

FTA

FEDERAL TRANSIT ADMINISTRATION

FTA Annual Report to Congress on FY 2016 Technical Assistance and Workforce Development Projects

JUNE 2017

FTA Report No. 0109
Federal Transit Administration

PREPARED BY
Federal Transit Administration




U.S. Department of Transportation
Federal Transit Administration

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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

REPORT DOCUMENTATION PAGE		Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.			
1. AGENCY USE ONLY	2. REPORT DATE June 2017	3. REPORT TYPE AND DATES COVERED October 1, 2015 – September 30, 2016	
4. TITLE AND SUBTITLE FTA Annual Report to Congress on FY 2016 Technical Assistance and Workforce Development Projects		5. FUNDING NUMBERS	
6. AUTHOR(S) Office of Research Management, Innovation, and Outreach			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESSE(ES) Federal Transit Administration US Department of Transportation Office of Research Management, Innovation and Outreach 1200 New Jersey Ave., SE Washington, DC 20590		8. PERFORMING ORGANIZATION REPORT NUMBER FTA Report No. 0109	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Department of Transportation Federal Transit Administration Office of Research, Demonstration and Innovation East Building 1200 New Jersey Avenue, SE Washington, DC 20590		10. SPONSORING/MONITORING AGENCY REPORT NUMBER FTA Report No. 0109	
11. SUPPLEMENTARY NOTES [https://www.fta.dot.gov/research]			
12A. DISTRIBUTION/AVAILABILITY STATEMENT Available from: National Technical Information Service (NTIS), Springfield, VA 22161. Phone 703.605.6000, Fax 703.605.6900, email [orders@ntis.gov]		12B. DISTRIBUTION CODE TRI-30	
13. ABSTRACT This report provides information on FY 2016 training, technical assistance, and standards development projects authorized by Federal public transportation law 49 U.S.C. § 5314 (Section 5314). These projects further key public transportation goals, as authorized by Section 5314. This report includes information on FTA's human resources and training projects and the Workforce Development initiative. Also included is information on the National Transit Institute (NTI), and its training and educational programs for federal, state, and local transportation employees, US citizens, and foreign nationals engaged or to be engaged in government-aid public transportation work. To meet its technical assistance and workforce development requirements, Section 5314 authorizes FTA to issue grants, contracts, and cooperative agreements to achieve impacts to 1) more effectively and efficiently provide public transportation service and 2) improve public transportation. Projects in Section 5314 promote FTA's strategic goals of economic competitiveness, environmental sustainability, and improving the quality of life in communities. In 2016, FTA approved \$7.06 million and obligated \$10.3 million under Section 5314 for technical assistance, standards, and training projects awarded to prestigious academic institutions, public transportation associations, non-profit organizations, and others in various public transportation disciplines. This mix of local, state, regional, and national grantees ensures a spectrum of perspectives that enhance the reliability, validity, and generalizability of technical assistance and standards development projects.			
14. SUBJECT TERMS Public transportation, Section 5314, FTA appropriations, MAP-21, FAST, FTA demonstration and deployment, workforce development, workforce frontline, FTA innovation		15. NUMBER OF PAGES 85	
16. PRICE CODE			
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT

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U.S. Department
of Transportation

**Federal Transit
Administration**

Headquarters

1200 New Jersey Avenue S.E.
Washington DC 20590

Dear Colleague:

I am pleased to provide you with a copy of the Federal Transit Administration (FTA) Annual Report to Congress for Fiscal Year (FY) 2016 Technical Assistance and Workforce Development Projects. Section 5314 of title 49 U.S.C. authorizes FTA to issue grants, contracts, and cooperative agreements to more effectively and efficiently provide public transportation service, and improve public transportation. These projects promote FTA's strategic goals of economic competitiveness, environmental sustainability, safety, and improving the quality of life in communities.

Relating to the technical assistance, standards, and training part of this report, the amount of active FTA-funded projects totaled \$13.51 million in FY 2016. Five million of this investment is for the National Transit Institute (NTI). NTI provides educational programs for federal, state, and local transportation employees, US citizens, and foreign nationals engaged or to be engaged in government-aid public transportation work. During this time of significant change in public transportation when demographic and technology trends are driving new mobility services models and expanded use of public transportation, public transit agencies have even greater need for technical assistance and training. This report provides a snapshot of the force multiplier and value of these activities. The workforce sections of the report include information on FTA's human resources and workforce activities.

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 black ink, appearing to read "Vincent Valdes".

Vincent Valdes
FTA Associate Administrator
Office of Research, Demonstration, and Innovation

ABSTRACT

This report provides information on training, technical assistance, and standards development projects funded by the Federal Transit Administration's (FTA) Section 5314 program for FY 2016, including detailed descriptions and fiscal year funding. These projects further key public transportation goals, as authorized by 49 U.S.C. 5314. This report also includes information on FTA's human resources and training, focusing on Workforce Development programs as authorized by the Moving Ahead for Progress in the 21st Century Act (MAP-21) and frontline workforce programs as authorized by the Fixing America's Surface Transportation (FAST) Act. Included is information on the National Transit Institute (NTI) and its training and educational programs for federal, state, and local transportation employees, US citizens, and foreign nationals engaged or to be engaged in government-aid public transportation work.

To meet its technical assistance and workforce development requirements, Section 5314 allows FTA to issue grants, contracts, and cooperative agreements to achieve impacts to 1) more effectively and efficiently provide public transportation service and 2) improve public transportation. Projects in Section 5314 promote FTA's strategic goals of economic competitiveness, environmental sustainability, and improving the quality of life in communities. In 2016, FTA approved \$7.06 million and obligated \$10.3 million under Section 5314 for technical assistance, standards, and training projects awarded to prestigious academic institutions, public transportation associations, non-profit organizations, and others in various public transportation disciplines. This mix of local, state, regional, and national grantees ensures a spectrum of perspectives that enhance the reliability, validity, and generalizability of technical assistance and standards development projects.

