to fill the needs other partners cannot meet as effectively. For example, CCD is a workforce organization that partnered with Los Angeles Valley College and LACMTA to develop its project. The Chicago Transit Authority partnered with 14 service agencies, City Colleges of Chicago, and Harper College for its Second Chance program. Denver's WIN project had Denver Transit Partners as the employer partners, Community Colleges of Denver as educational partners, and the Urban League as a community-based organization.
- **Wrap-around support services to support participants** – Each project provided various support or wrap-around services appropriate to the population of participants by design. For example, CCD provided assessment, coaching, case management, legal assistance, and help with childcare, transportation, DMV fees, and uniform/work clothes. JCETP provided services including mentoring, case management, legal assistance access to healthcare, addiction treatment, or sober housing. Support services play an important role in allowing participants to begin or continue training.
- **Opportunity to acquire industry-recognized credentials** – Each program provided participants with one (or more) industry-recognized credential earned as part of the program. The most common were OSHA

safety credentials and Commercial Driver's Licenses (CDLs). CCD's BOTA program helped participants obtain their Class B permit. Snohomish enabled participants to get OSHA, first aid, flagger, and forklift certifications, which were value added and made the participant more employable. Additionally, the wide recognition of these certifications meant they had value to more than just one transit agency, allowing placement at a wider range of employers. For example, those who did not meet LACMTA's requirements might have still found employment with another local transit provider with less stringent requirements based on their Class B permit.

- **Dedicated placement services or processes** – Each of the highly successful projects had either personnel or processes in place to help participants move from training to potential employment; in many cases, this included job developers dedicated to working with employers. For Denver's WIN program, job candidates were pre-screened and referred to employers, and the project took advantage of the U.S. Department of Labor's on-the-job training programs that enable the workforce system to pay part of the wages for a dislocated worker during a training period. JCEPT had employment specialists who looked for re-entry-friendly employers. CCD had job developers and also guaranteed interviews with LACMTA upon successful completion of the training; this was scheduled as the training wound down so interviews were the last step. CTA employed 95 participants from its Second Chance program, the majority of whom were placed.
- **Post-placement retention support** – For many participants, the transition into employment is fraught with barriers that arise during this time. All of the highly-successful programs offered some amount of support after training and placement. Typically, the support-service provider continued its support, coaching, mentoring, and assistance to help overcome barriers such as childcare, transportation, expenses for tools or clothing, etc. The timeframe varied across projects. For example, Denver's WIN program continued support for three months, and CCD offered it initially for two months and later up to a year. This support helped participants avoid losing placement at the "finish line" due to extraneous circumstances.

Other aspects of these projects might have helped make them successful—leadership support, labor-management agreement on the program, clearly set goals, etc.—but the elements above stood out as common among the high-performing projects and were specifically discussed during interviews with project leadership. Future FTA workforce programs aimed at training and placement can maximize the likelihood of creating high number of job placements if they incorporate these elements.

Role of Support Services in ITWDP Projects

As transit agencies look to attract enough new entrants to transit to replace turnover and the high rates of expected retirement, one method being used is broadening the labor pool from which the industry draws candidates. This means recruiting from underserved populations or those who often have been under-represented in the transit workforce, such as minorities, women, individuals with disabilities, veterans, low-income populations, returning citizens (i.e., ex-offenders), and others. ITWDP specifically encouraged projects that recruited from such populations.

> Low-income, unemployment job seekers require significant support, including emotional support and encouragement.
>
> *–CCD Represetative*

Workforce development professionals have long recognized that when drawing from populations that have experienced high-poverty rates, long-term unemployment or under-employment, court involvement, or other difficult circumstances, there will be barriers that must be addressed or training and educational programs will experience high dropout rates. The result for the transit agency will be wasted investment on recruitment, screening, training, and positions remaining unfilled despite having invested in otherwise qualified candidates. Barriers faced by these populations include:

> Change was the biggest factor that would disrupt students, such as losing access to a car or no longer living with a boyfriend or girlfriend. Coaches have to be there to help them adjust.
>
> *–Metro Transit Representative*

