



FEDERAL TRANSIT ADMINISTRATION

FTA Annual Report on Technical Assistance and Workforce Development for FY 2017

APRIL 2018

FTA Report No. 0121
Federal Transit Administration

PREPARED BY
Federal Transit Administration



U.S. Department of Transportation
Federal Transit Administration

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Federal Transit Administration
Office of Research, Demonstration and Innovation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

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Metric Conversion Table

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	liters	L
ft³	cubic feet	0.028	cubic meters	m ³
yd³	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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13. ABSTRACT This statutorily required annual report provides information on FY 2017 technical assistance, standards, human resources and training projects authorized by Federal Public Transportation Law 49 U.S.C. § 5314 (Section 5314). The primary goal for projects in Section 5314 Technical Assistance and Workforce Development is to improve public transportation. This Section 5314 projects report also includes information on FTA's process for making upcoming allocations for FY 2018 – at the time of this report's submission to Congress, FY 2018 allocation decisions had not been made.			
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U.S. Department
of Transportation
**Federal Transit
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Colleague:

During this transformative time in public transportation, agencies need access to the resources, tools, personnel, and promising practices that are high-impact and incorporate quality technical assistance, standards development, training, and workforce development. Between 2012 and 2022, transportation is expected to need 4.6 million workers, roughly 126% of the 2012 workforce. At the same time, the need for accessible transportation continues to grow, and the importance of coordinating both public and private resources to enable mobility on demand is now the expectation of most travelers. Transit agencies are facing these and many other challenges as well as opportunities such as transit automation. Projects funded in Section 5314 help agencies address challenges and harness the power of opportunities. FTA is proud of the accomplishments of these projects, and I am pleased to provide this annual report with the results of Section 5314 active projects in FY 2017.

This statutorily required annual report to Congress provides a snapshot of FTA's technical assistance, standards development, training and workforce development programs and projects. In FY 2017, FTA's active technical assistance, standards development, training and workforce development projects totaled \$27,393,595. The allocations across the eligible areas in Section 5314 are \$13,284,713 (46%), for projects providing technical assistance; \$2,500,000 (9%) for standards development activities; \$8,308,882 (28%) for workforce projects; and \$5,000,000 (17%) for the National Transit Institute (NTI). NTI is a program providing training for Federal, State, and local transportation employees.

I hope this report demonstrates the significant value and results of these important programs. Thank you for your continued support of a viable and robust public transportation system.

Sincerely,

A handwritten signature in blue ink, appearing to read "K. Jane Williams".

K. Jane Williams
Acting Administrator

Abstract

This annual report to Congress provides information on fiscal year (FY) 2017 technical assistance, standards development, human resources, and training projects authorized under Federal Public Transportation Law 49 U.S.C. § 5314. The primary goals for these projects are to more effectively and efficiently provide public transportation service and improve public transportation. The report includes a section on frontline workforce trends and discusses expectations and processes for allocating FY 2018 Section 5314 funding. In FY 2017, FTA's active technical assistance, standards development, training, and workforce development projects totaled \$29,093,595. The percentage allocations across the eligible areas in Section 5314 are \$13,284,713 (46%) for projects providing technical assistance, \$2,500,000 (9%) for standards development activities, \$8,308,882 (28%) for workforce projects, and \$5,000,000 (17%) for the National Transit Institute (NTI).

EXECUTIVE SUMMARY

This report provides information on technical assistance and workforce development projects active during fiscal year (FY) 2017. As authorized in 49 U.S.C. § 5314, there are four major types of projects: technical assistance, standards development, human resources/workforce, and training. The report is organized into three sections:

- **Section 1** provides detailed information on technical assistance, standards development, human resources, and training projects including key outcomes and impacts.
- **Section 2** discusses frontline workforce development trends as required by Section 5314(b)(2)(E).
- **Section 3** provides information on expectations, directions, and processes for allocating FY 2018 funding. At the time of this report, FTA had not made any final decisions for FY 2018 Section 5314 allocations.

In FY 2017, FTA's active technical assistance, standards development, training, and workforce development projects totaled \$29,093,595, including FY 2017 and prior year funds, as shown in Table I. The percentage allocations across the eligible areas in Section 5314 are \$13,284,713 (46%) for projects providing technical assistance, \$2,500,000 (9%) for standards development activities, \$8,308,882 (28%) for workforce projects, and \$5,000,000 (17%) for the National Transit Institute (NTI).

In FY 2017, FTA received the yearly authorized Highway Trust Fund (HTF) mandatory appropriation of \$9 million for Section 5314 projects and an additional \$5 million in general fund (GF) appropriations for other discretionary Section 5314 projects. Of the \$9 million in HTF funds, \$5 million continues the NTI statutory program and \$4 million is allocated to technical assistance and standards projects. The additional \$5 million is targeted to additional technical assistance and standards activities to advance public transportation for America's communities, and maintain a world-class public transportation system with access and mobility for all.

Table 1

Technical Assistance, Standards, Human Resources, and Training Projects Active in 2017 by Functional Area

Program/Project Name	Eligible Activities *											Amount
	Technical Assistance (TA)								Stand**	HT***		
	1	2	3	4	5	6	7	8	9	10	11	
National Aging and Disability Transportation Center (NADTC)	x	x	x									\$3,950,000
National Center for Mobility Management (NCMM)		x	x									\$3,300,000
Transit-Oriented Development (TOD)								x				\$3,000,000
Mobility on Demand Technical Assistance and Outreach Support	x	x	x									\$585,000
Transportation Research Board Core Program Support								x				\$250,000
Transit Research Analysis Committee (TRAC)						x		x				\$200,000
Evidentiary Protection of Transit Safety Program Information Study								x				\$600,000
Transit Advisory Committee for Safety (TRACS)						x		x				\$175,000
Safety Awareness Technical Assistance								x				\$350,000
Measuring Accessibility through Simplified Trips on Projects (STOPS)				x	x							\$199,713
Transportation Capacity Building Program (TCBP)				x	x							\$100,000
Performance-Based Planning Technical Assistance: A Report to Congress				x	x							\$75,000
Manual on Pedestrian and Bicycle Connections to Transit								x				\$250,000
Safety of Certain Transportation Facilities (“Parking Safety Study”)								x				\$250,000
Transit Standards Development									x			\$2,500,000
National Transit Institute										x		\$5,000,000
FY 2015 Innovative Transit Workforce Development Projects											x	\$8,308,882
TOTAL												\$29,093,595

* Section 5314 Functional Areas: (49 U.S.C. 5314 (a) (1) (A) (B) and (2) (A-I))

TECHNICAL ASSISTANCE (TA)**

1. Americans with Disabilities Act (ADA) of 1990
2. Human Services Transportation Coordination
3. Transportation Needs of Elderly Individuals
4. Increase Transit Ridership in Coordination with Metropolitan Planning Organizations
5. Improve Transportation Equity and Efficient Public Transportation Planning for Low-income and Minority Individuals
6. Facilitate Best Practices Bus Driver Safety
7. Meet Buy America and Rolling Stock Purchases Requirements
8. Other technical assistance activities that advance the interests of public transportation

STANDARDS (Stand)**

9. Standards

HUMAN RESOURCES AND TRAINING (HT)***

10. Human Resources
11. Training

Requirements for this Report

Federal Public Transportation Law at 49 U.S.C. §5314 (a)(3) requires the Secretary of Transportation to submit a report to Congress on technical assistance for all projects active under this section during the previous fiscal year. This annual report must be submitted to the Committee on Banking, Housing and Urban Affairs and the Committee on Appropriations of the U.S. Senate and the Committee on Transportation and Infrastructure, the Committee on Science, Space and Technology, and the Committee on Appropriations of the U.S. House of Representatives not later than the first Monday of February in the following year.

This annual report must include:

- A description of each project that received assistance under 49 U.S.C. §5314(a) (Technical Assistance and Standards) during the preceding fiscal year.
- An evaluation of the activities carried out by each organization that received assistance under 49 U.S.C. 5314(a) during the preceding fiscal year.
- A proposal for allocations of amounts for assistance under 49 U.S.C. §5314(a) for the subsequent fiscal year.
- Measurable outcomes and impacts of the programs funded under 49 U.S.C. §5314(b) and (c) (Human Resources and Training and the National Transit Institute, respectively).

SECTION 1

Section 5314 Active Projects in FY 2017

FTA awarded cooperative agreements, contracts, and other eligible agreements across diverse geographic areas to ensure the highest level of industry impact. This section provides descriptive information and results from Section 5314 funded projects active in FY 2017.

Technical Assistance

Title: National Aging and Disability Transportation Center (NADTC)

Recipient: Easter Seals, Inc., with subrecipient National Association of Area Agencies on Aging (n4a)

Project Description:

NADTC promotes the mobility of people with disabilities and older adults, ensuring that public transportation supports economic inclusion, access to healthcare, links to education, connections to recreation/leisure activities, and independent living in our communities. It also works to ensure the effectiveness, efficiency, and quality of coordinated human service transportation activities, promoting the best value for Federal investments in specialized transportation services. The work of NADTC is directed by stakeholder review committees and is conducted in close cooperation with FTA and guidance from the Administration for Community Living of the U.S. Department of Health and Human Services (HHS). FTA recognizes that the need for accessible transportation to support independent community living is continuing to grow in the U.S. With an increasing number of adults over age 75, the number of people living with disabilities will also increase. As many as 45% of people over age 75 have some limitation in their activities due to chronic conditions such as arthritis, heart disease, diabetes, and other conditions.

NADTC is a partnership of two national leaders in accessible transportation, Easter Seals and the National Association of Area Agencies on Aging (n4a), which have established an innovative technical assistance center to promote the availability of accessible transportation options that serve the needs of older adults, people with disabilities, caregivers, and communities. With FTA assistance, this partnership enhances coordination in the delivery of transportation and helps recipients of FTA funds leverage Section 5310 formula grants and other transit investments to further accessible transportation options.

The two partners also promote broad stakeholder collaboration within the transportation decision-making processes of metropolitan areas and states.

Outputs:

NATDC started in September 2015 and is expected to be completed in December 2020. NADTC received a total of \$2,250,000, and, as of July 2017, had spent 76% of FTA funds for this program. Relevant activities for NADTC in 2017 included the following:

- Development of online courses and training materials to assist Section 5310 recipients and subrecipients with providing transportation services to benefit older adults and people with disabilities, conduct of a community grant program, development of webinars and maintenance of a website (<http://www.nadtc.org/>) with useful materials that benefit older adults, individuals with disabilities, caregivers, and public transportation providers, and support of 1-800 inquiries through the Eldercare Locator. The information can be found at <http://www.eldercare.gov/Eldercare.NET/Public/Index.aspx>.
- In March 2017, presented a podcast on the Americans with Disabilities Act (ADA) and common ADA questions related to customer service, wheelchairs on vehicles, and service animals. The podcast was part of the NADTC ADA mini-course found at <http://www.nadtc.org/resources-publications/ada-ask-the-expert-podcast/> and featured technical assistance specialists who addressed questions related to ADA transportation for bus and rail operations.
- Provided targeted technical assistance in response to locally-identified challenges; developed and posted a report titled “2016 Transportation Trends: A Look at the Year’s Top Mobility Challenges & Opportunities” in April 2017 that reviews key topics, significant issues that affect the availability of accessible transportation in communities and opportunities to address these issues as identified by NADTC. This report can be found at <http://www.nadtc.org/resources-publications/2016-transportation-trends-a-look-at-the-years-top-mobility-challenges-opportunities/>.

In 2017, NADTC’s Innovations in Accessibility Mobility grants provided approximately \$300,000 in funding to 6 communities to encourage and facilitate program innovations and approaches that increase accessible transportation options for older adults and people with disabilities living in the community. Examples include using volunteer transportation aides to accompany older adults and people with disabilities who need additional assistance during their ride and combining transportation and nutrition services to promote health and socialization. Recipients include:

- Area Agency on Aging IB, Southfield, MI
- Berkshire Regional Planning Commission, Pittsfield, MA

- City of Hernando, MS
- Mountain Empire Older Citizens, Big Stone Gap, VA
- Peace Village Center Justice Network, Cincinnati, OH
- Senior Transportation Connection, Cleveland, OH

Outcomes/Impacts:

NADTC is ensuring the continuation of FTA's quarter century of prior investment in technical assistance for targeted populations by developing a library that includes the most valuable resources developed under prior cooperative agreements. A broad range of learning styles is being accommodated with the launch of a YouTube channel and Facebook and Twitter accounts, platforms that will allow NADTC to engage with the field beyond traditional platforms. As of July 2017, a total of 23,750 calls inquiring about transportation were answered, and as of June 2017, there were 2,050 downloads of NADTC documents, webinars, and other resources. In total, 15,195 calls were placed to the Eldercare Locator, and approximately 800 people participated in NADTC training events including webinars and online courses. In total, six community grants were awarded and currently are being conducted.

The impacts of this work already are being felt around the U.S. The City of Hernando, Mississippi, used its community grant to create a model for combining transportation and nutrition services through added Saturday transportation service to previously unserved destinations. Peace Village/Cancer Justice Institute in Cincinnati is creating a mobility navigator/cancer care navigator "hub" to schedule and coordinate rides to cancer screening and treatment. The Berkshire Regional Planning Commission in Pittsfield, Massachusetts, used its community grant to offer medical transportation to remote areas and create a centralized scheduling hub and driver app.

Project/Program Evaluation:

NADTC conducts a yearly independent, comprehensive program evaluation with an annual report and interim reports submitted to FTA to ensure the Center's effectiveness, guide decision-making using indicators established in consultation with FTA on output, efficiency and return on investment, evaluate the success of the Center, and inform future planning. The 2017 annual evaluation report of the NADTC will be completed in early 2018 and posted at www.nadtc.org and the results will be summarized in next year's version of this report.