ACKNOWLEDGMENTS

FTA thanks the Axiom Corporation, and especially Daniel Weissbein, Ph.D., who authored two briefs on FTA's Innovative Workforce Initiative under contract to FTA that provided significant content for Section II and Section III of this report.

EXECUTIVE SUMMARY

This integrated report is organized into four Sections. Section 1 is the annual report on technical assistance required by 49 U.S.C. 5314. The Secretary of Transportation is required to submit a Report to Congress on technical assistance that includes descriptions of projects and their results. Section 2 is a report on human resources and training previously required by 49 U.S.C. 5322 (2012) later repealed by the FAST Act and its provisions added to 49 U.S.C. 5314 (Section 5314). Section 3 is a report on frontline workforce development activities also required under 49 U.S.C. 5314. Finally, Section 4 concludes with the forecasted allocations for FY 2017.

Section 1, the annual report on technical assistance, discusses 16 projects totaling \$13.51 million. Of this total, the Federal Transit Administration (FTA) allocated \$7.06 million in Fiscal Year (FY) 2016 to technical assistance and standards projects, \$5 million to the National Transit Institute (NTI) for training, and \$1.45 million for technical assistance projects awarded in late FY 2015 that were active in FY 2016. The NTI program is now authorized in 49 U.S.C. 5314(c). Some projects were funded with prior-year technical assistance and standards funds. The requirement for this annual report does not differentiate on the year of funding; FTA is to provide descriptions for all active projects in these functional areas. The annual technical assistance report for Section 5314 also now requires reporting on the measurable outcomes and impacts for NTI as well as human resources or other training projects. One project in 2016 was focused on transit standards. However, the bulk of active projects in 2016 provided technical assistance in one of the following areas, eligible under Section 5314, to assist providers of public transportation to:

- Comply with the Americans with Disabilities Act of 1990
- Comply with human services transportation coordination requirements
- Meet the transportation needs of elderly individuals
- Increase transit ridership coordination
- Address transportation equity
- Facilitate best practices in bus driver safety
- Meet the requirements of sections 5323(j) and 5312(m) – Buy America and Rolling Stock Purchases
- Any other technical assistance area deemed necessary to advance the interest of public transportation – such as Safety, an area in which the public transit industry continues to ask FTA for significant support

FTA formed an internal working group to support program development and selection for technical assistance, standards, and workforce projects through a process that prioritized programs based on the needs of the industry, FTA's strategic goals, and statutory eligibility. Program ideas were vetted across FTA offices. Finally, the top projects were submitted for FTA Executive approval. The transparency and inclusion of this process ensured that investment decisions

were based on the highest return on investment projects within the parameters of the authorizing statute and FTA's strategic goals.

FTA awarded a \$1.5 million standards project in 2016. Though the primary focus for this activity is transit safety-related standards, it also emphasizes other important transit standards. This comprehensive standards project will result in four reports: identifying and analyzing where new standards are needed, current standards that should be updated or modified, the economic impact of rulemaking on safety standards, and standards for voluntary adoption.

Table I summarizes the funding of active technical assistance, standards and training projects in FY 2016.

Table 1
*Total Funding of Active
Technical Assistance,
Standards, and Training
Projects in FY 2016*

FY 2016 Approved Technical Assistance and Standards Projects	\$7,060,000
Previously-Approved FY 2015 Active Technical Assistance and Standards Projects	\$1,450,000
National Transit Institute	\$5,000,000
TOTAL	\$13,510,000

Table 2 lists active projects and funding allocations made in either late FY 2015 or FY 2016, categorized by the project's functional area of focus. An important note is that several projects were funded under previously-authorized allocations that gave broader authority for Section 5314 projects.

Table 2 Technical Assistance, Standards, and Training Projects Active in 2016 by Functional Area

Program/Project Name	Functional Area *											Amount
	1	2	3	4	5	6	7	8	9	10	11	
National Aging and Disability Transportation Center	x	x	x									\$1,700,000
National Center for Mobility Management		x	x									\$1,600,000
Mobility on Demand Technical Assistance and Outreach Support	x	x	x									\$185,000 \$200,000
Guidebook on Pedestrian and Bicycle Connections to Transit					x				x			\$250,000
Transit Advisory Committee for Safety (TRACS)						x			x			\$175,000
Safety Awareness Technical Assistance									x			\$350,000
FAST Section 3021: Study on Evidentiary Protection for Public Transportation Safety Program Information									x			\$600,000
FAST Section 3025: Safety of Certain Transportation Facilities (Parking Safety Study)									x			\$250,000
Transit Standards Development					x	x			x	x		\$1,500,000
Performance-Based Planning Technical Assistance				x	x							\$75,000
Transportation Capacity Building Program (TCBP)				x	x							\$100,000
Measuring Accessibility through Simplified Trips on Projects (STOPS)				x	x							\$200,000
Scenario Planning for Performance-Based Planning				x	x							\$75,000
National Transit Institute								x				\$5,000,000
Transit-Oriented Development											x	\$1,000,000
Transportation Research Board Core Program Support											x	\$250,000
TOTAL												\$13,510,000

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

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 the Buy America and Rolling Stock Purchases Requirements
8. Training (NTI)
9. Safety
10. Standards Development and Best Practices
11. Other technical assistance.

Section 2 of this integrated report provides information on the measurable outcomes and impacts of the human resources and workforce development programs funded under 49 U.S.C. 5322 (2012)(a) and (b). Over the last five years, FTA awarded a total of \$20.5 million in workforce development grants. The first two sets of grants (issued in 2011 and 2012) were authorized under the Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU). The results of these grants provided a basis for a workforce summit held in FY 2016. FTA awarded \$8.4 million for innovative development workforce grants through FY 2015. Recipients were selected to assure, to the extent feasible, diversity across geography, size of public transportation providers, urban and rural providers, areas with high rates of unemployment, type of training activity, and activities addressing shortages in technical expertise. Areas of focus for these grants included the development of training curricula, increasing new entrants to public transportation supporting incumbent worker development, increasing youth engagement and outreach, and supporting internships and apprenticeships with work-based skills training or new technology training. This section of the report provides project descriptions and the outcomes and impacts to date for these Workforce Development Program projects and important background information for Section 3.