- Lack of funds for materials, tools, work clothes, testing fees, or protective gear
- Lack of funds to support selves/family during extended unpaid training
- Lack of reliable transportation
- Lack of reliable childcare
- Lack of stable housing
- Lack of sufficient resources for food
- Lack of valid personal identification
- Need for legal assistance to help expunge driving records or address prior issues
- Need for assistance with remediation of literacy and numeracy
- Need for addition counseling to maintain sobriety
- Need for basic employability skills and resume writing assistance

Interviews with project personnel indicated that any of these issues could result in otherwise motivated and capable candidates never starting or dropping out of training. This is particularly true in training programs for technical skills that can require weeks or months to acquire. Support services, therefore, play a critical role in the success of transit agencies recruiting, training, and retaining individuals facing barriers to employment. Whereas such training programs often focus on providing the requisite technical job skills, programs successful at employing underserved populations took a more holistic approach to addressing not only the technical skill needs, but also other potential barriers to training and employment success.

Fortunately, transit agencies need not absorb all costs for these services. Many ITWDP projects leveraged effective partnerships with workforce development agencies, social service agencies, and community-based organizations that could provide qualifying participants with access to these services. ITWDP projects frequently formed partnerships with local Workforce Investment Boards and One Stop employment centers funded through the U.S. Department of Labor under the Workforce Investment and Opportunity Act (WIOA) (previously the Workforce Investment Act), community organizations such as the Urban League, faith-based organizations, and social service agencies such as the New Jersey Reentry Corporation or Chicago Department of Family and Support Services. Discussions with FTA personnel noted that projects could use contributions from other programs (e.g., from the departments of Labor or Agriculture) as matching funds for ITWDP, although none have done so to date.

> Due to personal histories of incarceration and healthcare challenges, clientele confronted unique and difficult barriers to employment. Unfortunately, existing programs were not designed to accommodate the multiple requirements of these populations. The challenge is to enable clients to receive the necessary academic and work preparation along with critically-needed wrap-around services to achieve work readiness and sobriety. JCETP continued to provide case management services to clients well beyond the time frame of the grant. Our clients are among the most marginalized.
>
> *– JCETP Representative*

Partner organizations provide case managers or social workers that conduct needs assessment and have knowledge of the broad range of federal, state, and local programs for which a participant may qualify to obtain support. A prime example was CTA's Second Chance project, which formed partnerships with 14 support agencies, all overseen and coordinated by the Chicago Department

of Family and Support Services. These agencies focused on various segments of the project's target population, including the economically-disadvantaged, ex-offenders, persons who are homeless, those with substance abuse problems, veterans, etc.; case managers matched the person to the appropriate support programs. As noted, despite the challenges of a population with a high number of barriers, the program trained 236 participants and placed 112, mostly with CTA. JCETP also worked with a population of ex-offenders, a very difficult population facing a large number of barriers and constraints, and was able to place almost half of its 469 participants. Project leaders credited support services with being a vital part of this success.

Role of Partnerships in ITWDP Projects

ITWDP required applicants to work in partnership; lead applicants that were non-profit organizations or institutions of higher education were required to partner with a transit agency at a minimum. If a transit agency was the lead applicant, it could partner with one or more education institutions, public workforce investment organizations, labor organizations, and non-profit organizations.

> Have a good team of partners. The programs work better when partners have business expertise in a number of areas.
>
> *– Grand Gateway Representative*

An overall theme that emerged in lessons learned from the ITWDP projects across years is the extent to which partnership plays a critical role in their success. Partnerships that ran into problems often impacted the ability of a project to accomplish all of its goals.

Three common categories of partners for most ITWDP projects are noted:

- **Employer partners** – These include transit agencies, transit construction firms, union apprenticeship programs, or other employers (e.g., rail car construction firms). Employer partners play a critical role, as they provide the knowledge of the problems to be addressed, subject matter expertise, job qualifications, incumbent workers for leadership training or skill upgrades, and, ultimately, the majority of the jobs for placing new entrants.
- **Educational/training design partners** – A second common type of partner is an education institution

> Partner, partner, partner! You cannot do it by yourself. Find good partners—identify your common interests and what each partner can bring to the table.
>
> *– Denver RTD Representative*

(e.g., community college), training design firm, research institute such as the International Transportation Learning Center, pre-apprenticeship program, or private training design provider. These partners provided training needs analysis, pre-existing courses, instructional design expertise to develop new courses, rigor in program design and execution, expertise in web-based training development, instructors, materials, and, often, space for training with the necessary equipment. In some cases, they provide certifications and credit toward advanced degrees and assist in the recruitment of participants to the training.