FTA Funding: \$2,250,000

Figure 1

*Example of
Impact of
National Aging
and Disability
Transportation
Center (NADTC)*

NADTC's premier group of six Innovations in Accessible Mobility grants launched in January 2017 and run for 12 months. Each project implemented a program to increase accessible transportation options for older adults and people with disabilities living in their communities

and surrounding areas. Grantees implemented innovative approaches including using technology, one-call centers, mobility navigators, and care coordinators to improve scheduling and communication with drivers and riders, improving service delivery and increasing regional coordination, using volunteer transportation aides to accompany older adults and people with disabilities while being transported, combining transportation and nutrition services to promote health and socialization, creating travel training curricula to educate and empower individuals to travel independently, incorporating partnerships among aging, disability, and transportation entities responsible for Section 5310 coordinated transit/human services plan, increasing understanding of and support for accessible transportation in the community by including older adults and people with disabilities in the decision-making process, evaluating the impact of different travel models and approaches on the travel behavior of older adults and people with disabilities, and developing sustainable projects that can thrive after grant funding ends.



Title: National Center for Mobility Management (NCMM)

Recipients: Easter Seals, Inc., with subrecipients Community Transportation Association of America (CTAA) and American Public Transportation Association (APTA)

Project Description:

NCMM was created to facilitate the adoption of mobility management strategies and coordinated transportation options at the state and community levels. In recognition of the fundamental importance of human service transportation and the continuing need to enhance coordination, Executive Order 13330 (February 24, 2004) was issued on Human Service Transportation Coordination, establishing the Coordinating Council on Access and Mobility (CCAM). In the Fixing American's Surface Transportation (FAST) Act, Congress required the CCAM to develop a strategic plan to advance local transportation coordination. As CCAM's lead agency, FTA has sought to expand the use of mobility management strategies and improve human service transportation coordination by partnering with NCMM.

Mobility management activities leverage transportation resources and fill transportation gaps to empower people to live independently and advance their health, economic vitality, self-sufficiency, and community connections. NCMM operates as a collaborative effort among its three partners—Easter Seals, Inc., as the lead fiduciary agent, APTA, and CTAA. NCMM's goals include improving and enhancing the coordination of federal resources for human service transportation, especially for people with disabilities, older adults, and people with low incomes through mobility management and coordination activities and works to promote coordination and innovative and integrated mobility management strategies that improve the efficiency of operations and optimize transportation resources. NCMM's key functions are producing training and technical assistance products, disseminating best practices, supporting the professionalization of mobility management by developing competencies and a curriculum, and supporting the CCAM's efforts to promote the ability of states to coordinate transportation resources. Faced with changing demographic and lifestyle trends as well as continuing economic pressures, the public transportation industry is adopting mobility management as a proven solution to use existing resources and investments and creating new options to meet growing demand. NCMM has emerged as a premier mobility management technical assistance center in the U.S. and provides invaluable support to FTA's formula grant programs.

Outputs:

NCMM started in June 2013 and will end in December 2018. NCMM received \$1,700,000 in FY 2017. FTA generally awards technical assistance funds in advance of project activity, and the FY 2017 funds will be used for activity that takes place between April 1, 2017, and September 30, 2018. Following is a description of activity carried out in part with the \$1,700,000 of FY 2017 funds as well as with previously awarded FY 2016 funds:

- During 2016 and early 2017, developed six free, self-paced on-line modules that define the mobility management approach and how it applies to different populations – “Mobility Management Approach,” “Family of Transportation Options,” “Creating an Inventory of Transportation Resources,” “How is Transportation Funded? A Look at Public and Private Options,” “Serving Your Customers: Who Are They and What Do They Need,” and “Performance Measures for Mobility Management.” The modules can be accessed at <http://nationalcenterformobilitymanagement.org/e-learning/>.
- Supported FTA by conducting three webinars for CCAM member audiences, including “Coordinating Council on Access and Mobility Webinar: Community Perspectives,” “Human-Centered Mobility and the Benefits for Transit,” and “Inclusive Planning and Shared-Use Mobility: Ensuring Diversity of Perspective in a Changing Transportation Environment.” An archive of the

webinars can be found at <https://nationalcenterformobilitymanagement.org/webinars/>.

- Developed a publication titled “Transportation to Healthcare Destinations: How a Lifeline for Patients Impacts the Bottom Line for Healthcare Providers” (http://nationalcenterformobilitymanagement.org/wp-content/uploads/2014/09/NCMM_Healthcare_Business_Case_Context.pdf), which provides transportation providers with an understanding of the many ways in which the healthcare industry is affected when patients lack transportation to appointments.
- From July 2016 to July 2017, addressed the technical assistance needs of diverse requesters across the U.S., including customized technical assistance to 79 requesters representing human service organizations, transit agencies, metropolitan planning organizations (MPOs), governmental agencies, and individuals from all 10 FTA regions and representing 24 states.

In FY 2017, NCMM continued to provide multiple forms of technical assistance across all FTA regions, including developing products, conducting research, presenting at meetings, and problem-solving. Selected outcomes related to this work included the following:

- Worked with the American Cancer Society (ACS) to assist with a community partnership strategy in key southeastern regional metropolitan areas.
- Assisted with transit system/governance information and general mobility.
- Developed a management primer for key ACS staff and an outreach strategy for staff making first contact with transit providers and planning professionals.
- Managed and provided technical assistance to 16 Healthcare Access Mobility Design Challenge grantees.
- Researched and compiled information for the Tennessee Employment First initiative regarding support available regarding mobility management and transportation services and supported more than 40 direct, intense technical assistance requests related to topics such as volunteer driver programs, transportation education for youth, and coordination with transportation network companies.
- Provided support to the Maine Primary Healthcare Association and Health Outreach Partners on Healthcare Access and Mobility. Compiled examples from other states, shared information about potential grant programs, and offered suggestions on convening key stakeholders. Produced a monthly newsletter that was disseminated to 1,000+ individuals.
- Participated in the annual Iowa Transit Meeting sponsored by the Iowa Transportation Coordination Council (ITCC) and presented on a mobility management panel.

- Provided technical assistance related to coordination in Texas and created a statewide mobility management network in Texas that provides transit participation in transitioning older drivers out of driving in Oklahoma.

Outcomes/Impacts:

NCMM started in June 2013 and will end in December 2018. It has continued to expand awareness of mobility management promising practices, and its products, briefs, resources and e-learning modules continue to be valuable to the field. From January to June 2017, there was a 61% increase in the number of registered users who completed the “Mobility Management Basics” and “Creating Innovative Solutions” modules. Additionally, technical assistance activities continue to drive partnerships and coordinated planning among state and local governments and social, human service, and transportation providers to improve planning and delivery of workforce development, training, education, and basic services to veterans, older adults, youths, and other disadvantaged populations. During this timeframe, there was a 171% increase in the number of NCMM products being downloaded. Following a conference in June attended by NCMM staff, there was a 971% increase in downloads of presentations from a poster session hosted by the Center.

By engaging with regional liaisons and providing direct technical assistance and outreach, NCMM has had a direct impact on grantees in all 10 FTA regions. In Nebraska (Region 7), NCMM provided direct technical assistance to Panhandle Trails Intercity Public Transit to assist with Nebraska-specific resources, volunteer transportation and Lyft and other Transportation Network Company (TNC) partnerships, resulting in the state being better prepared to offer assistance and guidance to persons with special needs and disabilities. Similar impacts resulted for grantees in New York, New Jersey, Michigan, Mississippi, and others.

Project/Program Evaluation:

NCMM uses an external evaluator related to performance monitoring and evaluation activities to support the Center in measuring its achievement of project objectives. Data collected are used continuously to amend technical assistance practices in quarterly reports and to develop an end-of-the-year project evaluation report that is shared with FTA to improve project performance. As 2018 is NCMM’s final performance year, the Year Five evaluation will include close-out data and will be shared with FTA and across the project team.

FTA Funding: \$3,300,000

Figure 2

*Example of
Impact of
National Center
for Mobility
Management
(NCMM)*

With funding through NCMM, Valley Regional Transit's (VRT) Rides 2 Wellness (R2W) program in Southwest Idaho has expanded the number of eligible clinics and its relationships with healthcare providers in the region. VRT staff meet with social workers, healthcare schedulers, discharge nurses, and caregivers to increase awareness of the free service to provide more access to patients, even if not coordinated by a healthcare provider. VRT's Ride line customer service staff process requests for travel to eligible clinics, conduct rider evaluations, and educate riders about the R2W program. Access the program has become a critical backup plan for instances in which a patient is not reached by a healthcare provider. The program is making a critical difference in the lives of its many customers.



Title: National Public Transportation/Transit-Oriented Development (TOD) Technical Assistance Initiative

Grantee: Smart Growth America (SGA)

Project Description:

The TOD Technical Assistance Initiative provides technical assistance activities leading to improved access to public transportation and employment and support for TOD with a focus on equity and economic development through innovative financing. The project assists FTA in providing technical assistance to communities and a wide range of local governmental entities, including public sector stakeholders beyond FTA's traditional public transportation agency grantees. FTA ensures coordination and cooperation among stakeholders when providing TOD technical assistance to achieve designated benefits that are associated with linking development and transit, including increased ridership, revitalization of neighborhoods, and economic returns to surrounding landowners and businesses. Through the project, FTA provides on-site and online technical assistance. On-site assistance supports communities that currently are implementing TOD projects along transit corridors or around transit stations, leverages Federal investments, and identifies ways to improve access to public transportation, foster real estate development and identify new economic opportunities and pathways to employment. Online assistance is available to all interested parties and provides a venue to identify resources that will assist such parties in their TOD activities.

Outputs:

TOD started its activities in October 2015 and is expected to end in September 2020. As of July 2017, SGA had spent 37% of FTA funds for this project. Significant outputs for FY 2017 include the following:

- Developed a report highlighting common themes of the first year of TOD technical assistance, “Transit-Oriented Development Technical Assistance: First Summary Report” (January 2017), accessible at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Report_No._0101.pdf.
- Launched on-site technical assistance in February 2017 that was provided to Birmingham, Alabama; Omaha, Nebraska; Charlotte, North Carolina; Albuquerque, New Mexico; and Tacoma, Washington.
- Conducted a national leadership summit in April 2017 in Washington, DC with leaders in economic development and real estate to discuss and explore themes of partnerships, placemaking, and policy change as they relate to TOD, walkable cities, smart growth, and community engagement. Information regarding the summit can be accessed at <https://smartgrowthamerica.org/program/locus/events/leadership-summit/past-leadership-summits/2017-locus-leadership-summit/>.

Outcomes/Impacts:

With \$1,102,669 funds spent, FTA provided on-site technical assistance to 14 communities, resulting in 8 public engagement sessions, 2 station area plans, and 1 corridor plan, and supported all online technical assistance requests. FTA is facilitating relationships at the local level among transit agencies, government staff, and community organizations to assist with the development of local policies aimed to support TOD.

FTA’s facilitation of relationships is exemplified by the City of Richmond, selected during the first year of the project to receive direct technical assistance to support the Pulse Bus Rapid Transit (BRT) project. Efforts focused on market assessments for Pulse BRT station areas with a focus on the eastern terminal station and surrounding areas and resulted in recommendations (e.g., market and housing assessment) that were incorporated into the Pulse Corridor Plan formally adopted by the Richmond City Council. The plan sets forth future land use along the Pulse Corridor that is transit-supportive and, with the implementation of the Pulse BRT, is projected to increase corridor-wide property values along Broad Street by 12% over a 20-year period and result in \$4.9 million annually in increased tax revenues for 20 years.

FTA Funding: \$3,000,000

Figure 3

*Transit Oriented
Development
(TOD) National
Leadership
Summit*

Professionals working on TOD in cities across the country met at the 2017 National Leadership Summit in Washington, DC to exchange ideas, talk strategy, and learn new approaches for creating TOD. Participants included real estate developers, investors, advocates, and local elected leaders who explored the themes of partnerships, placemaking, and policy change, particularly as they relate to TOD, walkable cities, retrofitting suburban neighborhoods, and community engagement.

Attendees learned about the latest policy strategies and financing ideas, connected with like-minded professionals working on walkable development, networked with developers and elected officials from other cities, and explored new development projects.



Title: *Mobility on Demand (MOD) Technical Assistance and Outreach Program*

Grantee: Intelligent Transportation Society of America (ITSA)

Project Description:

This program provides targeted support to transit agencies and vendors involved in MOD services such as conventional peer-to-peer car and bikeshare, conventional and on-demand rideshare, public/private partnerships with Transportation Network Companies (TNC), and micro transit. A key goal is to identify opportunities and challenges for public transit agencies as they seek new ways to expand mobility options for their customers. The program explores relationships between transit agencies and MOD service providers and their impacts. It includes information gathering and sharing via meetings, workshops and educational materials, and producing market research and state-of-the-practice materials (assessments, case studies, synthesis reports) and outreach materials to raise awareness of and share information about partnerships between transit agencies and MOD service providers and FTA.

Outputs:

The MOD Technical Assistance and Outreach Program started in September 2015 and will end in December 2020. As of July 2017, ITSA had used 27% of its funding and provided technical assistance and outreach to the industry through the following activities:

- Held an annual listening session during the Transit Research Board (TRB) Annual Meeting in January 2017.

- Developed and produced the Biweekly Mobility Rush Newsletter highlighting transit agency and MOD service provider partnerships, accessible at <https://drive.google.com/drive/folders/0BwMaQI3qg7EqSXItVnpLTXF6bEk>.
- Partnered with the Shared Use Mobility Center to add information on MOD partnerships in the U.S. to its on-line toolkit found at <http://sharedusemobilitycenter.org/tools/>, launched in March 2017.