Section 3 of the report is a new annual Report to Congress required in Chapter 53 of Title 49 U.S.C. § 5314. As required in Public Transportation Law, this section includes a detailed description of activities carried out under the innovative public transportation Frontline Workforce Development Program, an evaluation of the program, and policy recommendations to improve program effectiveness. Although FTA did not receive enough funding in FY 2016 to support a new competitive workforce grant cycle, it did publish an evaluation of the FY 2011 workforce grants and convened a meeting of workforce grantees to exchange information about grant accomplishments. In addition, FTA funded a study on its workforce activities to date to provide information for this report. The study information included an analysis of frontline workforce trends and needs, an initial assessment of 2012 and 2015 workforce grantee results, and policy recommendations based on these findings. Beginning in FY 2017, FTA will evaluate all remaining workforce grants using the same framework for the FY 2011 evaluations and will provide a final report that summarizes the gains and impacts of these workforce grants by the end of FY 2018. Section 3 provides information on lessons learned through these various activities, especially relating to frontline workforce issues. In FY 2016, FTA significantly increased its strategic work to help the public transit industry meet workforce needs by building upon all of the projects and investments of the last five years. Going forward, FTA will continue this trajectory, including building closer partnerships with colleagues at the Department of Labor, participating in an interagency career pathway committee, publishing promising practices resulting from workforce grants in a repository, and increasing the strategic connection between training activities of NTI and workforce issues. During outreach activities conducted with the transit

industry in FY 2016, FTA received feedback that workforce issues remain one of the biggest barriers and challenges for public transit agencies.

During this time of significant change in public transportation, with both demographic and technology trends driving new public/private partnership based mobility services models and expanded use of public transportation, public transit agencies have an even greater need for technical assistance and workforce development. The overarching goal for FTA and grantees performing work in these areas is to significantly advance the development and revitalization of public transportation with the cooperation of both public and private entities engaged in public transportation.

FY 2016 Annual Report on Technical Assistance

Section 5314 calls for 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. The statute requires this annual report to be submitted to the Committee on Banking, Housing, and Urban Affairs and the Committee on Appropriations of the US Senate, and the Committee on Transportation and Infrastructure, the Committee on Science, Space, and Technology, and the Committee on Appropriations of the US House of Representatives. Section 5314 requires this annual report to 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 NTI, respectively).

Section I project descriptions, outputs, outcomes, and, impacts are organized by the type of project across the 11 functional areas noted in Table 2.

FY 2016 Active Projects

On FY 2016, the Federal Transit Administration (FTA) was actively engaged in \$13.51 million of Section 5314 projects—\$8.51 million for technical assistance and standards activities and \$5 million for the National Transit Institute. These projects are organized by functional areas. The functional area groupings begin with a discussion summarizing the work in those areas followed by a list of the respective projects. Each project review notes the recipients(s), a description of the projects and commensurate outputs, outcomes/impacts, and total funding.

Technical Assistance to Public Transit Providers Associated with ADA, Human Services Transportation Coordination, and the Transportation Needs of Older Adults

FTA awarded two major technical assistance cooperative agreements to aid in the provision and coordination of transportation services to promote mobility for people with disabilities and older adults. One of two major technical

assistance centers, the National Aging and Disability Transportation Center (NADTC), helps transportation providers with information on the Americans with Disabilities Act (ADA) and expands transportation options for older adults. The second major technical assistance center, the National Center for Mobility Management (NCMM), promotes mobility management.

These technical assistance centers play a critical role to enhance public transportation agencies' results and services. Technical assistance centers share knowledge, best practices, and ways to improve effectiveness in their respective areas of responsibility. Functions served by technical assistance centers are training, 1-800-number questions and answers, development of online and downloaded resources, tailored technical assistance to communities, and outreach to educate and increase awareness. Specific outcomes and impacts for these centers are noted later in this section.

Supporting the Transportation Provisions of the ADA of 1990 and Meeting the Transportation Needs of Elderly Individuals

FTA sponsors technical assistance programs that assist transit agencies to support the transportation provisions of the ADA (42 U.S.C. 12101 et seq.). The ADA prohibits discrimination and ensures equal opportunity and access for people living with disabilities. FTA works to ensure nondiscriminatory, accessible, and equitable transportation is available to further the social, educational, health, housing and employment access needs for Americans of all abilities. The National Aging and Disability Transportation Center (NADTC) is an example of an FTA project supporting accessible transportation.

Human Services Transportation Coordination

Federal transit law requires that projects selected for funding under the Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities, (Section 5310), be derived from a locally-developed, coordinated public transit–human services transportation plan. The requirement for this type of plan resulted from the United We Ride Program, a program created to reduce duplication of services and reduce the regulatory burden for communities' use of Federal funds for people with disabilities, older adults, and persons of limited income transportation. These plans also address an important need to ensure that those individuals who will be affected by public transit agency decisions can provide input to these decisions. When providers and riders all participate in a coordinated planning process, the risk of duplication is reduced and Federal funding is more effectively leveraged so that all transportation resources targeted to support people with disabilities, older adults, and persons of limited income are coordinated into one system of services. The Federal requirement is that plans must be developed through a process that includes representatives of

public, private, and non-profit transportation and human services providers,¹ as well as participation by members of the public. These plans identify the transportation needs of individuals with disabilities, older adults, and people with low incomes. Many communities need technical assistance to develop and implement these plans. The National Center for Mobility Management (NCMM) provides such assistance by cataloguing promising practices, driving greater adoption of mobility management strategies, facilitating planning sessions, and coordinating promising practices in mobility management. Mobility management is a proven, high-impact intervention that ensures greater coordination of resources among transit providers. The NCMM has also increased the use of one-call one-click centers, driving the use of technology as an enabler of coordinated transportation services. Another technical assistance center supporting mobility choices, especially the use of technology as an innovative enabler of enhanced mobility, is the Mobility on Demand (MOD) Technical Assistance and Outreach Program.