- **Workforce/support service partners** – The third common partner type is the public workforce investment system or community-based partners that can provide a range of services. Workforce partners, such as local One Stop employment centers, often provide recruitment, background checks, drug screening, assessment, career exploration, employability skill training, and resume or other assistance, as well as access to on-the-job training funds or services through other one-stop center partners (veterans services, vocational rehabilitation services, etc.). Community-based organizations provide access to specific populations targeted by projects for recruitment (e.g., high-unemployment areas or particular minority groups, veterans groups, women, etc.). Many also provide support services including case management, assistance with transportation, childcare, fees, clothes, food, counseling, mentoring, addiction treatment, legal assistance, etc. Less often, some provide employability skills training or other workforce services.

Many of the strongest performing projects had one or more partners from each of these categories. When functioning properly, each has a clear, complementary role in supporting the project. For example, a community-based partner might conduct recruitment and outreach, then pass the recruits to a workforce center to conduct screening and enroll participants; then, the education partner implements the training of the qualified participants and the employer helps ensure training meets its standards and conducts the final selection to employ the graduates.

> Having the right partners is critical to the success of the program. They must be willing to work, problem solve, and flexible in their own programs to adapt them to transit needs, and they have to be very good at what they do.
>
> *– Metro Transit Representative*

Successful partnerships met early and identified clearly what each could and could not do. For example, some community colleges with established certificate programs could not easily customize the curriculum. One project found it was easier to add material to an existing program specific to transit rather than customize the entire existing curriculum. Likewise, each social service program has particular populations they are funded to serve or who qualify for service,

and they must respect these limitations. Effective programs learn what partners can and cannot do and then supplement where needed.

ITWDP Project Goals and Performance Measures

Because FTA was seeking innovative programs across a range of workforce development issues, ITWDP did not specify any specific types of goals the projects needed to set; it asked for a summary of project goals, objectives, and expected benefits from applicants. FTA also did not specify specific performance measures; it asked that applicants describe their plan for recording the outcomes and report, at a minimum, the number of individuals affected by the project, with some suggestions on how to do so. This led to variability in goals and measures, which were sometimes not sufficient to drive performance.

Project Goals

Actual project goals across the three rounds of projects demonstrated substantial variability, from overly ambitious goals related to organizational improvement that would be difficult and expensive to assess to vague statements of desired benefit that suggested no specific measure. Most projects had a mixture of goals, some more targeted and measurable than others.

In addition, several programs specified measures to track (e.g., number recruited, number of participants, etc.) but without specifying a target number, thus setting no specific performance goal.

Examples of Vague or Difficult-to-Measure Project Goals from ITWDP Projects

- Expand outreach efforts.
- Create a feeder pool for entry level positions.
- Develop railcar maintenance skills through classroom and on-job-training.
- Increase average miles between road calls.
- Train participants as operators and in administration to enable employment.
- Agency service quality and improved customer services.
- Performance of agency's fleet relative to new technologies.
- Overall return on investment of training.

Research on goal setting identified characteristics of effective performance goals—1) challenging, 2) clear/specific, 3) appropriate to the complexity of the task, and most effective if there is 4) commitment to the goal and 5) feedback on performance toward the goal (Locke & Latham, 1990). That is, the goals should be difficult but still realistic to reach. They should be specific as to the target to be reached (e.g., recruit 200 people to the training by June 30) as opposed to vague about the performance targets (e.g., conduct outreach). They should be sufficient to cover the complexity of the task without being so complex as to be overwhelming (e.g., a few key target measures as opposed to setting goals for every behavior). The organization and project leadership should be committed to reaching the goals once they are set and willing to invest effort and resources to accomplish them. Finally, there should be a mechanism to track progress and get feedback during the task to assess performance relative to the goal so the project can adjust strategies or resources as needed to meet the goal.

Some programs were more effective at setting appropriate goals, such as Denver's WIN program, which provided proposed outcomes noted in Table 2-2.