Outcomes/Impacts:

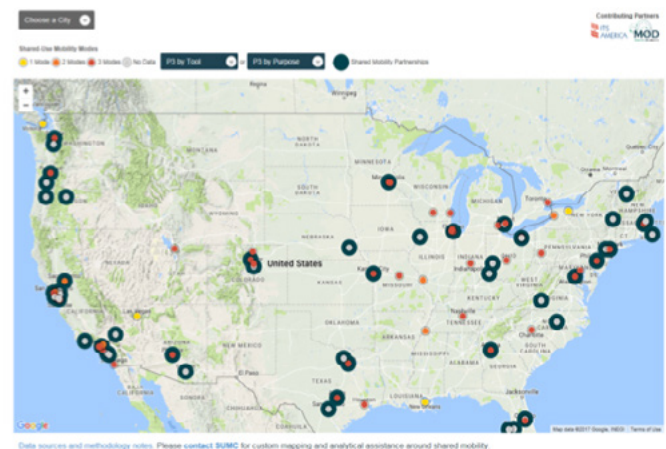
With \$157,889 funds spent to date, FTA is developing a greater understanding of the opportunities and impacts of MOD services on transit agencies across the nation, as well as facilitating dialogue among the U.S. government, transit agencies, and MOD service providers. The project provides a better understanding of MOD's impact on the public transportation industry and engages transit agencies to identify and understand the public transportation community's needs, issues and opportunities for MOD roles and partnerships.

FTA Funding: \$585,000

Figure 4
U.S. Mobility on
Demand (MOD)
Locations

FTA's cooperative agreement with ITSA informs the transportation industry about partnerships between transit agencies and MOD service providers. For example, Dallas Area Rapid Transit (DART) collaborates with Uber, Lyft, Irving Holdings, and other MOD service providers for the First and Last Mile Solution pilot program, which combines traveler applications to create an

integrated, multimodal application that leverages ride-sharing and other MOD services. The project will improve ease of access to DART stations, particularly in non-walkable areas not well served by transit. This pilot program is one of FTA's MOD Sandbox 1.0 program. For additional information, visit <http://policies.sharedusemobilitycenter.org/#/policies/805>.



Title: Transportation Research Board (TRB) Core Program Support

Grantee: Transportation Research Board (TRB) of the National Academy of Sciences (NAS)

Project Description:

This project supports TRB's provision of an extensive network of transit specialists in research, operations, and academia to work cooperatively on commonly-held critical transit needs and to resolve these issues through the application of appropriate research findings. TRB's core technical activities consist of a series continuing, interrelated activities such as the TRB Annual Meeting, operation of standing committees and task forces, committee-sponsored conferences and workshops, a field visit program to states, and responses to inquiries that draw on extensive TRB Library resources. FTA has a long history of cooperative agreements and collaboration with the public transportation industry through TRB, and more than 30 FTA staff serve as members of TRB standing committees in their areas of expertise.

NAS is a prestigious institution known for the high quality and objectivity of its activities and for its ability to convene high-impact meetings that provide essential feedback and strategic support to Federal agencies. Under this project, NAS brings together experts in all areas of the transit industry to assist in improving the overall safety, security, effectiveness, and sufficiency of transit services and to provide for a centralized, widely-accessible abstracting service for transportation innovation. These activities are associated with Section 5314 goals to more effectively and efficiently provide public transportation service and improve public transportation.

Outputs:

This is a yearly project that provides support to TRB. This project's description reflects the assistance received in FY 2017. The project is expected to be renewed for FY 2018. As of July 2017, TRB had spent 96% of previously awarded FTA funds. In FY 2017, FTA supported the following TRB technical assistance activities:

- Conferences such as the 22nd National Conference for Rural, Public, and Intercity Bus Transportation, Asheville, North Carolina, October 2016, attended by 463 people from 47 states, the District of Columbia, and Canada; 200 registrants represented local/regional transit providers and 46 state DOTs, with 72 presentations by transit industry researchers and practitioners in 30 breakout sessions.
- TRB Annual Meeting, Washington, DC, January 2017, attended by 13,722 people from 183 transit agencies, with 338 transit paper presentations,

25 poster sessions (230 posters), 92 papers published, and 43 committee meetings. See <http://www.trb.org/AnnualMeeting/AnnualMeeting.aspx>.

- TRB site visits, such as to Florida DOT in April 2017 for a multi-agency, multi-state workshop on developing a Florida roadmap for research on transformative technologies such as connected and automated vehicles and to Mississippi DOT in July 2017 to discuss the structure of transportation research in the state and implementation of research, including a discussion on transportation for rural health care.
- GIS in Public Transportation Conference, Washington DC, September 2017.

FTA participation in the TRB Annual Meeting enables engagement with the industry and stakeholders through networking, discovery of new research, and exchange of research ideas. TRB also manages the Transportation Research International Documentation (TRID) database, a bibliographic system that collects information and provides literature searches to researchers, government organizations, the transit industry, and the private sector. Transit agencies use TRID to learn how other organizations have handled similar problems and to benefit from their experience, and research sponsors use TRID to avoid costly duplication and assure timely dissemination of results. TRB processes approximately 30,000 new transportation-related publications into TRID per year, and TRB staff conduct TRID searches for FTA staff.

Outcomes/Impacts:

This program supports the exchange of transit research information and results at the national level as well as technical assistance for transit entities working at the state and local levels. Research results are made available to the transit industry through the TRB Annual Meeting, TRB standing committees and task force activities, a field visit program, responses to inquiries, and the TRB Library, which includes access to publications and the TRID database. FTA representatives are involved with key committees and are able to gather and give critical information on important trends and issues through these committees. Through membership provided by this project, FTA staff also have free access to all online TRB resources and participate in the yearly TRB Conference, which gathers over 13,000 people from around the world who are involved in transportation related activities. There is significant cost benefit to this investment, as it would be extremely expensive in both staff time and travel costs to have the same level of access to people and resources provided by TRB.

FTA Funding: \$250,000

Figure 5

*Transportation
Research Board
(TRB) Annual
Meeting in
Washington, DC*

The TRB Annual Meeting in Washington, DC in January 2017 attracted 13,722 attendees representing 183 transit agencies and featured 338 transit papers presentations, 25 poster sessions (230 posters), 92 papers published, and 43 committee meetings. Participants explore topics of interest to policy-makers, administrators, practitioners, researchers, and representatives of government, industry, and academic institutions. Information on the annual meeting can be found at www.trb.org/AnnualMeeting.



Title: *Transit Research Analysis Committee (TRAC)*

Grantee: Transportation Research Board, NAS

Project Description:

FTA established TRAC to provide an independent review and assessment of the needs of the public transportation industry that could be met through future investment in a national research program. Specifically, TRAC provides feedback to FTA on its Federal role in transit research, high-priority opportunities proposed by the agency, and processes that should be in place to ensure that FTA receives the input and cooperation of transit research stakeholders. TRAC is operated by TRB staff, and FTA manages the cooperative agreement with NAS that governs it. These activities are associated with 49 U.S.C. § 5314 goals to more effectively and efficiently provide public transportation service and improve public transportation. TRAC comprises 13 nationally recognized public transportation experts who meet twice yearly to review FTA research activities, discuss key industry issues, and provide a letter report after each meeting with feedback. FTA put this project on hold in FY 2012 and restarted work in FY 2015. Since then, TRAC met in September 2016 and April 2017. The next meeting is scheduled for November 2017.

Outputs:

The current project receiving assistance from FTA started in June 2016 with an expected conclusion in September 2018. TRAC provides FTA with feedback on the efficacy of FTA's research program to ensure that it is well-aligned with the needs of the public transportation field. In FY 2017, TRAC conducted the following activities:

- Met with FTA in September 2016 to hear status of FTA research program and seek feedback on priority areas of Mobility Innovation, Asset Management, and Asset Innovation and Safety.

- Provided feedback to FTA in April 2017 on the early stages of a performance management framework for FTA research programs, which will be a key part of FTA's Five-year Research Strategic Plan (currently in development) that will extend through FTA's current authorization through 2020.
- Developed two Letter Reports to FTA, available at <http://www.trb.org/Publications/PolicyStudies/LetterReports.aspx>, providing relevant recommendations and feedback of FTA research projects.

Outcomes/Impacts:

FTA evaluates TRAC recommendations to determine which are most appropriate and implementable for the FTA research program, taking action on most of the suggestions included in Letter Reports. At the April 2017 meeting, FTA provided a formal response to each of TRAC's findings from September 2016 to clearly communicate the consideration and resolution of each of the Committee's suggestions. A key element of the TRAC response was verification that FTA's research priorities of Mobility, Safety, and Infrastructure (at that time, this was referred to as Asset Management/Asset Innovation). During the April meeting, FTA reviewed draft performance goals for the program, and TRAC's input has helped shape the final form of those goals. TRAC has had considerable influence in iterative revisions and fine-tuning of FTA's research program and performance goals. The major impact of the TRAC input is providing FTA with direct feedback from a broad swath of industry stakeholders on FTA's research program; this ensures that FTA is staying focused on those priorities and goals that best meet the current needs of the industry.

FTA Funding: \$200,000

Title: Evidentiary Protection of Transit Safety Program Information Study

Grantee: National Academy of Sciences (NAS)

Project Description:

This study will evaluate whether it is in the public interest (regarding public safety and the rights of persons injured in public transportation accidents) to withhold from discovery or admission into evidence in a Federal or State court proceeding any plan, report, data, or other information or portion thereof, submitted to, developed, produced, collected, or obtained by FTA for purposes of complying with 49 U.S.C. § 5021, including information related to a recipient's safety plan, safety risks, and mitigation measures. Under Federal law, documents related to safety and collected by FTA generally must be disclosed upon request under the Freedom of Information Act, and many states have open records laws. Some public transportation agencies have expressed concern that creating safety plans, setting safety performance goals, and instituting programs such as close-call

reporting would be subject to public disclosure and facilitate tort litigation in personal injury cases. The ability to prevent disclosure of sensitive documents that might otherwise be used in litigation will assist FTA in its oversight of public transit agencies and will encourage public transit agencies to collect and maintain data and set performance targets.

Outputs:

The activities for this project started in September 2016 and are expected to be completed in June 2018. In FY 2017, NAS conducted three public meetings with committee members responsible for writing the report to provide them with necessary background information to provide recommendations, which will be produced after solicitation of input from public transportation recipients, public transportation labor organizations, and impacted members of the public.

Outcomes/Impacts:

The final report, to be submitted in July 2018, will provide impartial recommendations from NAS for Congress to consider statutory changes regarding evidentiary protections that will increase public transit safety and reduce burdens on transit agencies. FTA believes that the agency can carry out the safety program, authorized at 49 U.S.C § 5329, more effectively if it can protect the safety data collected from transit agencies to comply with the implementation of the safety program.

FTA Funding: \$600,000

Title: Transit Advisory Committee for Safety (TRACS)

Grantee: Interagency Agreement with Volpe Center

Project Description:

The purpose of TRACS is to provide information, advice, and recommendations on transit safety and other issues as determined by the Secretary of Transportation and the FTA Administrator. The diversity of TRACS representation provides a mechanism to gather broad input to address transit safety and other issues. Meetings and discussions seek out the best solutions based on agreed-upon facts and identify proposed regulatory provisions to implement those solutions. TRACS includes members from the public transportation safety community who serve two-year terms and are subject to reappointment by the Secretary. Members are knowledgeable on trends or issues related to rail transit and bus transit safety and represent leadership and organizational skills, as well as geographic, industry, gender, and racial diversity.

TRACS was established in 2009 in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. App. 2. The operation of TRACS is in the public interest and supports FTA in performing its duties and responsibilities under 49 U.S.C. § 5329. TRACS provides the FTA Administrator and the U.S. DOT Secretary with information, advice, and recommendations that impact safety in public transportation nationwide.

Outputs:

The current agreement with the Volpe Center started in June 2016 and is expected to end in June 2018. TRACS evaluates economic, technological, and institutional developments related to transit safety and submits recommendations to the FTA Administrator on innovative ideas and approaches for federal policies and programs. In March 2016, TRACS members were tasked with two efforts:

- Develop practical recommendations detailing how processes, practices, tasks, and individual employee responsibilities can support a strong safety culture.
- Develop recommendations to define the functional requirements and data elements of a comprehensive safety data collection and analysis framework to support improvements in the transit industry's safety performance.

A report was submitted for each task to the full TRACS Committee in February 2017 for concurrence on the recommendations before submitting the final reports to FTA.

Outcomes/Impacts:

FTA evaluated each TRACS report to determine which recommendations to undertake in future rulemakings, guidance, and programs. FTA has used many past TRACS recommendations in rulemaking efforts, bringing its recommendations and work to a nationwide audience.

FTA Funding: \$175,000

Title: *Safety Awareness Technical Assistance*

Grantees: Operation Lifesaver, Inc. (OLI)

Project Description:

This project supports rail transit safety awareness by educating communities in which rail transit systems operate across the U.S. through outreach to motorists, bicyclists, pedestrians, and transit riders through media such as radio public service announcements (PSAs), billboards, bus wrap ads, platform kiosks and clings, and vehicle interior cards. Historically focusing on grade crossing

safety and trespasser prevention programs, OLI, a national, non-profit safety education group with programs in all 50 states whose goal is to eliminate deaths and injuries at railroad crossings and along railroad rights-of-way, has been directed toward intercity freight railroad and Amtrak systems. However, because of the growing number of urban light rail system grade crossings and trespasser incursions that indicate a need for a transit-focused safety program, FTA entered into a partnership with OLI for trained volunteers who provide free safety talks to community groups and school bus, truck, and student drivers to raise awareness of the dangers around railroad tracks and trains.

Outputs:

The current project started in September 2016 and IT is expected to be completed in June 2018. As of July 2017, OLI had spent 41% of FTA funding for this project. At the beginning of FY 2017, OLI completed a transit safety grant program that began the prior year, for which eight transit agencies received grants up to \$20,000 each to conduct transit safety education campaigns. Efforts included train wraps and signs at stations and on vehicles as well as safety campaigns including a video PSA shown in movie theaters in Sonoma and Marin counties (California), a printed safety message on bicycle cabs in Houston, a safety video shown on in Atlanta's subway trains and "See Tracks? Think Train!" sidewalk clings in Hampton Roads, Virginia. Design, production, and deployment of safety materials were completed prior to FY 2017, and closeout of several grants was conducted during FY 2017. Materials developed are available on OLI's website at <http://oli.org/rail-safety/transit-materials>.