Transportation Needs of Older Adults

FTA has a long history of collaboration with the US Department of Health and Human Services Administration for Community Living and the Aging Network to further the mobility needs of older adults. FTA recognizes the importance of ensuring that communities know how to support aging in place through investments in transportation choices to meet the transportation needs of aging citizens. FTA funded many initiatives and collaborated successfully with non-federal partners to improve access to transit and improve the coordination of Federal, state, and local resources in ways that benefit older adults. These efforts leverage Federal investments through public, non-profit, and private partnerships. FTA provided financial assistance to organizations that are responsible for managing public transportation and shared-ride surface transportation services that are open to the public or open to a segment of the public defined by age, disability, or low income. In addition, FTA sought to tighten the alignment between formula grants in Section 5310 and technical assistance. An example of a project in this area is the NADTC.

¹ Human services transportation refers to public transportation services for people with disabilities, older adults, and persons of limited income. FTA is only one funder of these types of services; often, many health and human services, education, and labor programs also pay for transportation for their respective clients/patients/customers.

Title: National Aging and Disability Transportation Center (NADTC)**Recipient:** Easter Seals, Inc. with subrecipient the National Association of Area Agencies on Aging**Project Description:**

NADTC is a partnership of two national leaders in accessible transportation—Easter Seals and the National Association of Area Agencies on Aging (n4a)—that 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. Easter Seals and n4a partner with FTA to enhance coordination in the delivery of transportation for older adults and people with disabilities and to help 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.

FTA recognizes that the need for accessible transportation to support independent community living is continuing to grow in the US. With the increased number of adults over age 75, the number of people living with disabilities will also increase, 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. The 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. The NADTC 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 the NADTC is directed by stakeholder review committees. The NADTC is conducted in close collaboration with FTA and with guidance from the Administration for Community Living at the US Department of Health and Human Services (HHS).

Outputs:

Activities for the NADTC in 2016 included developing online courses on Section 5310 and other areas; awarding eight community grants; holding five webinars; launching a new website with useful materials that benefit older adults, individuals with disabilities, caregivers, and public transportation providers; and supporting 800# inquiries through the Eldercare Locator. Additionally, the NADTC provided targeted technical assistance in response to locally-identified challenges. A report titled “2016 Transportation Trends: A Look at the Year’s Top Mobility Challenges & Opportunities” was posted on April 3, 2017. This report reviews

key topics, significant issues that affect the availability of accessible transportation in communities, and opportunities to address these issues as identified by the 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/>.

Outcomes/Impacts:

In the first three quarters of FY 2015 (October 2015–June 2016), NADTC began making meaningful impacts to advance its mission. In total, NADTC responded to 158 specific requests for technical assistance, 335 individuals were provided information and referral service, and 838 people were provided referrals to assist them in finding local transportation resources. NADTC is ensuring the continuation of FTA's quarter century of prior investment in technical assistance for this targeted population by developing a library that includes the most valuable resources developed under prior cooperative agreements. To support outreach and dissemination of useful resources in the field, NADTC developed a mailing list of more than 10,000 names. A broad range of learning styles is being accommodated with the launch of a YouTube channel and Facebook and Twitter accounts.

FTA Funding: \$1,700,000

DeMario Green is a Maryland transit rider who relies on various transportation options to help him maintain his quality of life after a serious accident in 2012. Because of his injuries, he is unable to drive. Access to public transportation has become essential for him to independently navigate his community: "Transportation is very important to get to job interviews and stuff like that. I'll start by telling you about myself a little bit. I got in a very bad motorcycle accident. I had been T-boned by a car and it left me with a lot of injuries." His initial experience with public transportation left him uncertain of the correct route to take, and he ended up on the wrong light rail train in the opposite direction of his intended destination. He enrolled in the Central Maryland Regional Transit Travel Training Program, a program that receives technical assistance support from NADTC, to gain confidence and become an independent traveler. Through group travel training and one-on-one training, he learned how to plan trips with Google Maps, locate information on fares, schedules, and maps, and count stops to ensure he exits the bus at the right destination. He now has a degree of confidence in his travel ability that allows him to successfully ride fixed-route public transportation and says his days of taking the wrong light rail train are in the past!



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 transportation options at the state and community levels. 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. The NCMM operates as a collaborative effort of the three partners: Easter Seals, Inc., as the lead fiduciary agent, with the American Public Transportation Association (APTA) and the Community Transportation Association of America (CTAA) as partners to use the unique expertise of each organization to further NCMM goals. These 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. 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 Federal Coordinating Council on Access and Mobility's efforts to promote the ability of states to coordinate transportation resources. The NCMM supports FTA in implementing major strategic initiatives such as Rides to Wellness, focused on improving access to vital healthcare services. Increasingly, public transportation providers are seeing the value of mobility management. Faced with changing demographic and lifestyle trends as well as continuing economic pressures, the industry is adopting mobility management as a proven solution to use existing resources and investments as well as creating new options to meet growing demand.

Outputs:

To further professionalize and clearly identify the work and value of mobility managers, NCMM uses an inclusive, field-driven approach to develop a set of core competencies for mobility management from which a curriculum is being developed, starting in 2016. A "Starting a Mobility Management Program Toolkit" is also under development.

NCMM is also the primary support for FTA's Rides to Wellness initiative, which seeks to build partnerships between the health and transportation sectors to improve access to care and, thus, better the health of people while reducing costs to the healthcare system. During 2016, NCMM hosted Rides to Wellness forums in San Francisco, Baltimore, Portland, Charlotte, and Kansas

City, facilitating an ongoing conversation and collaboration between the transit industry and healthcare providers. NCMM supported FTA by funding \$400,000 in planning grants to 16 communities for the development of innovative solutions to healthcare access transportation challenges. Local coalitions of cross-industry providers, including consumers, spanning the healthcare, transportation, human service, and other industries, developed replicable strategies to enhance access to preventive, dialysis, behavioral health, and post-hospitalization care. NCMM also organized and hosted Peer Exchanges in Baltimore and Austin (Texas), allowing transit agencies and MPOs an opportunity to learn from each other about effective transit planning.