Table 2-2

Example of Effective Performance Goals from Denver RTD's WIN Project

Outcome	2011	2012
Number of eligible individuals served by WIN (assessment, training, placement)	150	300
Number of WIN participants completing entry level training	45	90
Number of WIN participants completing skilled or advanced training (for long-term unemployed or incumbent workers)	100	200
Number of WIN participants placed	53	149
Number of retained workers after 90 days	42	119

Although not perfect, these goals were clear and specific and covered progression through the project. They included the key activities of the project's functions from intake (service) to placement and retention and specified time periods for attainment.

Such goals are also possible for other types of projects, such as training program development projects. For example, ITLC specified the following for each training development project it undertook:

- Number of courses to complete
- Type of materials to produce for each course (slides, courseware, etc.)
- Number of courses to pilot test
- Number of incumbents to be trained in pilot tests
- Learning gains demonstrated by testing with specific target percentage
- Other specific activities, e.g., submitting an apprenticeship application to U.S. Department of Labor

These types of specific goals are essential for having at least a minimal standard against which to evaluate the project's performance.

Measures

If project goals are sufficiently specified, performance measures will follow from the goals. Measures specify how each element of the goal will be operationally defined and what data will be collected. For example, programs should specify what it means to "complete training" (attendance, passing a final test, etc.) or key terms in their goals such as "transit-related employment."

At a minimum, FTA should expect workforce projects proposing to deliver training (the large majority of ITWDP projects) to set goals for and assess performance against the following measures, with operational definitions of each:

- Number entering training
- Number completing training
- Number attaining certifications
- Number placed with target employer(s) for new entrant training
- Promotion or performance improvement measures (incumbent training)
- Number retained after target period after placement
- Average course evaluation ratings from participants

For training development projects, measures similar to the above should be required. Other types of projects (such as CTA's Transit Leadership Competency Model development) should be required to propose a set of specific goals and measures tailored to the nature of the project.

No project should be able to specify measures that will be "tracked" without setting specific targets to accomplish for each. Although a lack of goals does not necessarily prevent significant accomplishment, it demonstrates insufficient planning and prevents effective accountability and evaluation. An organization starting something new and innovative may need to re-visit goals as new information is learned (which FTA should accommodate within reason), but the initial planning should be sufficient to set performance targets. There is a tendency on the part of proposals to "under-promise" to avoid failing to meet goals; however, applicants should give FTA a set of minimum proposed accomplishments so it can evaluate whether the project targets reflect reasonable impact for the Federal investment. Many projects were able to exceed specific performance targets set, some drastically. But FTA started with an understanding of a minimum level of performance to expect.

Some measures were too difficult to measure. Additional measures such as job performance improvement, return on investment, or organizational impact were proposed by some projects, but they were not provided in the final reports. Although having such measures would be beneficial, they require complex, costly

research projects that can take longer than the 18-month timeframe of ITWDP and demand outside expertise. Such evaluation measures are more suited for large, higher-cost programs, not short-term projects.

Finally, large scale workforce development programs (such as those in the public workforce system) use "gold standard" data sources such as unemployment insurance wage records to determine employment, wage changes, etc. These measures are each highly prescribed and require set periods for assessment such as "one quarter before program entry and two quarters after exit." Such measures make sense for large workforce programs that are maintained on relatively permanent basis and assess collective impact on individuals served. However, such prescribed measures and data sources are generally less feasible for short-term programs at individual agencies. The wage records require data-sharing agreements, and the time lags involved are too long for relatively short projects. Moreover, FTA is not a workforce agency, so impacts on individuals "served" by ITWDP projects are less relevant than the impact on transit agencies, such as positions filled. Measures should, therefore, reflect transit agency (or transit construction firm) needs and use their data and partner data.