In September 2017, OLI coordinated the first U.S. Rail Safety Week to raise awareness of the need for caution near rail properties and to empower the public to keep themselves safe. OLI will continue to conduct educational events and enforcement activities, coupled with national advertising and social media campaigns, to reach critical audiences. OLI has completed the following activities:

- Development of eight new infographics with new safety messages targeted specifically to rail transit, posted on OLI's website in August 2017 and available for download.
- Identification of 13 transit markets for a paid digital ad campaign during Rail Safety Week based on population, system type and size, and number of grade crossing and trespassing incidents; launch of the Rail Safety Week webpage on OLI's website; and coordination with key stakeholders such as APTA and preparation of an article for Passenger Transport announcing Rail Safety Week.
- Continued the "See Tracks, Think Train!" campaign through OLI's website and social media activities, including Facebook, Twitter, Instagram, and Pinterest.

Outcomes/Impacts:

As of July 2017, OLI had spent \$146,344 of FTA funds, with much work geared toward Rail Safety Week. OLI's articles in *Passenger Transport* and *Passenger Transport Express* were seen by 27,000 transit professionals. A detailed report on the impact of Rail Safety Week will be submitted.

OLI's work with transit grantees has yielded a library of transit safety materials that transit agencies use on a regular basis; the transit safety materials page on OLI's website received approximately 1,430 page views during the first three quarters of FY 2017, and OLI's "See Tracks? Think Train!" safety campaign continues to be used by transit agencies—its dedicated microsite, www.seetracksthinktrain.org, received 4,354 visits during the first three quarters of FY 2017.

The reach of OLI's safety messages is further extended through OLI's Authorized Volunteers (OLAVs), who are specially trained to make safety presentations using OLI-approved materials. Many are employees of transit agencies whose presentations reach transit users and community members in areas served by rail transit. In total, 456 safety presentations were made during the first three quarters of FY 2017, reaching an audience of 27,664 in nine states.

FTA Funding: \$350,000**Title: Simplified Trips-on-Project Software (STOPS) – Accessibility and Mobility Impacts**

Grantee: Resource Systems Group, Inc.

Project Description:

This project expands the current capabilities of FTA's Simplified Trips-on-Project Software (STOPS) package for predicting passenger ridership on transit projects, including the use of STOPS to quantify measures of transit accessibility to jobs, healthcare, education, and other locations of interest to existing and future transit users and the use of STOPS to calculate the mobility impacts for transit users resulting from proposed or actual changes to the existing scheduled transit service. Because STOPS uses readily available General Transit Feed Specification (GTFS) data to measure transit service, this product will be more accurate and easier to implement than traditional regional model-based approaches.

Outputs:

Research for this project began June 2017, with expected completion by December 2018. Activities conducted to date include reviews of previous work performed to address changes in transit accessibility and mobility in response to

changes to the transit system. Products will include the software package, user guide, example applications, and technical support for users, who will be able to prepare quantified measures of transit accessibility and mobility. Based on information available from a transit rider survey, outputs will show the magnitude of impacts on different transit rider populations such as minorities, older adults, persons from low-income households, and others.

Outcomes/Impacts:

Consistent national quantification of accessibility and mobility measures will support local performance-based planning and decision-making that has a foundation in tracking historical and current changes and expected changes about person travel over time. The product will support the conduct of before-and-after studies of completed transit projects, evaluation of the likely impacts of transit project alternatives and transit service operations changes under consideration for implementation, and a Title VI or environmental justice equity analysis of a proposed change in transit service.

FTA Funding: \$199,713

Title: Transportation Capacity Building Program (TCBP)

Grantee: Interagency Agreement with Volpe National Transportation Systems Center

Project Description:

This project provides technical assistance and training to states, transit agencies, and MPOs to implement the performance-based planning requirements described in Public Transportation Law. Transit agencies, MPOs, and state DOTs are required to adopt performance management practices to prioritize investment in infrastructure and services to meet national goals for safety, state of good repair, reliability, congestion reduction, economic benefits, environmental benefits, and other national goals. The purpose of this program and the performance-based planning roundtables is to bring MPOs, transit agencies, and state DOTs together to discuss how to implement these requirements within their specific region and to share best practices and local experiences.

Outputs:

TCBP started in August 2016 and is expected to end in December 2018. As of July 2017, Volpe had expended 75% of FTA funding for this project. Relevant outputs for this project include the following:

- In April 2017, in partnership with APTA, published a “Performance-Based Planning and Programming Roundtable Series” that summarizes seven PBPP peer-exchange workshops conducted during FY 2016, accessible at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Performance%20Based%20Planning_SummaryReport.pdf.
- In June 2017, hosted a nationwide PBPP webinar that explored legislative requirements for performance-based planning and featured speakers from MPOs and transit agencies working to develop transit asset management plans and set state of good repair performance targets. In total, 11 roundtable exchanges and a national webinar were held with active participation by representatives of MPOs, transit providers, and state DOTs from throughout the U.S., 5 of which were targeted towards small and medium-size MPOs and transit agencies that requested additional technical assistance and training to meet the new requirements.
- In April 2017, made available additional technical assistance resources to improve the capacity of transit agencies, MPOs, and state DOTs on FTA’s Performance Based Planning webpage at <https://www.transit.dot.gov/performance-based-planning>.

Outcomes/Impacts:

In addition to 600 participants in roundtables and the webinar, training and technical assistance provided will reach 200 representatives of transit agencies, MPOs, and state DOTs. Upon project completion, transit agencies and MPOs will be better prepared to establish performance targets for Transit Asset Management and Safety and work with their local MPOs to develop Metropolitan Transportation Plans and Transportation Improvement Programs that reflect a performance-based planning process.

FTA Funding: \$100,000

Figure 6
FTA
Performance-
Based Planning
Roundtables

PBPP roundtables engaged transit agencies, MPOs, and State and Federal leaders in discussions about performance-based planning, the metropolitan planning process, transit asset management, and safety. Information and insights were shared about what



is working, where there is room for improvement, and how to establish regional and statewide performance targets and prioritize investment priorities as part of a performance-based approach to transportation planning. Key themes included recognition of the benefits of PBPP, existing familiarity with performance management, staff and resource constraints, competition among highway and transit projects for funding, cultural challenges and concerns about setting performance targets in a financially-constrained environment, data collection and availability, and timelines associated with FTA's rulemaking. Transit agency and MPO executives and technical staff benefited from the opportunity to voice concerns and interact in an open, collaborative forum with FTA leadership, regional staff, and peers. These networking opportunities will further expand development and sharing of best practices as local and regional practitioners implement Federal requirements for performance-based planning processes.

Title: *Performance-Based Planning and Programming: A Report to Congress*

Grantee: Interagency Agreement with the Volpe National Transportation Systems Center

Project Description:

This project assisted with the development of materials needed for FTA's report to Congress on "the effectiveness of the performance-based planning processes of metropolitan planning organizations." State DOTs and MPOs are required to develop a performance-based planning and programming (PBPP) approach to transportation planning to place greater emphasis on performance outcomes for safety, infrastructure condition, congestion, system reliability, emissions, and freight movement.

Outputs:

The work associated with this project started in August 2016 and was completed in December 2017. Volpe reviewed information on all state DOT websites and a random sample of websites for 40 MPOs to identify progress made on PBPP. Findings were summarized and presented to FTA for review and final concurrence by U.S. DOT. The final product is a report entitled “Performance-Based Planning: A Report to Congress,” which was submitted to Congress on January 8, 2018. The report can be accessed at <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-guidance/transportation-planning/69421/performance-based-planning-report-congress-12018.pdf>.

Outcomes/Impacts:

This report serves as a baseline for the implementation of a PBPP process. Whereas many state DOTs, MPOs, and transit agencies have initiated such a process, few have fully implemented this as envisioned by Public Transportation Law because, in part, FTA and FHWA have not completed the rulemaking process that establishes the performance measures required by MAP-21.

FTA Funding: \$75,000

Title: *Manual on Pedestrian and Bicycle Connections to Transit*

Grantee: Portland State University (PSU)

Project Description:

This publication helps transit agencies and communities extend the reach and impact of transit by developing and fostering strong ties between transit service and active transportation modes such as walking and bicycling. As an increasing number of transit agencies integrate bike and pedestrian users into their services, it is essential to provide information on ways to maximize the effectiveness of these activities. The manual provides guidance on how to create and fund services that enhance pedestrian and bicyclist safety, accessibility, and mobility and includes best practices and references key resources for transit agencies such as funding available from FHWA and opportunities to use flexible Surface Transportation Program or Congestion Mitigation and Air Quality (CMAQ) funding. With examples from around the U.S., the manual can be used by communities and transit providers nationwide.

Outputs:

This project started in November 2015 and ended in December 2017. As of December 2017, PSU had spent 99% of FTA funds for this project. Significant activities conducted in FY 2017 include the following:

- Conducted three in-depth cases studies of recent efforts to integrate transit with walking and bicycling in the Atlanta, Los Angeles, and Minneapolis-St. Paul metropolitan areas, which revealed a variety of planning and implementation best practices and approaches and compiled key resources, tools, and research from a range of other sources to guide planning and implementation of policies and programs to improve walking and biking connections to transit; worked with transit agencies and other transportation officials in 14 cities to identify best practice examples.
- Developed and produced the final manual in August 2017 and posted to FTA's public website at <https://www.transit.dot.gov/research-innovation/manual-pedestrian-and-bicycle-connections-transit>. The manual benefits transit properties and travelers by compiling existing industry standards and best practices for the design and function of access points, bike parking, and associated amenities related to multimodal transit facilities, rail/bus rapid transit stations, rail crossings, bus stops and vehicle design and bike share integration with public transportation.

Outcomes/Impacts:

Walking and bicycling are important tools for making it easier and more convenient for riders to access public transportation, giving riders more options and supporting multimodal trips. Improvements in walking and bicycling access and safety can help extend the reach and value of transit. The manual informs public transportation and other transportation professionals of best practices, innovations, and key resources to support the work of improving pedestrian and bicycle safety and access to transit. FTA is coordinating with the project team and FHWA on the dissemination of lessons learned from in the manual through the distribution of print copies at events and conferences.

FTA Funding: \$250,000

Figure 7

“Manual on Pedestrian and Bicycle Connections to Transit”

Enhancing walking and bicycling connections to transit provides a cost-effective tool for transit agencies pursuing the goals of improving their level of service and expanding their reach. Well-connected walking and bicycling networks around transit, combined with appropriate accommodations at transit stations and on transit vehicles, can help agencies and community by maximizing the return on transit investments. FTA worked with the Transportation Research & Education Center (TREC) at Portland State University to create the “Manual on Pedestrian and Bicycle Connections to Transit” to address pedestrian and bicyclist safety, accessibility, and mobility related to transit facilities and vehicles. The manual connects public transportation and other transportation professionals to best practices, innovations, and key resources to support the work of improving pedestrian and bicycle safety and access to transit.



Title: *Safety of Certain Transportation Facilities (“Parking Safety Study”)*

Grantee: Interagency Agreement with Volpe Center

Project Description:

This study satisfies the requirement of Section 3025 of the FAST Act, which directed the Secretary of Transportation to research the safety and security of selected locations and facilities intended to encourage public use of alternative transportation, including carpool lots, rest stops, college and university lots, bike paths and walking trails, public transit lots and local, state, and regional rail stations, and any other locations deemed appropriate. The study collected information on the nature, frequency, and impact of property damage, injuries, deaths, and other safety and security incidents that occur or could occur at the facilities. A customized “all hazards” approach was used to determine the hazards that could impact the facilities. This approach determined which assets (people, property, and materials) were vulnerable to man-made or natural threats at the facilities, and hazards were sub-divided into safety and security dimensions. The study identified innovative technologies designed to increase safety and security and/or ensure a better response by transit security and law enforcement at such facilities and locations. The information was synthesized into a report to Congress summarizing safety and security issues by type of facility and identifying innovative technologies available to deal with such issues.

Outputs:

This project started in July 2016 as was completed in December 2017. Research and literature reviews were completed to identify innovative technologies that increase safety and security and/or ensure a more effective response by transit security and law enforcement. The project developed recommendations on how innovative technologies can increase safety and security at parking lots and adjacent areas. “Report to Congress on Innovative Safety and Security Technology Solutions for Alternative Transportation Facilities” (FTA Report No. 0108) was published in May 2017 and can be accessed at <https://www.transit.dot.gov/research-innovation/report-congress-innovative-safety-and-security-technology-solutions-alternativ-0>.

Outcomes/Impacts:

The final report identifies numerous safety and security hazards, technologies, and priorities for the studied alternative transportation facilities. The conclusions and recommendations will help agencies enhance safety and security for transit riders that use parking and other facilities near public transit hubs, bus stops, and stations. Many transit riders use these locations to access alternative transportation modes, so an increase in safety and security may also encourage increased ridership.

FTA Funding: \$250,000

Figure 8

“Report to Congress on Innovative Safety and Security Technology Solutions for Alternative Transportation Facilities”

Safety incidents at transportation facilities that encourage the use of alternative transportation (modes other than private motor vehicle) were researched, including local, state, and regional rail and bus stations, stops, and terminals; parking lots associated with public transportation and carpools at colleges and universities; rest stops; bike paths and walking trails; and sidewalks, streets, and bike lanes used for alternative transportation. The “Report to Congress on Innovative Safety Security Technology Solutions for Alternative Transportation Facilities” presents collected information on the frequency and impact of safety and security incidents at selected facilities and identifies priority incidents at each facility. Additional research focused on identifying innovative technologies that could address these issues. A customized “all hazards” approach was used to identify hazards that could impact the facilities to determine which assets, riders, and transit workers were vulnerable to man-made or natural threats at the facilities, which were sub-divided into safety and security dimensions. Additional research focused on finding innovative technologies that could address these issues. The report can be accessed at <https://www.transit.dot.gov/research-innovation/report-congress-innovative-safety-and-security-technology-solutions-alternativ-0>.