Through the use of a Regional Liaison program, in which staff are assigned as points of contact for stakeholders in each of FTA's 10 regions, NCMM provided a range of in-depth technical assistance support to groups ranging from a state DOT seeking to better coordinate with the state Department of Health, to an MPO seeking best practice guidance in designing a useful, equitable, accessible bikeshare system, to a large employer seeking solutions to employee absenteeism and truancy that resulted in a partnership with the local public transportation provider to support additional bus service.

NCMM's mission includes supporting FTA in its role as the lead of the Coordinating Council on Access and Mobility, an inter-agency collaborative that seeks to improve the efficiency, effectiveness, and usefulness of public and specialized transportation services funded from any of the 11 member departments. To promote promising practices, NCMM continued to build the Mobility Management Information and Practices (MMIP) database, a geographic information systems-enabled resource on its website that collects promising mobility management strategies from around the country, providing a social network mechanism to share this information across the profession through peer networking and other activities. The number of practices included in the database continues to grow, and the MMIP was accessed approximately 4,000 times during the year from all over the world.

In 2016, NCMM continued to provide multiple forms of technical assistance across all FTA regions, including developing products, conducting research on varying topics, presenting at various meetings, and problem-solving. Select outcomes related to this work included the following:

- Field-tested competencies for professionals working in mobility management capacities to enhance the professionalism of the position.
- Managed and provided technical assistance to 16 Healthcare Access Mobility Design Challenge grantees to develop solutions to support the FTA Rides to Wellness initiative.

- Held one national and four regional dialogues with transit and healthcare professionals to identify key issues, challenges, and successes to facilitate Rides to Wellness.
- 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.
- Facilitated relationships and developed informational materials with the support of a range of federal agencies such as the US Department of Agriculture (conducted webinars), HHS (implemented Rides to Wellness grants), and the US Department of Labor (participated in forums).
- Produced a monthly newsletter that was disseminated to 1,000+ individuals.
- Updated the NCMM website and used social media to reach 6,000+ unique visitors.
- Attended and presented at more than 20 transit and human services events and forums such as the American Public Health Association, the Council for Exceptional Children, APTA, and CTAA.

Outcomes/Impacts:

The NCMM has expanded awareness of mobility management promising practices and expanded collaboration across a diverse set of stakeholders. Additionally, technical assistance activities drove partnerships and coordinated planning among state and local governments and social, human service, and transportation providers to improve coordinated planning and delivery of workforce development, training, education, and basic services to veterans, older adults, youths, and other disadvantaged populations.

FTA Funding: \$1,600,000

The Adult Day Health (ADH) Center in Bellingham, Washington, was relocating from the center of the city to a new operator and site about 15 miles to the north in Lynden. Many ADH clients used the Whatcom Transit Authority's (WTA) ADA-complementary paratransit service to access the program in Bellingham, with the average paratransit ride taking no more than an hour. Traveling to the new site in Lynden would be about 90 minutes, an



extremely difficult ride for older adults with dementia and other significant health conditions. A few months before this problem emerged, staff from WTA attended a training in human-centered design through the FTA-funded NCM. Using that process, WTA and community partners formed a team to apply this design process to their problem. In the team's resulting "Layover Program" solution, paratransit riders headed to the Lynden ADH to take WTA paratransit to a local church, at which point they can use the church's bathrooms and take a break. Riders arriving at the church are met by ADH staff and their program day begins. Caregivers also can drop off clients at the church to connect with the bus to Lynden. After all riders have gathered at the church, they continue the second leg of the trip to Lynden, all traveling together in one 40-passenger bus. As a result of the Layover Program solution, program participants can access the Lynden ADH center in greater numbers than prior to the program's move to the new location. The project resulted in significant cost-avoidance for WTA from the standpoint of an extremely efficient shared rides service delivery model and also eliminated the need for hiring new staff and likely purchasing additional vehicles to service the distant facility if the standard paratransit approach had been used.

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

Grantee: Intelligent Transportation Society of America (ITSA)

Project Description:

The purpose of the MOD Technical Assistance and Outreach program is to provide targeted support to the stakeholders (e.g., transit agencies) and vendors involved in MOD services such as car/bikeshare (conventional and peer-to-peer), rideshare (conventional and on-demand), public/private partnerships with transportation network companies, and micro transit. A key goal of these technical assistance activities is to identify opportunities and challenges for public transit agencies as they seek new ways to expand mobility options for their customers. This 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 (e.g., brochures, fact sheets, magazine articles, webinars, and guidance materials). This project will produce market research and state-of-the-practice materials (e.g., 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:

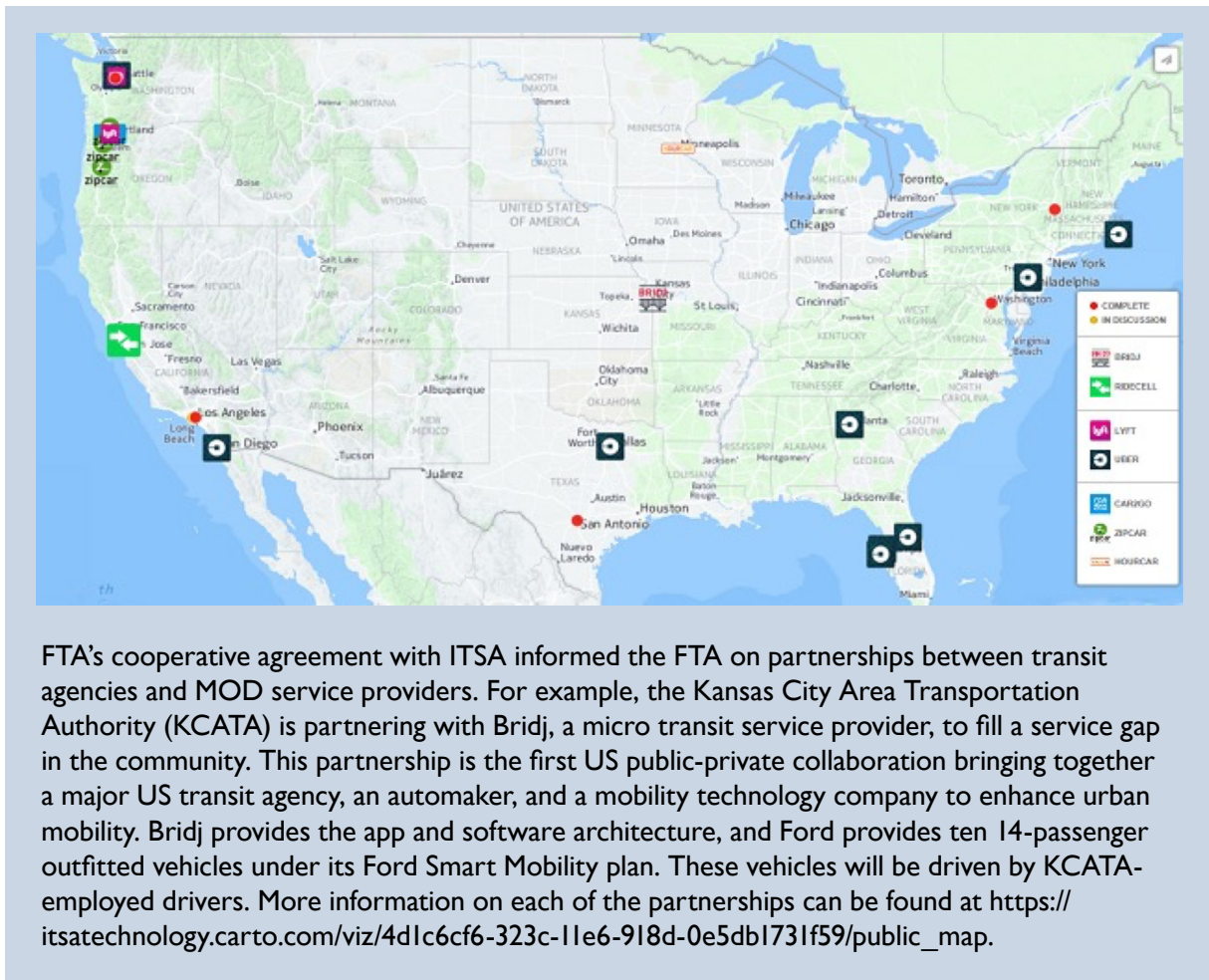
In FY 2016, the MOD Technical Assistance Center started operation, and began providing industry support through:

- A listening session held during the Transit Research Board Annual meeting on January 11, 2017
- Creating and fielding a biweekly Mobility Rush newsletter highlighting transit agency and MOT service provider partnerships
- Partnering with the Share Use Mobility Center to add information to its on-line toolkit found at <http://sharedusemobilitycenter.org/tools/>

Outcomes/Impacts:

This project is developing a greater understanding of the opportunities and impacts of MOD services on national transit agencies as well as facilitating dialogue among the federal government, transit agencies, and MOD service providers.

FTA Funding: \$385,000



Technical Assistance in Safety and Standards, Best Practices in Bus Driver Safety, Buy America, and Rolling Stock

FTA's new safety authority marks a significant change in how it does business to keep transit safe. FTA now has authority to establish common-sense safety performance criteria for all modes of public transportation. As the agency works diligently to put initial policies and procedures to implement this important expansion of our mission, it understands that a "one-size-fits-all" approach will not work for public transit. Thus, technical assistance in the area of safety, safety management systems, and other areas is needed by transit providers working to ensure that these systems are put in place. Implementing both voluntary and non-voluntary standards requires support. Both transit management and labor are working together to build on the industry's existing safety foundation to improve risk control, allow for earlier detection and correction of safety problems, and develop promising practices in essential areas such as bus driver

safety. In addition, technical assistance with asset management and other support for rolling stock issues is important to ensure effective transit operations. FTA has a number of projects across these technical assistance areas.

Facilitate Best Practices in Bus Driver Safety

Through its Office of Safety and Oversight (TSO), FTA administers the Bus Safety Program, which proactively provides voluntary safety guidance and technical assistance to assist bus transit agencies of all sizes in meeting their safety mission, including enhancing bus driver safety. The Bus Safety Program was founded on established industry best practices for bus transit agency and bus driver safety and continues to gather information on transit industry operational safety issues and best practices through its activities and ongoing research. The program promotes safe driving habits for transit bus drivers by highlighting operational best practices through orientation seminars, safety presentations, and webinars and the review of operational manuals and transit agency practices during voluntary onsite safety reviews and by providing direct technical assistance feedback to agencies. An example project in this area is the Transit Standards Development Program coordinated by the Center for Urban Transportation Research (CUTR) at the University of South Florida.

Meet the Buy America and Rolling Stock Purchases Requirement

Under FTA final policy guidance, the Buy America domestic content requirements for transit rolling stock procurements for railcars and buses are based on the scheduled delivery date of the first production vehicle. The revised FTA Buy America policy addresses public transportation industry concerns and maintains the core goal of the program to preserve and create good-paying American jobs.

Safety and Other Technical Assistance Activities

An FTA goal is to advance the provision of safe, reliable, and equitable transit service through adherence with legislative, policy, and regulatory requirements as established by FTA. The Transit Advisory Committee for Safety (TRACS) supports this area.