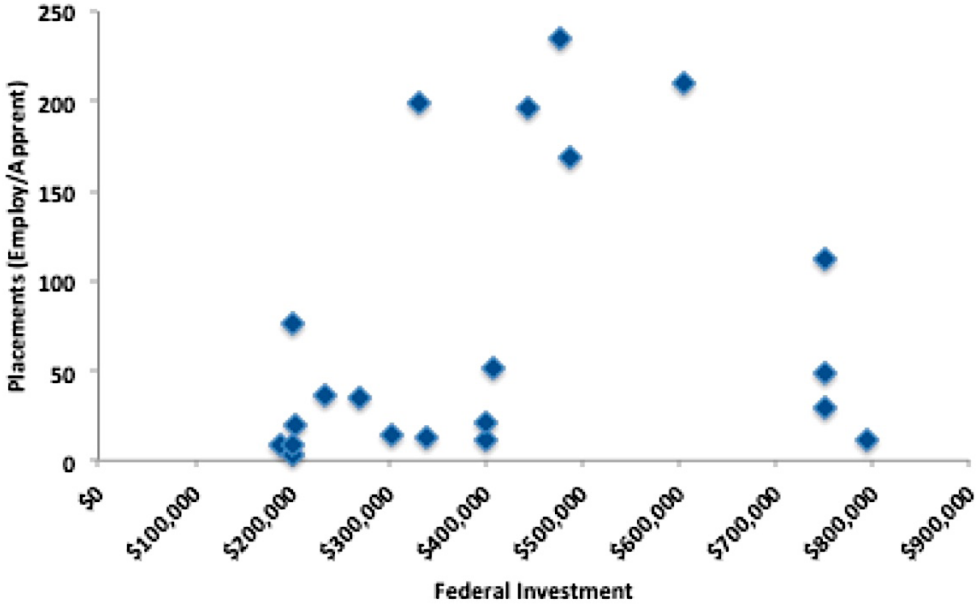
Targeting and Sizing ITWDP Projects

Two issues related to developing effective goals and measures are effectively targeting and sizing workforce development projects for ITWDP. There was considerable variability among projects for the outcomes relative to the investment made in the projects.

One way to address this is to plot investment versus placements. For example, Figure 2-1 shows the Federal investment plotted against the resulting number of placements for the 21 ITWDP projects (50%) that had placement as a goal (placement in employment or apprenticeship). As shown, there is little clear relationship, as some projects that cost $200,000 –$300,000 had high numbers of placements, whereas several projects with low number of placements were in the $700,000 range. Although a perfect linear pattern is not expected, as some training and placements cost more to develop and implement, nevertheless, the figure indicates that at least some projects were not highly efficient from a placement standpoint, which could be related to the targeting and sizing of the projects.

Figure 2-1

Federal Costs and Job Placements (n=21 projects)



Source: FTA and project interviews/final reports; 21 projects with only training, training development, youth engagement, or other outcomes not included.

Targeting Projects

Each ITWDP project was required to specify in the proposal a problem to address. In the large majority of cases, the projects were developed to target specific workforce problems for transit agencies or transit construction firms, such as:

- High levels of turnover in operators or maintenance positions
- Preparing the next generation of agency leadership given expected turnover
- Lack of technical training to address specific industry-wide needs (e.g., Signals technology)
- Need to prepare operators or technicians to pass selection tests to fill positions of need
- Need for more prepared transit construction workers or apprentices for upcoming expansion projects

However, in a few cases, despite what appeared to be sensible problem statements, it became clear that there were existing alternatives to creation of a new program or there was no clear problem addressed by the program. For example, NORTA's Railcar Maintenance Technician training developed a lengthy course to train unemployed or underemployed individuals with no maintenance background for entry-level positions in railcar maintenance. The program was designed to address expected turnover in these positions; however, NORTA representatives believed that without the program, it could have filled the positions via their regular recruitment, assessment, and training process.

Likewise, Olympia's Village Vans program was targeted to creating a pool of potential transit workers by training volunteers to drive vans to assist low-income residents get to jobs, interviews, etc.; however, project leaders indicated that there was little need to expand the prior Village Vans program, as the agency already received 100 applications for every 10 operator positions, positions that are, in fact, "difficult to get" for applicants. Therefore, the program was more beneficial to the participants (giving them a slight advantage in applying for positions) than to the transit agency.