Standards

Title: Transit Standards Development Program

Grantee: Center for Urban Transportation Research (CUTR), University of South Florida

Project Description:

This program supports research and development for collecting information necessary to adopt transit standards through rulemaking activities and identify and adopt voluntary standards in cooperation and coordination with standards development organizations. To guide the standards development program, the research leverages the findings and recommendations of the Safety Standards, Strategic Plan, and Data Collection Project as well as other related standards research projects and programs. The program provides a mechanism for FTA to receive input on both safety and non-safety standards from within the industry and organizations with specific expertise in public transportation safety by engaging stakeholders, standards development organizations (SDOs), and industry standards working groups.

Outputs:

Since September 2016, CUTR has provided research and analysis on needs, gaps, and recommendations for new standards or to modify existing standards. This project is expected to end in September 2018. Additional topic areas will be determined based on identified needs as the program progresses. The following reports were delivered in FY 2017:

- “Event Data Recorders for Rail” (June 2017)
- “Emergency Lighting and Signage for Rail” (July 2017)
- “Crashworthiness for Rail” (July 2017)
- “Crashworthiness for Buses” (August 2017)
- “Event Data Recorders for Buses” (August 2017)
- “Rail Tunnels” (October 2017)
- “Fitness for Duty and Fatigue Management” (January 2018)

Outcomes/Impacts:

In addition to the seven reports noted above, this program will cover other topics based on standards needs identified by FTA. These reports provide information to FTA that assist in deciding the implementation of new recommendations, guidelines, or standards that can be used by transit agencies, making public transportation safe and reliable and ensuring that transit systems

are in a state of good repair. The ultimate impacts of this program are increased safety and reduced injuries and fatalities.

FTA Funding: \$2,500,000

Human Resources and Training

National Transit Institute (NTI)

Grantee: Rutgers University

Project Description:

NTI is operated through an agreement with Rutgers University, a public four-year degree-granting institution of higher education as required in 49 U.S.C. 5314(c) to “develop and conduct training and educational programs for Federal, State, and local transportation employees, United States citizens, and foreign nationals engaged or to be engaged in government-aid public transportation work.” Public transportation is a unique subject that is not taught in schools, and knowledge and numerous skills are needed to provide training to support the efficient and effective operation of public transportation. NTI was established to specifically address the knowledge gaps that exist. Additionally, with the aging workforce and increasing retirements as well as more people entering the transit workforce, NTI training is critical to ensure that the industry has a well-educated workforce to continue compliance with Federal rules and ensure that Federal dollars are wisely spent.

Outputs:

NTI receives funding yearly from FTA as required by statute. NTI training needs are developed and identified through an open process that is representative of the public transportation industry’s needs as defined by the industry and FTA. Courses and direct training have been the backbone of NTI’s efforts, helping FTA grantees comply with current rules and regulations, and its training techniques are beyond classroom-style training and include interactive CD-ROMs, videos, teleconferencing, and distance learning and webinars. NTI supports the development of the current and future transit workforce. Although most transit jobs are in operating and maintaining transit service, numerous technical, supervisory, managerial, and administrative positions also are a focus of NTI’s courses and support developing a future-focused workforce and enhance the skills of the STEM-related careers in the transit industry. Having a well-trained transit workforce means transit agencies are operated efficiently and effectively and support the ability of Americans to access jobs, healthcare, and other needs. NTI outputs in FY 2017 include the following:

- Delivered 270 training courses throughout the U.S. to 7,298 participants.
- Developed and delivered a course on Transit Asset Management (TAM) for Tier II providers and sponsors to support implementation of FTA's TAM rule in compliance with Federal transit law. Under development is a TAM course for Tier I reporters that will be delivered in the upcoming NTI program year.
- Developed and delivered an Advanced Level Environmental Justice Workshop using 10 case briefs that provide transit agencies with best practices for successful environmental justice efforts that result in a more effective planning process.
- Developed and delivered a course on ridership forecasting with STOPS for transit project planning that forecasts ridership to support transit planning and development of major capital projects.
- Revised courses to reflect current Federal transit law and regulation, including:
 - Five courses on Procurement (Series I through Series IV; Small and Medium Transit Systems).
 - Understanding ADA
 - Disadvantaged Business Enterprise
 - FTA Real Estate Requirements
 - Management of Transit Construction Projects
 - Risk Assessment for Transit Capital Projects
 - National Transit Database
 - Public Involvement in Transportation Decision-Making
 - Transit-Oriented Development
- Implemented a new course attendance policy aimed at reducing the number of “no-shows” at course deliveries, resulting in more seats being available for attendees and more individuals being trained at the same costs.
- Began development of PBPP and Transportation Planning Process courses that will be delivered in the next NTI program period.

Outcomes/Impacts:

- NTI's yearly expenses average approximately \$4.5 million. Of this amount, approximately \$3,793,000 was spent to deliver courses, with the remainder dedicated to revision of existing courses and development of new courses.
- In FY 2017, the program delivered 270 training courses throughout the U.S. to 7,298 participants at an average cost per course of approximately \$14,000 and an average cost per participant of approximately \$519. Available data show that the average annual expenditure per adult learner is \$800 and the average cost per college credit hour is \$594, indicating that NTI's cost

averages are very efficient, especially since NTI also supports other activities from its yearly funding allocations.

- Supported a MOD Community of Practice workshop to demonstrate innovative educational techniques used to provide real-time impact to industry issues as they arise, such as workforce shortages and issues in workforce recruitment and retention.
- Implemented a new attendance policy to reduce the number of “no-shows” at courses.
- Significantly revised and developed new planning and program management courses in response to regulatory and statutory changes from MAP-21 and the FAST Act. Revised courses are offered as revisions are completed; new courses will be offered in the upcoming year.
- Rutgers University operates the NTI program with a staff of 11. As of June 2017, over 26 years of operation, NTI has delivered 6,270 courses to a total of 178,591 participants.

FTA Funding: \$5,000,000

Table 2 *NTI Courses Offered in FY 2017*

Program	Current Courses Offered
Intermodal and Public Transportation Planning	<ul style="list-style-type: none"> • National Transit Database (Urban Reporting) • National Transit Database Webinars • State and Metropolitan Transportation Programming • Title VI and Public Transit • Transit-Oriented Development • Ridership Forecasting with STOPS* • Performance Based Planning and Programming* • Public Involvement in Transportation Decisionmaking • Transportation Planning Process*
Management	<ul style="list-style-type: none"> • Best Practice Seminars/Workshops • Building Diversity Skills in the Transit Workplace (Direct Delivery) • Building Diversity Skills in the Transit Workplace (Train-the-Trainer) • Cultural Change at Transit Agencies* • Effective Supervision in Transit • Fundamentals of Transit Supervision • Harassment Prevention (Train-the-Trainer) • Harassment Prevention for Transit Employees (Direct Delivery) • Harassment Prevention for Transit Supervisors (Direct Delivery) • Introduction to Transit Asset Management • Leading as a Mid-Manager in Today's Public Transportation • Mid Manager Training (with ENO) • Overview of Transit Procurement for Senior Leadership • Project Management for Transit Professionals • Senior Leadership for Public Transportation • Transit Academy

Table 2 cont'd *NTI Courses Offered in FY 2017*

Program	Current Courses Offered
Environmental Factors	<ul style="list-style-type: none"> • Advance Environmental Justice* • Introduction to Environmental Justice • Introduction to Transportation Conformity • Managing the Environmental Review Process Seminar • Transit Noise and Vibration Impact Assessment
Acquisition and Joint Use Rights-of-Way	<ul style="list-style-type: none"> • FTA Real Estate Requirements
Engineering and Architectural Design	<ul style="list-style-type: none"> • Introduction to Transit Service Planning • Transit ITS Seminar
Procurement Strategies for Public Transportation Systems	<ul style="list-style-type: none"> • Procurement for Small and Medium Transit Systems • Procurement Series I – Orientation to Transit Procurement • Procurement Series II – Risk Assessment and Basic Cost or Price Analysis • Procurement Series III – RFPs and Competitive Contract Negotiations • Procurement Series IV – Contract Administration • Procuring Technology*
Turnkey Approaches to Delivering Public Transportation Systems	<ul style="list-style-type: none"> • Transit Trainers' Workshop
New Technologies	<ul style="list-style-type: none"> • Implementing Rural Transit Technology • Systems Engineering for Technology Projects • Using Regional ITS Architecture(s)
Emission Reduction Technologies	<ul style="list-style-type: none"> • Courses in development
Ways to Make Public Transportation Accessible to Individuals with Disabilities	<ul style="list-style-type: none"> • Advanced Mobility Device Securement Skills Development Workshop • Comprehensive ADA Paratransit Eligibility • Disadvantaged Business Enterprise • Managing Community Mobility • Mobility Management Skills* • Paratransit Management and Operations • Understanding ADA • Fare Policy Analysis*
Construction, Construction Management, Insurance and Risk Management	<ul style="list-style-type: none"> • Infectious Disease Awareness and Prevention (Direct Delivery) • Infectious Disease Awareness and Prevention (Train-the-Trainer) • Management of Transit Construction Projects • Project Management for Transit Professionals • Risk Assessment for Transit Capital Projects • Transit Asset Implementation for Tier II Providers & Sponsors*
Maintenance	<ul style="list-style-type: none"> • Transit Maintenance Leadership Workshop • Using the Transit Economic Requirements Model (TERM Lite) – Computer Lab • Using the Transit Economic Requirements Model (TERM-Lite) – Laptop Required
Innovative Finance	<ul style="list-style-type: none"> • Financial Planning in Transportation
Workplace Safety	<ul style="list-style-type: none"> • All-Hazards Awareness and Preparedness for Transit Employees (Direct Delivery) • All-Hazards Awareness and Preparedness for Transit Employees (Train-the-Trainer) • Assault Awareness and Prevention for Transit Operators (Train-the-Trainer) • Assault Awareness and Prevention for Transit Operators (Direct Delivery) • Musculoskeletal Disorder Awareness and Prevention (Direct Delivery) • Musculoskeletal Disorder Awareness and Prevention (Train-the-Trainer) • Toolbox for Transit Operator Fatigue: Putting the Report Into Action

Table 2 cont'd *NTI Courses Offered in FY 2017*

Program	Current Courses Offered
Public Transportation Security	<ul style="list-style-type: none"> • Crisis Communication for Transit Employees (Direct Delivery) • Crisis Communication for Transit Employees (Train-the-Trainer) • Developing a Transit Emergency Management Plan • National Incident Management System and Incident Command System: An Introduction for Public Transit Personnel • Rail Signaling (Online) • Securing Community Mobility (Direct Delivery) • Securing Community Mobility (Train-the-Trainer) • Violence in the Transit Workplace – Prevention, Response and Recovery (Direct Delivery) • Violence in the Transit Workplace – Prevention, Response and Recovery (Train-the-Trainer)

*New course in 2017

Figure 9*NTI Testimonials*

“NTI classes are my first choice when it comes to training in the various fields in the transit industry. I like to send new employees with little to no experience in transportation to NTI classes. They can learn and interact and get their questions answered. Whenever my colleagues are looking for transportation training, the first place I point them to is NTI. As a new Advisory Board member, I am very impressed with the massive amount of training the organization is able to accomplish in a fiscally-responsible manner. DART has had the privilege of hosting NTI’s Transit Academy, one of the most comprehensive learning experiences for those new to or need a refresher in transportation.”



*Tammy J. Haenftling, Assistant Vice President, Mobility Management Administration,
Dallas Area Rapid Transit (DART)*

“I have found NTI’s courses and their content to be very valuable—in particular, the train-the-trainer courses, which enable TARC’s trainers to be on the ball and up to date. NTI provides us with the length and breadth of what is needed to respond to a rapidly-changing environment, from procurement to security, from customer service to project management. With the broad range of materials offered across a variety of geographic locations, we can access what we need when we need it. Many of our team members have benefited directly, and all our team members have benefited indirectly. NTI is a cost-effective, encyclopedic, in-depth, and rapid response to our need to provide high-quality public transportation services to our customers.”

*J. Barry Barker, Executive Director
Transit Authority of River City (TARC), Louisville, KY*

FY 2015 Innovative Transit Workforce Development Projects

FTA has 17 active projects under the Innovative Transit Workforce Development Program that was launched in FY 2015. The primary purpose of these Innovative Workforce Initiative projects was to pilot various creative workforce activities across the U.S. in various settings – rural, urban, suburban, and tribal – to see which solutions were the most effective in addressing workforce shortages and needs. These projects span five areas:

- Recruiting new entrants to public transportation jobs
- Incumbent worker training
- Conducting youth outreach and engagement
- Creating internships, apprenticeships, and work-based skills training
- Curriculum development

As of July 2017, most FY 2015 projects were more than 50% complete. Grantees are tracking qualitative and quantitative outcomes, including the number of direct participants they expect to serve through their programs. Of the \$8.3 million awarded in FY 2015, approximately 77% (\$6.2 million) went directly to serving program participants; the remaining \$1.9 million was for investments in curriculum development and program start-up and planning activities. The primary area of focus for many projects is training, either developing new training curricula or seeking to recruit and train specific groups, especially those who are underrepresented in the public transportation workforce.

All 17 active FY 2015 projects are working to provide opportunities for traditionally disadvantaged communities or those who are underrepresented in transit and transit construction. Various projects target recruitment of minorities, including Tribal citizens, women, veterans, returning citizens, persons with disabilities, and low-income individuals. In addition, many programs provide support services to overcome barriers to employment for targeted groups including case management, coaching, or assistance with various program or registration fees.