Title: [Guidebook on Pedestrian and Bicycle Connections to Transit](#)

Grantee: Portland State University (PSU)

Project Description:

As more and more transit agencies integrate bike and pedestrian activities into their services, it is essential to provide information on ways to operationalize these activities. Thus, the purpose of this project is to develop a manual on how to create and fund services that enhance pedestrian and bicyclist safety,

accessibility, and mobility. The manual will also reference other resources such as those available from Federal Highway Administration (FHWA) and opportunities to use flexible Surface Transportation Program or Congestion Mitigation and Air Quality (CMAQ) funding.

National Relevance:

This manual aims to provide a compendium of best practices to help transit and other transportation professionals improve pedestrian and bicycle safety and access to transit that can be used by community planners and transit providers nationwide.

Outputs:

The main deliverable for this project is the completion of a *Manual on Pedestrian and Bicycle Connections to Transit*, a visually rich compendium of existing standards, best practices, and potential funding sources for bike and pedestrian transit projects. During FY 2016, PSU conducted the background research for the manual. When complete and posted on FTA's public website in September 2017, the manual will include references to many existing guidance documents as well as information collected through a literature review, interviews with professionals, and three case studies of regions that are taking innovative approaches to integrating pedestrians and bicycles with transit.

Outcomes/Impacts:

Pedestrians represent about 14% of traffic fatalities in motor vehicle crashes, and bicyclists represented about 2%. Compared to their share of trips, these modes are over-represented in traffic fatalities. The manual will benefit 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 multi-modal transit facilities, rail/bus rapid transit stations, rail crossings, bus stops and vehicle design, and bikeshare integration with public transportation.

FTA Funding: \$250,000



In 2016, USDOT launched the Safer People, Safer Streets Initiative, which addresses non-motorized safety issues and helps communities create safer and better-connected bicycling and walking networks. The initiative also engages safety experts, existing and new stakeholders, local officials, and the public on a range of targeted strategies to help get materials into use and encourage safety in and around our streets, including bus stops, transit stations, and other multi-modal connections. As part of the initiative, FTA is working with PSU in creating the *Manual on Pedestrian and Bicycle Connections to Transit* to address pedestrian and bicyclist safety, accessibility, and mobility related to transit facilities and vehicles.

Title: Transit Standards Development Program

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

Project Description:

This program supports the research and development of standards for collecting information necessary to adopt transit standards through rulemaking activities or to 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 a current FTA research project, Safety Standards, Strategic Plan, and Data Collection, as well as other research projects and programs.

New authorities in 49 U.S.C. 5329 strengthened FTA's position as a safety regulatory agency and required formal promulgation of vehicle safety standards and safety performance criteria for all public transportation modes. In implementing these provisions, 49 U.S.C. Section 5329(b) (2) (C) requires FTA to take into consideration, to the extent practicable, "recommendations of, and best practices standards developed by, the public transportation industry." The law also requires FTA to review "relevant recommendations of the National Transportation Safety Board (NTSB)." Section 5329 further defines and directs the identification and establishment of transit safety-related regulations and standards.

This program provides a mechanism for FTA to receive input on safety standards from organizations with specific expertise in public transportation industry safety. To achieve this objective, the programs engages stakeholders, standards

development organizations (SDOs), and advisory groups including FTA's Transit Advisory Committee for Safety.

Outputs:

Specific outputs of the Transit Standards Development Program include:

- Background research and analysis on needs and gaps for new standards in the transit applicable areas where standards are lacking.
- Background research and analysis to modify or enhance any existing standards deemed not adequate to be applicable to transit.
- Additional research, data collection, and economic impact analyses for rulemaking (including only safety-related standards).
- Working with SDOs to develop standards for voluntary adoption.

Four reports will be produced by the end of December 2017 that will identify new standards that need to be developed, current standards that need to be updated/modified, economic impact analysis for rulemaking of safety standards, and development of standards for voluntary adoption.

Outcomes/Impacts:

Outcomes include implementation of new recommendations, guidelines, or standards by transit agencies that will make transit safe and reliable, and ensure transit systems are in a state of good repair. The ultimate impact will be increased safety and reduced injuries and fatalities. An FTA Safety Standards Strategic Plan that includes the recommended transit safety standards along with corresponding rulemaking analyses and recommendations will be available in FTA's public site by the end of December 2017.

FTA Funding: \$1,500,000

Title: Evidentiary Protection of Transit Safety Program Information Study

Grantee: National Academy of Sciences (NAS)

Project Description:

The evidentiary protection for public transportation safety program study is authorized under Section 5314 to be done with NAS. This study will evaluate whether it is in the public interest, including 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. 5329, 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. States also 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:

A final report will be produced after solicitation of input from public transportation recipients, public transportation labor organizations, and impacted members of the public. The final report will be available on FTA's public website in December 2018.

Outcomes/Impacts:

This program and final report will provide recommendations for Congress to consider statutory changes regarding evidentiary protections that will increase public transit safety and reduce burdens on transit agencies.

FTA Funding: \$600,000

Title: Parking Safety Study

Grantee: Interagency Agreement with Volpe Center

Project Description:

This study satisfies the requirement in FAST Act Section 3025 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, as well as any other locations deemed appropriate by the Secretary of Transportation. The study will collect information on the nature and extent of property damage, injuries, deaths, and other safety and security incidents that occur at the facilities and will identify 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 will be 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:

Research and literature reviews were completed to identify innovative technologies that increase safety and security and/or ensure a faster response by transit security and law enforcement. The project is developing recommendations on how innovative technologies can increase safety and security at parking lots and adjacent areas. The report is expected to be released by the end of August 2017.

Outcomes/Impacts:

This final report 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 may also encourage increased ridership. The final report will be available on FTA's website in August 2017.

FTA Funding: \$250,000

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 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 Secretary of Transportation with information, advice, and recommendations that impact safety in public transportation nationwide.

Outputs:

TRACS evaluates economic, technological, and institutional developments relating to transit safety and submits recommendations to the FTA Administrator on innovative ideas and approaches for federal policies and programs. TRACS members were tasked with two efforts in March 2016:

- 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.