In both cases, the projects were targeted to addressing issues that did not constitute problems for the transit agency. In other cases, the targeting issue may not have been as easily identifiable initially. For example, several projects from the 2011 and 2012 rounds attempted to reach youths to develop a pipeline of new transit industry entrants—an important long-term approach. However, most projects found that for short-term, 18–24 month projects, it was difficult to demonstrate impact. Problems of liability, students not ready to make career decisions, lack of positions or internships for those without a CDL, etc., meant youth projects could rarely demonstrate much impact or evidence that they led to new hires. This may be an area better targeted by longer-term educational initiatives than short-term projects.

Before developing a new program with the effort and cost entailed, transit agencies and their partners need to carefully assess the nature of the problem being addressed, asking questions such as:

- How do we fill the positions/solve the problem without a new program?
- Do we already have a sufficient talent pool, or do we need to build one?
- Can we select for the skills needed, or do they need to be trained?
- Do we expect to have positions into which program graduates can move?
- If we create the new program, how will it improve agency performance?
- Is the timeframe sufficient to demonstrate impact?

If the existing approach sufficiently filled positions or provided a sufficient talent pool, then new programs were not of much benefit to the transit agency, even if successful. Although there may have been some ancillary benefit to such programs, such as good will in the community, the overall benefit to the agency was relatively minor. Contrast that with programs such as CCD's B/ROTA program, which filled operator positions and led to numerous hires, or ITLC's Signal Training Consortium, which addressed the need for technical skill training for many transit agencies in a safety-critical area with changing technology and high expected retirements. Massachusetts DOT targeted its 2015 program based on transit construction employer feedback that more candidates were needed that arrived screened, trained, and ready to work.

Because FTA is a transit-focused organization, not a workforce development agency, it is not sufficient that participants benefit from a project; the program must solve a problem for transit agencies to be worthy of FTA investment. Otherwise, even a successfully-executed project can result in little impact for the agency.

Sizing Projects

In addition to targeting, it is important to design projects of sufficient size or scale to result in real impact on a problem if the project is successful. For example, Santa Clara VTA developed an internship to address ongoing difficulty with filling skilled, technical, well-compensated Transportation Planner positions consistent with its normal internship program. The program was for five paid interns; some had successful internships—one ended up in college, two with private firms, and one in a normal college internship at VTA, and one new Transportation Planning aide position was created. This was for a Federal investment of $200,000 and a total of about $500,000. In this case, the total investment was $100,000 per intern, with a maximum potential of five hires, which were unlikely due to the interns' ages. Even if successful, was five interns sufficient to address the agency's Transportation Planner position needs? Might there have been a more efficient approach to generate more Planner candidates likely to fill the position? Was this approach scalable for other, larger agencies to replicate?

Likewise, NORTA's project received $400,000 and, with matching, spent $765,000 on the railcar maintenance program that intended to train only 13 people, representing a total of almost $60,000 per person, for a program with no plans for sustainability. Given that the railcars were unique to NORTA, was the program scaled sufficiently given the scope of the problem? Was it more efficient than the normative process prior to this project?

As a final example, LCSS created a Generation Y Transit Workforce Connection project to reach low-income 18–26-year-olds to promote interest in transit careers. It planned to give presentations to 1,000, but provide weekly training over 6 months to up to 20 individuals, with the hope that 10 would go on to secondary education or transit employment. The program cost $187,850, all Federal funds, with no plans to sustain it after funding ran out. Again, it is unclear whether such a program targeting 20 people at a cost of more than $9,300 per individual with the hopes of 10 going to either post-secondary education or employment was cost-effective or of sufficient scale to make any impact on the number of these older youths who chose transit even if all goals were met.

FTA may wish to identify minimal levels of anticipated impact for applicants or have programs that suggest smaller target numbers to justify how the project approach merits the investment. This is not to say a program targeting a smaller number of people cannot have a high impact if the positions are critical or

expensive to train/fill and in high demand. This is particularly true if there are no plans for sustaining the program over time; a larger initial up-front investment might be worthwhile if the program can be sustained to increase impact over time.

Questions project developers and reviewers should consider include the following:

- How many people would need to complete the program to get a sufficient number of hires to meet the agency's needs?
- What is the normal cost of recruitment/training per person in the targeted position, and how does it relate to the expected costs of the program? If the project would be more or equally expensive, how would this program be value added?
- If the program is being newly developed, will it be sustained? How?
- What would be the impact on the agency's workforce needs if the program is successful at reaching the target numbers of completers proposed?