To date, workforce development programs have trained 4,151 individuals, and 6,634 individuals were selected and able to participate in their local programs, achieving 94% of the target. Of those successfully trained to date, 846 people obtained employment, 84 obtained internships, and 283 obtained or were placed in apprenticeships in a variety of transit careers and jobs at transit properties, suppliers, or other transportation-providing entities. As required by law, each grantee submitted to FTA year-to-date milestone progress reports on July 31, 2017, with their current project activity status. Table 4 provides a summary of key performance metrics for these grants.

Table 3 FY 2015 Innovative Transit Workforce Development Projects

Project Name	Grantee Name	City and State	Investment Area*					Funds Awarded
			1	2	3	4	5	
Discover Opportunities – In Transit! (DO IT!)	Santa Clara Valley Transportation Authority	Santa Clara, CA			x			\$200,000
Institute for Advanced Transportation Technology Training	Los Angeles Trade-Technical College	Los Angeles, CA				x		\$750,000
Moving Employees into Transit Related Opportunities (METRO)	Community Career Development, Inc.	Los Angeles, CA		x				\$331,313
Transit Career Ladders Training Program	Bay Area Rapid Transit District (BART)	San Francisco Bay Area, CA				x		\$750,000
Workforce Initiative Now! 2.0	Regional Transportation District (RTD)	Denver, CO		x				\$663,256
Back-2-Work	Jacksonville Transportation Authority (JTA)	Jacksonville, FL					x	\$200,000
Second Chance	Chicago Transit Authority (CTA)	Chicago, IL	x			x		\$750,000
Massachusetts Construction Career Development	Mass DOT	Hopkinton, MA				x		\$744,536
Integrating Career Pathways in Public Transportation: Rail Car Maintenance and Beyond	International Transportation Learning Center	Silver Spring, MD		x			x	\$750,000
Signaling Career Pathways: Putting Veterans and Women on Track and Advancing Signals Technicians	International Transportation Learning Center	Silver Spring, MD		x			x	\$574,182
Metro Transit – Mass Transit Technician Program	Metropolitan Council	Minneapolis-St. Paul, MN		x		x		\$203,210
Workforce Development Training Program	Jersey City Employment Training Program, Inc.	Jersey City, NJ	x			x		\$604,896
Skilled Laborer Jobs Training Program	Niagara Frontier Transportation Authority	Buffalo, NY				x		\$303,000
Career Pathways Program	Greater Cleveland Regional Transit Authority (GCRTA)	Cleveland, OH		x				\$407,780
N2N Automotive University	Grand Gateway Economic Development Association (EDA)	Big Cabin, OK	x			x		\$399,933
Puget Sound Region Ladders to Opportunity Initiative	Workforce Development Council of Snohomish Co.	Puget Sound, WA	x					\$476,776
Village Vans Program	Intercity Transit	Olympia, WA						\$200,000
Total FY 2015 Projects Funded								\$8,308,882

* Types of Workforce Development grants:

1. New Entrants (e.g., veterans, women, re-entrants, etc.)
2. Incumbent Worker Training (e.g., frontline [bus/rail operators], supervisors/managers, etc.)
3. Youth Engagement & Outreach
4. Internship, Apprenticeship, Work-Based Skills Training or New Technology Training
5. Curriculum Development

Table 4
*Status of FY
 2015 Innovative
 Transit Workforce
 Development Projects
 as of July 31, 2017*

Funds awarded	\$8,308,882
Funds expended	\$4,509,591
Percentage of total grant funding expended	49.95%
Number of people trained	4,151
Total number of direct participants	6,634
Number who achieved employment	846
Number who achieved an internship	84
Number who achieved an apprenticeships overall	283

Once the FY 2015 Innovative Transportation Workforce Development Projects are completed, more than 7,300 people will have been reached and 4,800 trained, resulting in 1,327 participants obtaining part- or full-time employment, 108 obtaining an internship, and 523 obtaining an apprenticeship in transportation careers and jobs. With public transportation jobs paying \$40,000–\$100,000 annually, this program is expected to result in approximately \$79 million in yearly wages, a return on investment of approximately \$10 in wages for every \$1 spent in Federal funds. Actual wage information will be calculated when the grants are completed.

At completion of the projects, the average total projected cost to serve a direct recipient is expected to be \$986, excluding the cost of outreach activities or the amount of grant funds being applied to planning, curriculum development, and other generalized activities. About \$1.9 million in overall grant funds is being used for replicable and sustainable activities that will help extend the efficacy and reach of these programs past what can be applied to a direct recipient. There is significant variability in how the grantees are serving direct recipients, which accounts for the variation in cost per participant, with some programs providing significant wrap-around services that last 1–2 years. For these programs, cost per direct participant averages \$1,500–\$7,000, which reflects the differences in costs in geographic areas and scopes of services, and costs may include activities such as training courses, individualized coaching, counseling, and other types of social services over a 1–2-year time period; such services can average \$150–\$300 per month. Table 5 presents the expected outputs of the active grantees at the completion of their period of performance.

Table 5
*Expected Outputs
 of FY 2015
 Innovative Workforce
 Development Projects*

Number expected to be trained overall	4,800
Number expected to achieve employment overall (part-time or full-time)	1,327
Number expected to achieve an internship overall	108
Number expected to achieve an apprenticeship overall	523
Unduplicated count of direct participants expected to be served through training, jobs, internships, apprenticeships (excluding outreach)	6,625
Total projected cost per direct participant	\$986

Formal program evaluations for these projects will begin in Winter 2017. The evaluation will use the same criteria as that used to assess the first two rounds of grants issued over the last six years. This will provide additional critical information to assess the impact of all of these investments and provide a framework for promoting research to practice so that other agencies can benefit from the accomplishments of the workforce grantees. A final complete evaluation report that summarizes results of the six years of investment in workforce development will give the industry a resource to assess what projects are right for their unique environment and workforce needs.

Title: Workforce Development Training

Grantee: Jersey City Employment Training Program, Inc. (JCETP)

Project Description:

JCETP operates an evidence-based re-entry program in close partnership with the Hudson County Department of Corrections Community Reintegration Program and provides a full complement of wrap-around case management services, sober housing, connection to insurance and benefits and substance abuse treatment and therapy from licensed onsite social workers. JCETP developed the Workforce Development Training Program to address the shortage of trained workers needed for massive ongoing regional transportation and infrastructure projects such as the New Jersey DOT's \$240 million Bayonne Bridge project, which will recruit participants from impoverished target groups who would otherwise rely on public social benefits and train them, thus creating a pool of highly skilled workers. The program provides support services to help participants acquire the certifications and education needed to secure apprenticeships and jobs. This grant relies on a strong network of partners, including Department of Labor One Stop Centers, labor unions, and county and city governments, by working with the social services provider Jersey City One Stop to ensure that participants will earn both relevant general accreditations (such as a GED) and access to transit jobs, internships, and training through local unions and workforce boards.

Outputs:

JCETP started the Workforce Development Training in November 2015, and it ended in December 2017. JCETP reached 700 people with its outreach and orientation sessions, and Returning Citizens JCETP trained 150 individuals. Of these, 22 are preparing to obtain their GED with Workforce Learning Link software, 6 have completed commercial driver license training, and 7 are in training through the Jersey City Department of Public Works.

Outcomes/Impacts:

JCETP has expended approximately 43% of its total workforce grant funding, and as of July 2017, it had placed more than 47 applicants in apprenticeships or unions, with 9 in the process of taking pre-tests and 61 securing employment. By the end of the grant, JCETP expects to help at least 360 people obtain employment at a projected cost per direct participant of \$538, an impressive number for the level of support services being provided.

FTA Funding: \$604,896

Title: *Workforce Initiative NOW (WIN) 2.0!*

Grantee: Regional Transportation District (RTD), Denver

Project Description:

WIN 2.0 is an expansion of Denver's highly successful FY 2011 WIN project. Drawing on a network of 58 local partners, the program successfully capitalizes on investments in public transportation infrastructure to generate high-quality employment and training opportunities for local area residents. As RTD approaches completion of several major transit projects, jobs in operations and maintenance are expected to be in high demand. The WIN program has a 90-day retention rate of at least 90%, and the program is expected to serve almost 2,000 people and train more than 350 in programs such as SkillUP, a 45-hour pre-employment boot camp to help participant assess career interests and aptitudes, and the Transit Tech Institute, which provides three career-ladder training programs designed to expand the pipeline of entry-level transportation workers.

Outputs:

RTD started the program in October 2015 and is currently working with FTA in the next steps to follow under this program. RTD had not expended any of its grant funds as of July 2017 but FTA expects to receive invoices reflecting expenditures by the end of calendar year 2017. WIN has provided outreach and orientation activities to 896 persons and trained 100 Denver residents on local FasTracks and infrastructure expansion projects, and 178 people obtained employment.

Outcomes/Impacts:

As of July 2017, WIN had not expended any of the workforce grant funds. The program is training and placing participants from underserved communities on large construction projects and for operations and maintenance positions, providing training to at least 350 people and helping at least 200 obtain

employment. It expects to achieve a cost per participant of \$166, approximately 80% lower than the average for these grants, demonstrating the effectiveness of having a large network of partners and building upon an already successful training program and maintaining a target retention rate of a least 90% for participants in middle-skill transit and construction careers. WIN 2.0 has also achieved a position advancement rate of 15%.

FTA Funding: \$663,256

Title: Back-2-Work!

Grantee: Jacksonville Transportation Authority (JTA)

Project Description:

A unique workforce development project and the first of its kind to be selected, the Back-2-Work! program ties workforce needs with major construction project bids. JTA will fund more than \$100 million in support of 27 transportation project over a five-year period as part of its Mobility Works Initiative, with staff working with prime contractors to develop a listing of subcontractor and labor opportunities and addressing Disadvantaged Business Enterprise (DBE) goals. By working with strategic partners such as the Florida Small Business Development Center, Jacksonville Job Corps, and Duval County Public Schools, this innovative program helps workers and small business owners from minority communities provide their services to the transit industry and address the workforce needs for major transportation projects. Each prime contractor bidding on transportation projects must develop a required workforce utilization program, which enables them to bid on future transit construction projects.

Outputs:

JTA started the Back-2-Work! project in October 2015; it will continue until September 2018. JTA identified labor needs and potential employees and trainees and trained 189 participants, with 215 small and disadvantaged business partners benefiting from the program.

Outcomes/Impacts:

As of July 2017, JTA had expended 51% of its workforce total grant funding. Of the \$200,000 awarded, JTA will use 79% of its funds to assist program participants. This will further enable JTA to impact 75% of the individuals and businesses that enter and complete its Back-2-Work! Business Development Academy. Currently, the Back-2-Work! Program has enabled 113 participants to obtain employment, with 60% of trainees being placed with contractors and an expected 45% retained after 90 days. The Back-2-Work! Program will

provide employment services and assistance to approximately 98 participants. An additional 300 individuals/participants and business owners will receive small business training. The expected cost per participant of \$527, more than 40% below the average cost per participant for all 2015 workforce grants of \$986.

FTA Funding: \$200,000

Title: Ladders of Opportunity – Moving Employees into Transit-Related Opportunities (METRO)

Grantee: Community Career Development, Inc. (CCD)

Project Description:

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is experiencing a significant shortage of bus operators and, with impending retirements, data suggest it will face even greater shortages in the future. To address this issue and the challenge with recruiting and successfully training bus operators, CCD developed the METRO program, which recruits low-income individuals, including underserved groups such as women, veterans, and minorities, from communities throughout metropolitan Los Angeles who have suffered from a lack of employment opportunities to train as potential bus operators and rail car assemblers and to prepare current rail/bus operators for promotion to supervisors. This requires a full complement of wrap-around case management and mentoring support services in addition to training. Participant support will be for one year after employment and spans financial assistance, career counseling, career coaching, and other services. Upon completion of the grant, CCD expects to train at least 200 individuals and assist 90 with a full year of employment support services.

Outputs:

This project started in September 2015 and ended in December 2017. As of July 2017, CCD had expended 94% of its grant and trained 220 people, with 121 obtaining employment. Marketing activities reached 400 people, and those employed will receive individualized support at a forecasted cost per participant of \$1,499.

Outcomes/Impacts:

The Bus Operator Training Academy (BOTA) Bridge class trained 201 people to meet the job needs for highly-skilled transit workers in the Los Angeles area. The program addressed job shortages, with a target to employ at least 93 people. CCD has reached veterans and developed a strong relationship with Santa Monica Big Blue Bus, with which it is replicating the BOTA training model. These participants are now able to seek employment as bus operators within the Los

Angeles area, including at LACMTA, MV Transit, and the Santa Monica Big Blue Bus company. The BOTA Program trained veterans and others from underserved groups and is an example of one method used to fill bus operator positions. The program is expected to generate \$5+ million in new wages and assist LACMTA and MV Transit in their impending job shortage. The projected cost per participant of \$1,499 includes a full complement of training and support services to aid in retention and job success. There have been 121 people employed after receiving this training. The training, which enabled these positions to be filled.

FTA Funding: \$331,313

Title: *Second Chance*

Grantee: Chicago Transit Authority (CTA)

Project Description:

This grant expands the Second Chance program, which offers Chicago residents in difficult circumstances a path to economic stability by extending enrollment to reach more targeted job seekers, authoring career path curricula for diesel mechanics and other fields, implementing comprehensive skills testing and assessment tools for program participants, adding nationally recognized certifications, and developing job placement services for graduates who successfully complete 12 months of paid job training. Program participants receive experience as bus and rail car servicers, diesel mechanics, or bus operators. The program prioritizes reaching and supporting individuals with barriers to employment including ex-felons, abuse survivors, and the homeless. Participants receive training and cross-training in software and other skills needed to thrive in the transit workforce of the future. Partnerships with local social services agencies ensure that enrollees receive the support they need on the way to self-sufficiency. Fourteen social service agencies were selected to work with qualified job seekers.

Outputs:

Second Chance started in August 2015 and ended in April 2017. Under this project, 230 participants entered the Second Chance program and were trained in fields such as maintenance, operations, and customer service. Second Chance has provided permanent frontline and entry level transit jobs at the CTA for 64 program participants in positions including bus servicers, rail car servicers, rail car repairers, customer service representatives, and bus operators.

Outcomes/Impacts:

As of July 2017, CTA had expended approximately 13% of its workforce grant funding. A total of 53 individuals trained became employed in targeted positions and are now receiving support services to help them succeed and retain employment. CTA applies 70% of grant funding to direct services and expects to achieve a projected cost of \$1,747 per participant, which equates to about \$125 per month per person per support session. Second Chance has achieved a 27% employment rate for those who attended training. By the end of the grant, CTA will provide employment opportunities within its property or skills to gain employment at other surrounding transit properties for at least 265 people. FTA is expecting a final report in August 2019.

FTA Funding: \$750,000

Title: Massachusetts Construction Career Development

Grantee: Massachusetts Department of Transportation (MassDOT)

Project Description:

MassDOT is developing the Massachusetts Construction Career Development (MCCD Program to improve existing and successful pre-apprenticeship programs in the construction trades, focusing on underrepresented groups such as women and minorities. To support the enhancement of these programs, MassDOT will work with four existing anchor programs—Community Works, Building Pathways, Worcester-Fitchburg Building Pathways Programs, and Youth Build Boston. Transportation employers in Massachusetts have indicated support for working with hiring sources that refer trained, screened employees through proven pre-apprenticeship programs.

Outputs:

This career development program started in August 2015 and ended in December 2017. In total, 1,194 people attended outreach and orientation sessions, and 128 were trained. Significant planning and development activities were completed with each partner; 53% of grant funding was used to further refine and develop the four anchor programs. FTA is expecting a final report for this project by April 2018.

Outcomes/Impacts:

This initiative had expended 63% of grant funding as of July 2017. It has met its employment target and projects a cost of approximately \$2,086 per direct recipient. In total, 78 people were employed as a result of these programs out of the 169 people who directly participated, a 46% employment rate, with an

additional 18 receiving apprenticeships. The program projects that at least 51 people will receive apprenticeships.

FTA Funding: \$744,536

***Title: Integrating Career Pathways in Public Transportation:
Rail Car Maintenance and Beyond***

Grantee: International Transportation Learning Center (ITLC)

Project Description:

ITLC is integrating two sets of initiatives in rail car maintenance to create and connect two related but often disconnected pathways activities—pre-employment education and training, and training for employees after they are hired. Building on the Transit Core Competencies Curriculum (TC3) that prepares participants with the skills needed to start a career in transit, ITLC will add higher levels of technical training in the Rail Car Training Consortium. Key strategic partners are the Amalgamated Transit Union, the American Federal of Teachers, APTA, CTAA, the Corps Network, the National College Credit Recommendation Service, and the U.S. Department of Education.

Outputs:

This project started in October 2015 and will end in April 2018. As of July 2017, five webinars on Heating, Ventilation and Air Conditioning (HVAC) and three webinars on Propulsion & Dynamic Braking were conducted, and four of the six modules for TC3 were finalized. Project staff also surveyed participating transportation agencies to identify their training needs and identified core locations and partners, with 14 agencies committed to participating.

Outcomes/Impacts:

ITLC had expended about 70% of its total funding as of July 2017. A total of 130 were trained at a cost of approximately \$5,000 per participant, reflecting the depth and extensive set of courses. By the end of the grant, ITLC expects to directly assist 150 individuals with coursework that will prepare them with core and specialized skills that will equip them for essential positions in public transit agencies. The broad reach already achieved ensures long-term sustainability of these new curricula.

FTA Funding: \$750,000

Title: Signaling Career Pathways: Putting Veterans and Women on Track and Advancing Signals Technicians Grantee

Grantee: International Transportation Learning Center (ITLC)

Project Description:

This project is addressing the need for highly skilled signals technicians by enhancing existing Signals Training coursework through a consortium of agency and union partners. The results will be 13 new courses, including an extensive introductory course and courses in inspection, maintenance, and troubleshooting for signaling, interlocking, power distribution, and control panels with classroom and on-the-job training. ITLC will recruit women and veterans for these courses to address public transportation's need for highly skilled signals technicians and enhance workforce diversity.

Outputs:

This program started in September 2015 and ended in December 2017. ITLC piloted 12 courses with 89 participants to allow agencies to test and identify needed changes. In addition to courseware, ITLC's Veterans Task Force created a Veterans Outreach and Skills Guide and a Women's Toolkit.

Outcomes/Impacts:

ITLC had expended about 70% of its total funding as of July 2017. A total of 130 were trained at a cost of approximately \$5,000 per participant, reflecting the depth and extensive set of courses. By the end of the grant, ITLC expects to train 150 individuals by providing pre-employment education and training and core training needed to obtain and maintain a job in rail car maintenance. Currently, ITLC is set to meet the goal of 150 individuals trained. ITLC expects to directly assist 150 individuals with coursework that will prepare them with core and specialized skills that will equip them for essential positions in public transit agencies. The broad reach already achieved ensures long-term sustainability of these new curricula.

FTA Funding: \$574,182

Title: Metro Transit Technician (MTT) Program

Grantee: Metropolitan Council/Metro Transit, Minneapolis-St. Paul, Minnesota

Project Description:

To address the workforce needs of Metro Transit, this grant will develop a pool of future bus mechanic technicians to help them meet the Twin Cities' transportation needs. The MTT program is recruiting low-income,

underemployed, and other disadvantaged groups and providing complementary social services as needed to help ensure participant success.

Outputs:

MTT started in October 2015 and ended in September 2016. Metropolitan Council/Metro Transit expended 100% of its total grant funding and received a final report in January 2018. MTT has incurred expenses and is working with FTA to correctly submit invoices. Of more than 424 people reached through outreach and orientation, 22 participants successfully completed a 16-week empowerment training and academic readiness program, which led to acceptance into Hennepin Technical College's two-year Associate's degree program to become a Medium/Heavy Truck Technician; of these, 19 obtained employment.

Outcomes/Impacts:

At the end of the grant period, MTT trained 40 people with a cost per person served of approximately \$1,676.

FTA Funding: \$203,210

Title: Career Pathways Program

Grantee: Greater Cleveland Regional Transit Authority (GCRTA)

Project Description:

Faced with a number of retirements and the lack of a skilled workforce of qualified candidates, GCRTA created the Career Pathways Program (CPP) to provide economic growth for greater Cleveland residents. CPP is designed for new transit entrants and targets low-income, minority, veteran, and female recruits and is building a pathway to long-term transit careers in four ways: (1) introduction of career opportunities to frontline worker positions; (2) hiring college students as interns; (3) developing recent college graduates in a Management Development program; and (4) enhancing skill development for existing middle managers. The program is addressing all aspects of the transit workforce, from student internships to upper-level management. A partnership with El Barrio Workforce Development Center is recruiting and training women, minorities, and veterans to join the GCRTA workforce, especially in low-income communities. Upon completion of these programs, GCRTA will offer internships and on-the-job training to prepare successful participants for careers at the agency.

Outputs:

This program started in November 2015 and ended in December 2017. In total, 105 people were trained, with 12 completing mechanical or electronic repair

training provided through Cuyahoga Community College and beginning 12-week internships. Of the participants selected for the training, 77 have obtained employment.

Outcomes/Impacts:

GCRTA had expended approximately 53% of its total grant funding as of March 2017. At the conclusion of the grant, GCRTA expects to have assisted 152 individuals at a cost of \$2,683 per participant, with 110 obtaining full-time employment. Most studies suggest the salaries of these positions to be \$40,000–\$100,000; at an average of \$60,000 annually, 110 jobs equate to projected wages of more than \$6 million, a 15-to-1 ratio—for every \$1 of Federal funds, this grant expects to leverage \$15 in wages.

FTA Funding: \$407,780

Title: Nation-2-Nation (N2N) Automotive University

Grantee: Grand Gateway Economic Development Association (EDA)

Project Description:

The Grand Gateway EDA established the N2N Automotive University in the Green County region of northeast Oklahoma, a rural and low-income area, and is working with the Northeast Oklahoma Workforce Investment Board, the Oklahoma Workforce DESI program, and the Northeast Technology Center to provide opportunities to those who need it most. The N2N program, through its automotive repair training and operations training, is creating a new university and set of curricula with fast-track job certification and on-the-job training and career pathways into transportation jobs along with support services. The N2N program is the first automotive university and program in Indian Country.

Outputs:

N2N University launched in FY 2016 and began development of coursework and recruitment strategies, hired staff, and finalized planning activities. The project is expected to end in July 2018.

Outcomes/Impacts:

Once operational in late 2017, the program will identify and train participants primarily from low-income Tribal communities in the area. Training and certifications will address important areas of transit workforce shortages such as providing automotive repair and bus operations skills. The program is designed to coordinate with existing entities willing to share resources and expertise

to make the program replicable and scalable throughout Indian Country and beyond. Major results to date include planning for the CDL/Transit Driver program and recruiting an initial group of students to pilot the program. As of July 2017, 16 people were reached through outreach and orientation and 5 were trained and obtained employment. At the conclusion of the grant, at least 52 are expected to obtain employment. The expected average cost per direct participant is \$4,307 due to the training and support services provided to each person who enters the program and the hands-on nature of the training.

FTA Funding: \$399,933

Title: Puget Sound Region Ladders to Opportunity Initiative

Grantee: Workforce Development Council of Snohomish County, WA

Project Description:

This initiative brings together eight partners across Snohomish, King, and Pierce counties to create a pipeline of skilled workers ready to enter the construction and transit industries. The partners will develop comprehensive career training, including mechanical and technical skills and resume building. Targeted outreach, to groups such as women, minorities and native tribes, is connecting new recruits to apprenticeships, social services, and job placement programs to address the skilled transit worker needs for the more than \$30 billion in transportation construction projects in the three regions. The partners will provide vocational pre-apprenticeship training, apprenticeships, and non-traditional employment for women and training from Bates Technical College.

Outputs:

The partners of Workforce Snohomish, Sound Transit, City of Tacoma, Apprenticeship & Non-Traditional Employment for Women, Bates Technical College, Seattle Vocational Institute Pre-Apprenticeship Training Program, Tulalip Tribal Employment Rights Office Construction Training Center, and the Urban League of Metropolitan Seattle have reached 3,768 people in outreach and orientation sessions and trained 320 participants, with 186 obtaining employment. This program started in September 2015 and ended in December 2017.

Outcomes/Impacts:

Approximately 62% of total grant funding was expended as of July 2017. The program is succeeding in reaching its target to bring more women into pre-apprenticeship programs—all 15 direct participants in the program are women. When completed, the project is expected to help 145 people obtain

employment, reach more than 3,500, and train at least 196 at a cost per participant of \$1,930. FTA is expecting the final report for final approval of funding and close out of the project.

FTA Funding: \$476,776

Title: Transit Career Ladders Training Program

Grantee: Bay Area Rapid Transit (BART) District, CA

Project Description:

BART established the Transit Career Ladders Training (TCLT) Program to create a direct and accessible pathway to employment for traditionally underrepresented individuals in the transit industry by partnering with workforce investment boards and community colleges in the Bay Area in three activity areas—community outreach, technical training, and non-technical training to address public transit workforce shortages in the Bay Area.

Outputs:

The project started in September 2015 and was completed in December 2017. As of July 2017, BART had spent \$110,690 of its workforce program funds. The TCLT program provided college placement testing to 418 applicants in Math and English, with 379 receiving passing or marginal scores. The programs target populations that are historically disadvantaged and have 32% unemployment, 28% of whom are women. Of 379 students, 135 were enrolled and participated in the Academic Bridge program for 6 weeks and became eligible to participate in the TCLT program, 103 enrolled in the Spring 2017 Technical Training Program, and 95 enrolled in the Fall 2017 Technical Training Program. FTA is expecting a final report on this project in April 2018 that will highlight the final numbers of this project and the impact it had in employment and its community.

Outcomes/Impacts:

Approximately 15% of total grant funds has been expended. A total of 135 people have been trained since the beginning of the program, and an additional 1,610 people were reached through outreach and orientation, with an expected cost per direct recipient of \$5,556 for the two-year program, with a goal of securing employment. Participation in the program is resulting in new recruits for transit careers. A total of 6 individuals had achieved employment as of July 2017, and the primary purpose is to prepare participants who successfully complete the Technical Training phase and pre-employment and background screening phases

to become eligible to participate in the Field Training Program, which qualifies them to compete in the selection test and be placed in hiring pools at BART.

FTA Funding: \$750,000

Title: *Institute for Advanced Transportation Technology Training (IATTT)*

Grantee: Los Angeles Trade-Technical College

Project Description:

The Los Angeles Trade-Technical College serves more than 23,000 students annually and has a 90-year history of providing workforce training and transfer opportunities. This project was developed to address forecasted workforce shortages for transportation workers in the Los Angeles area, bringing together a diverse set of partners to create the IATTT. Partnering with LACMTA, local unions, and workforce organizations, the College is forming the Transportation Pathway for Academic Career and Transfer Success (T-PACTS) program with this grant to build pathways to long-term careers in public transportation. T-PACTS is a new and innovative core curriculum that includes a workforce model that integrates a transportation competency framework with training and new curricula development to train both incumbent and new workers. The project is also developing a curriculum for Rail Systems Technology.

Outputs:

IATTT started in September 2015 and was completed in December 2017. Approximately 89% of total grant funding had been expended as of July 2017. This project increased employment opportunities for participants at Metrolink, LACMTA, Union Pacific, and others in the local region, as this project continues to spur training and career opportunities in transportation. Since award of this project in September 2015, the partners developed the Transportation Workforce Institute and a strategy for outreach and launched a pilot for the new Rail Systems Technology: Rail Vehicle Maintenance certificate and degree programs. Through its outreach efforts and strategy, 2,114 individuals have been introduced to various career options in transportation. In addition, 22 Metro employees in the Joint Apprenticeship Committee (JAC) program have been trained. As a result of participation in the FTA Workforce Summit, the College is working with LA Metro and the U.S. Department of Labor (DOL) to gain approval of the JAC program as an official DOL Registered Apprenticeship. Also held were 9 incumbent worker trainings, including 2 Cisco Networking trainings with 21 participants. FTA is expecting receipt of a final report in April 2018.