If the program is not proposing a sufficient number to make an impact, has no plan to sustain the program over time, and/or it would cost more per person than the existing approach for fulfilling the workforce need without some clear benefit, FTA may question whether it is a sufficiently-scaled project.

Sustainability and Local Funding

Part of ensuring that ITWDP projects have longer-term impact is finding a way to sustain the programs after the Federal funding is depleted. Sustaining the program with local funding improves the impact of the projects, as the initial Federal investment yields continued outcomes after the funded period of performance. In addition, local funding means more control over the project, as the project is not subject to Federal guidelines as to how funds can be used, what types of participants can be served, etc. Different approaches to project sustainability plans were identified and are summarized in Table 2-3.

Table 2-3
ITWDP Project Sustainability Approach

Sustainability Revenue	ITDWP Projects
No sustainability plan	12
Transit agency paying to sustain	7
State, State DOT, or Governor funds	6
Looking for grants	5
Consortia to develop/deliver training	5
Workforce funds (WIOA, State/local funds)	3
Co-funding, transit agency and partners	2
User fees/partnership with association	1
Not applicable (competency model creation)	1

Although roughly a quarter of the projects had no sustainability plan, the remaining programs used one of seven approaches that could be identified for more local funding to continue the workforce projects:

- **Transit agency funding** – The most common approach, used by seven agencies, was funding the program from their agency budget, usually absorbing the project's work as part of their ongoing training. This may have meant reductions in the numbers or frequency compared to the fully-funded project. For example, GCRTA developed its Public Transit Management Academy with ITWDP funds, which it plans to run roughly every two years.
- **State funding** – Six projects found funds either from the State DOT budget (which, in some cases, was the lead applicant to ITWDP) or from a State-funded program such as NJ Build. In other cases, project staff successfully contacted the Governor's office to request funds to continue the program.
- **Other grants** – Five ITWDP project leads indicated that they were searching for grant money to try to continue the projects. These projects had, as yet, identified no particular grants, but identifying a Federal, State, or local grant was their approach for trying to sustain the program.
- **Consortia** – Five projects were using a consortium approach to continuing their project. The Southern California Regional Transit Training Consortium was an existing consortium of transit, education, and other members that developed and delivered training that was added to its library for members. The International Transportation Learning Center used consortia as its model for several ITWDP projects, consisting of interested transit agencies and associations that spread the work and costs of training development and delivery. Consortia can adopt sliding scales that enable members to contribute relative to their size (e.g., by scaling consortia dues by agency ridership or other metrics).
- **Workforce Development funds** – Three projects were using or seeking to use U.S. Department of Labor workforce development funds from their local One-Stop employment center. For example, one project lead became a statewide Eligible Training Provider for the use of WIOA funds, which means eligible unemployed and dislocated workers can select to receive transit operator training funded by the local area's share of the Federal workforce investment program funds. However, this approach is more restrictive, as only participants found to be eligible for training funds can receive the training paid for with these workforce funds.
- **Co-funding among transit agencies and project partners** – In two cases, the transit agency intended to pay for part of the training, but the partners also were interested in continuing the program and jointly funded the continuation of the program. For example, Denver's WIN program was partially funded by the transit agency, other employer partners, and fundraising. In another case, a community college created a Transportation Workforce Institute within the college, which would receive college support but hoped to offset that by leveraging outside funding, grants, etc.

- **User fees/partnership with associations** – River Cities Public Transit developed an on-line training clearinghouse populated with (as yet) a limited number of courses. It received some funding from associations related to rural transit and planned to fund part of maintenance and updating with user fees paid by those who wish to have access to the training content (e.g., wheelchair securement).

Because grants are not generally a stable way to maintain a program long term, agencies seeking to have more local control may want to consider an approach such as joining a consortium, leveraging partnerships, or seeking State funds to continue important workforce development programs.

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Additional Links

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FY 2012 Announced Workforce Projects, https://www.transit.dot.gov/research-innovation/2012-innovative-workforce-development-grants.

FY 2015 Announced Workforce Projects. https://www.transit.dot.gov/funding/grants/innovative-public-transportation-workforce-development-program-project-selections.

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