Outcomes/Impacts:

As of July 2017, 2,092 individuals were trained, and 22 trainees received an apprenticeship. The projected cost per participant is expected to be \$302, approximately one third of the average for this set of workforce grants. The new curricula and new framework developed through this new initiative housed within a highly-regarded technical college is setting the foundation for sustainable transportation training and development for many years to come.

FTA Funding: \$750,000

Title: *Discover Opportunities – In Transit! (DO IT!)*

Grantee: Santa Clara Valley Transportation Authority (VTA)

Project Description:

The DO IT! program is recruiting low-income and minority youth in the Santa Clara Valley and providing for a career in transportation planning. VTA found that it was challenging to find qualified local candidates for its transportation planner series of jobs and created this program in partnership with the San Jose Job Corps, the Mineta Transportation Institute (MTI) and Independence High School to provide training and classroom instruction. Successful candidates who complete the transportation planner training will have the opportunity to apply for internships. VTA expects to train 172 students and provide 5 paid internships, with one 12-month internship position and 4 six-month internships. Both classroom learning and hands-on training will be provided. Upon completion of the educational program and the internship, participants will be qualified for Transportation Planning Aide or Transportation Planner I positions.

Outputs:

VTA started this project in October 2015, and it ended in November 2017. VTA had expended about 16% of total workforce grant funding as of July 2017. The two-year program selected and assisted low-income and minority youth to training courses. The program reached its goal to train 172 participants and reach 200 people through outreach and orientation. VTA has issued five paid internships to underserved, underemployed, and minority youth that will prepare them for a career path as a transportation planner.

Outcomes/Impacts:

VTA has made significant progress to develop potential workers through transportation training at a cost per direct participant of \$756, less than the

anticipated average cost per direct participant of \$986. Approximately 65% of the award is being used to directly serve participants.

FTA Funding: \$200,000

Title: Skilled Laborer Job Training Program

Grantee: Niagara Frontier Transportation Authority (NFTA)

Project Description:

The Skilled Laborer Job Training Program was developed to recruit, train, and provide career pathways for traditionally underserved populations and semi-skilled incumbent NFTA workers. NFTA created the Skilled Laborer Job Training Program and partnered with the Buffalo and Erie County Workforce Investment Board, U.S. Veterans Affairs Western New York Healthcare System, and Erie I Board of Cooperative Educational Services to address current and pending skilled-job vacancy and diversity issues at NFTA by combining several levels of community involvement in the recruitment and training of prospective program applicants. Prospective applicants are recruited through these partnerships, and NFTA identifies candidates who possess the core competencies to successfully complete the program and provide continuing education to them and incumbent workers for additional career advancement. NFTA expects to train 40 incumbent and new participants in courses on industrial electricity, programmable logic controls, mechanical drives, hydraulics, pneumatics, sheet metal, pipefitting, welding, machining, and others, including CDL bus training.

Outputs:

This training program started in February 2016 and is expected to end in April 2018. As of July 2017, the program had trained five groups in the areas of electricity, hydraulics, pneumatics, machining, mechanical drives, pipefitting, welding, CDL bus training, and OSHA safety. An NFTA training bus is currently being retrofitted as a mobile classroom and is due to be completed in October 2017 to assist in teaching lower-skilled applicants and employees to work on a vehicle in a controlled environment to improve their mechanical skills.

Outcomes/Impacts:

NFTA had expended about 30% of its total grant funding as of October 2017, with approximately 90% being used to directly serve participants. The program has sponsored 30 new participants through the first four training groups, 21 of whom completed the 18-week training program. A total of 7 participants who completed the training have obtained employment as of June 2017.

FTA Funding: \$303,000

Title: Village Vans Program

Grantee: Intercity Transit

Project Description:

The Village Vans Program was developed to address barriers that low-income job seekers face related to transportation and to provide job training and work experience to individuals interested in transportation-related careers. Intercity Transit created the program and partnered with WorkSource Thurston County, Pacific Mountain Workforce Development Council, and Washington State Department of Social and Human Services. Participants are selected for training as volunteer drivers and/or administrative assistants for the program or as clients who use the service. Three vans are used to operate transportation services for clients and their dependents to reach jobs, job search activities, employment training, or other employment support destinations, such as child care, medical appointments, etc., that would be difficult or impossible for them to access otherwise. Intercity Transit expects to train 50 participants through driver and administrative training, with the goal of assisting 22 people with employment.

Outputs:

This two-year program launched in July 2017 and is expected to end in July 2019. As of July 2017, the program had reached the halfway point of its goal to train 50 participants. The program is expected to reach more than 200 people through outreach and referrals from the region's Workforce Development System. Intercity Transit has helped 17 participants obtain employment.

Outcomes/Impacts:

The Village Vans program was executed on September 23, 2017. There have been no expenditures to date. Intercity Transit is working with FTA to ensure that this program provides training opportunities to participants and possible employment opportunities.

FTA Funding: \$200,000

SECTION 2

Frontline Workforce Development Program Trends and Next Steps

Section 5314 requires the Secretary of Transportation to make publicly available a report on the Frontline Workforce Development Program for each fiscal year, not later than December 31 of the calendar year in which that fiscal year ends. The report must include a detailed description of activities carried out under this paragraph, an evaluation of the program, and policy recommendations to improve program effectiveness.

FTA did not solicit or award any new grants in FY 2017; however, it continued to advance innovative workforce development through competitive grants that were issued in 2015, as mentioned in Section I. FTA is also building and leveraging expanded partnerships with national organizations such as APTA and NTI.

FTA is collaborating with NTI to conduct an industry workforce needs assessment aimed at identifying training, skills, and educational gaps that exist in the industry as well as within current NTI programs. This is being done in light of the changing workforce, changing technologies, and changing environment in which transit operates. The output from this assessment will be a report that provides a roadmap for workforce development and training. As of September 2017, NTI held focus groups at key public transportation conferences that provided a preliminary picture of the public transportation industry's critical needs. The next steps include fielding a survey, doing curriculum mapping with NTI courses and key skills, and leading a national effort to develop a public transportation competency framework.

In addition, FTA is learning from the results from completed evaluations of its Innovative Transportation Workforce Development Program conducted in FY 2011 and FY 2012. The independent evaluation report for FY 2011 can be accessed at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Report_No._0094.pdf. FTA is finalizing the evaluation report for the FY 2012 programs, which will be posted on FTA's public site in March 2018. Following are the trends and next steps for FTA's Workforce Development Program based on the information gathered in FY 2011, FY 2012, and based upon FTA's participation and collaboration with industry officials.

Trends

An Aging Workforce and Changing Demographics

The public transportation industry is growing rapidly, particularly in large metropolitan areas such as New York City, Dallas, Fort Worth, Houston, and Chicago. Public transit and ground transportation, together, have the highest percentage of older workers that are at or nearing retirement age, with 35% over age 55 and 28% ages 45–54. In 2015, for the first time, millennials (those born 1982–1993) made up the majority of the workforce. With an aging workforce, it will be important for the transit industry to understand the needs and characteristics of its current and future workforce. Between 2012 and 2022, transportation is expected to need 4.6 million workers, roughly 126% of the 2012 workforce. Public transit and ground passenger transportation will have the highest growth in the transportation sector, at 135% of the expected growth.

The high turnover in career employees is a major concern for the industry, as knowledge transfer is important for incoming employees who will be filling these positions. Understanding the changing demographics that will be coming into the industry is important. Transit workplaces need strategies for inclusion and recognition of all races, genders, ethnicities, etc., and it is important that the public transit industry be aware of the changing demographics and be prepared to handle the diverse workforce that is entering the industry.

Lack of Diverse Representation

Even with rapid growth in the public transportation industry, disadvantaged groups still make up only a small percentage of the total workforce. Women make up only 35% of the transit workforce and are significantly underrepresented in technical positions. African Americans and Hispanics are underrepresented in higher-paid and skilled positions, comprising only 11% of bus and truck mechanics but 27% of vehicle cleaners.

Education Gap and Lack of Investment in Training

The lack of investment in technical training and the growing educational gap of current workforce workers is a major concern for the transit industry. As the industry continues to grow, so do the technical demands of the job. The expected number of transit job openings is currently 68% higher than the completions expected in analogous education programs, which is especially acute for rail transportation workers (95%) and bus and truck mechanics (59%). By 2018, an estimated 49% of all openings will require some amount of post-secondary education, ranging from a few community college courses to an Associate's degree and advanced certification. Frontline jobs are increasingly

becoming more technical, and advances in technology mean some jobs are less strenuous in terms of physical demand but require more technical knowledge, (e.g., bus and rail operators, bus and rail maintenance workers). Whereas the new demands on transit workers require a wider range of technical and non-technical skills than ever before, public transit has not invested in its workforce at a sufficient level. Estimates indicate that public transit expends only 0.6–0.8% on investing in human capital (e.g., training). By contrast, leading American companies spend 4.5%.

Based on these emerging trends, FTA recommends the following to begin to address them.

Need for Wrap-around Services

Some of FTA's workforce grantees are working with historically disadvantaged populations or individuals who need additional assistance in the early stages of training and development. These grantees are finding the wrap-around services that include social services supports, counseling, mentorship, and other services complement training and apprenticeship programs. Grantees are partnering with DOL-funded activities as well as DHHS activities to provide this holistic approach to personnel recruitment and development. The overall cost per person is higher than investments that only pay for training or apprenticeships; however, the success rate in helping people who would otherwise not be able to take advantage of and succeed with these new employment opportunities is higher.

Partnerships with Construction Firms at the Time of Contract Award

Many grantees have broad partnerships with educational institutions and community services organizations when developing and implementing new workforce programs. These partnerships are essential to creating the community framework needed to recruit, train, and retain employees. One way that some communities have boosted recruitment, especially where there are shortages of frontline workers such as bus operators, maintenance workers, and other critical roles is early partnerships with major construction firms during the proposal and award phase of their contracts. Firms are partnering with small and disadvantaged businesses to engage and identify early workforce needs. This helps build a pipeline of needed talent.

Next Steps for Innovative Workforce Development Initiative

Based on findings from the last five years, FTA plans to take a number of steps to further workforce development, including the following:

- Continue to expand partnerships with the U.S. Department of Labor.
- Develop a workforce strategic plan.
- Educate and assist the industry with using formula funds to replicate successful workforce projects and programs.
- Create useful materials for outreach from the \$20 million in grantee projects to date.
- Build a strong evaluation construct with consistent measures and evaluate the remaining FY 2012 and FY 2015 grantees using the same model from the FY 2011 grantee evaluation.
- Continue to build relationships and partnerships with transit industry partners.

FTA has learned much from its pilot workforce grant projects; in the future, any new workforce initiatives will focus on requiring a strong commitment to the number of people who have achieved or will achieve employment.

SECTION 3

FY 2018 Expected Activities and Program Planning Process for Technical Assistance and Workforce Development Allocations

FTA requested \$9 million for technical assistance and workforce development projects as authorized under Section 5314. A total of \$5 million of the \$9 million authorized from the Highway Trust Fund is for the statutorily required NTI program; the remaining \$4 million available for technical assistance, standards development, and human resource and frontline workforce development projects.

FTA developed a yearly cross-functional program planning process to develop, review, and recommend projects for Section 5314 funding to FTA senior leadership. Honed over the last two years, the process provides a transparent, collaborative mechanism that enables all FTA offices to suggest projects and participate in the review of those projects. The projects that achieve the best rating from participants based on selected criteria such as strategic value and return on investment are then proposed for funding. FTA senior leadership make all final decisions, and after those decisions are made, the appropriate acquisition strategy is developed and completed. At the time this report was completed, FTA had not yet begun the FY 2018 planning process. However, it is anticipated that FTA will continue to provide a significant portion of available Section 5314 funds to technical assistance activities.

FTA and NTI have collaborated to develop some strategic initiatives to further workforce development through training. Currently, NTI is leading a national workforce needs assessment to identify the current and emerging workforce skills and training public transit agencies require to recruit, retain, and train their employees. In FY 2018, NTI expects to field a survey building upon the findings of focus groups held at major conferences during FY 2017. Additionally, NTI will lead a national public transportation competency framework development initiative and curriculum mapping to help agencies identify courses to send their employees to based upon the skills and functional needs of each agency. Currently, NTI programs are primarily noted by function.

In FY 2017, FTA provided \$5 million for the National Aging and Disability Transportation Center and for the National Center for Mobility Management. These two long-standing and major technical assistance centers provide

assistance to public transit agencies to further the transportation needs of people with disabilities, older adults, and persons of limited income and to enhance coordination of community transportation resources. Thus, it is expected that FY 2018 funding will be allocated to other technical assistance, standards, and human resources activities.

ACRONYMS

ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
CTAA	Community Transportation Association of America
DOT	U.S. Department of Transportation
FACA	Federal Advisory Committee Act
FAST	Fixing America's Surface Transportation Act
FTA	Federal Transit Administration
ITSA	Intelligent Transportation Society of America
JARC	Job Access and Reverse Commute
MAP-21	Moving Ahead for Progress in the 21st Century Act
MOD	Mobility on Demand
NADTC	National Aging and Disability Transportation Center
NAS	National Academy of Sciences
NCMM	National Center for Mobility Management
OLI	Operation Lifesaver, Inc.
TCRP	Transit Cooperative Research Program
TOD	Transit-oriented development
TRACS	Transit Advisory Committee for Safety
TRB	Transportation Research Board
TRI	FTA Office of Research, Innovation and Demonstration
TRIS	Transportation Research Information Services



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