TRACS submitted two reports, one for each task, to the full TRACS Committee by February 2017 for its concurrence on the recommendations before submitting the final reports to FTA.

Outcomes/Impacts:

FTA evaluates 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.

Project Description:

This project supports rail transit safety awareness through targeted outreach efforts to educate the communities in which these systems operate. The project provides tools for transit riders to safely access platforms and board trains using a creative video and complementary print material. The nationwide project focuses on outreach messaging for motorists and pedestrians using media that include radio public service announcements, billboards, bus wrap ads, platform kiosks and clings, and vehicle interior cards.

Outputs:

Education outreach programs are ongoing throughout the US at transit properties, and education campaigns have produced a series of print, digital, social media, and radio public service announcements aimed at raising public

awareness and improving pedestrian behavior around rail properties. Outreach includes bilingual bus advertisements, billboards, and mobile social media as well as radio spots and sponsorships.

Outcomes/Impacts:

Focusing on grade crossing safety and trespasser prevention programs, the Operation Lifesaver program historically has been directed to intercity freight railroad and Amtrak systems. However, in 2003, FTA entered into a partnership with Operation Lifesaver, Inc., due to the growing number of urban light rail system grade crossings and trespasser incursions that indicated a need for a transit-focused safety program. Passenger rail consistently offers people the safest transportation available. Ridership is projected to rise by 3.5% annually, nearly doubling over the next 20 years, and sustaining a good safety record is vital. This outreach program provides drivers, pedestrians, and communities with critical rail safety education to stay safe on and around trains and railroad rights-of-way.

FTA Funding: \$350,000

Technical Assistance to Further Transportation Equity, Planning, and Other Technical Assistance Activities

FTA provides technical assistance to metropolitan planning organizations (MPOs) and others to support activities that promote coordination and equity. In addition, major partners such as the Transportation Research Board (TRB) are critical to further technical assistance through information sharing and networking at major event such as TRB's annual conference.

Increase Transit Ridership in Coordination with MPOs

FTA works in coordination with MPOs and other entities to encourage development around public transportation stations through technical assistance and the development of tools, guidance, and analysis related to market-based development. The Transit-Oriented Development Technical Assistance Initiative embodies FTA's work in increasing transit ridership in partnership with MPOs. The Transportation Capacity Building program is an example that showcases FTA'S coordination with MPOs.

Improve Transportation Equity and Efficiency of Public Transportation

FTA oversees programs that address transportation equity with regard to the impact that transportation planning, investment, and operations have on low-income and minority individuals.

Title: Performance-Based Planning Technical Assistance**Grantee:** Interagency Agreement with Volpe Center**Project Description:**

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, congestion, asset management, and state of good repair. FTA and FHWA are required to develop a Report to Congress on the progress of implementing PBPP. This project will enable FTA and FHWA to work with State DOTs, MPOs, and transit agencies to identify the overall effectiveness of performance-based planning as a tool for guiding transportation investments—what is working well and what needs improvement.

Outputs:

The final product consists of a Report to Congress on PBPP, to be submitted by October 1, 2017.

Outcomes/Impacts:

PBPP is new for many MPOs and transit agencies. A better understanding of its overall effectiveness and the institutional relationships that foster a performance-based planning framework will help with an understanding of the key challenges for providing technical assistance and resources for successful implementation.

FTA Funding: \$75,000**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 performance-based planning requirements. 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. As the legislation states:

“Performance-Based Approach – In General – The metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the national goals described in section 150(b) of title 23 and the general purposes described in Section 5301.” 49 U.S.C. 5303(h)(2).

“Public transportation performance targets – Selection of performance targets by a metropolitan planning organization shall be coordinated, to the maximum extent practicable, with providers of public transportation to ensure consistency with sections 5326(c) [Transit Asset Management] and 5329(d) [Safety].” 49 U.S.C. 5303(h)(2)(B)(ii).

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:

During FY 2016, FTA held a series of seven PBPP exchange workshops attended by more than 250 staff from transit agencies, MPOs, and state DOTs to improve their technical capacity to implement performance-based planning. During FY 2017, FTA plans to host an additional five PBPP roundtables targeted toward small- and medium-size MPOs and transit agencies that have requested additional technical assistance and training to meet the new requirements.

FTA is drafting a report to be published in the first quarter of 2017 summarizing the seven performance-based planning roundtables held in FY 2016. FTA will hold five additional performance-based planning roundtables in December 2016 and January, February, April, and May 2017.

Outcomes/Impacts:

The training and technical assistance under this project will reach an additional 200 representatives of transit agencies, MPOs, and state DOTs that participate in the five performance-based planning roundtable peer exchanges. 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

Title: Scenario Planning for Performance-Based Planning**Grantee:** Interagency Agreement with Volpe Center**Project Description:**

Section 5303 of title 49, U.S.C. provides specific recommendations for transportation agencies, particularly MPOs, to use with scenario planning as part of their transportation planning activities. FTA and FHWA are required to develop a Report to Congress on the status of MPO scenario planning activities and use of scenarios in development of Metropolitan Transportation Plans. This research provides FTA with the resources to meet the requirement to produce the Report to Congress.

Outputs:

The final product will be a Report to Congress on Scenario Planning, to be submitted by June 1, 2017. FTA and FHWA will be able to meet the statutory requirement to produce the Report to Congress on Scenario Planning.

Outcomes/Impacts:

This project identifies ways that MPOs, state DOTs, and transit providers use scenario planning to consider the outcomes of various investment strategies, population and employment scenarios, funding levels, and cost scenarios during the development of metropolitan transportation plans. This project will enable FTA, in collaboration with FHWA, to evaluate the benefits and costs of applying scenario planning by both MPOs and state DOTs.

FTA Funding: \$75,000**Title: Measuring Accessibility through Simplified Trips on Project Software (STOPS)****Grantee:** Contractor to be selected in 2017**Project Description:**

This project will expand the capabilities of FTA's Simplified Trips on Project Software (STOPS) package, to have broader utility beyond predicting project ridership. The project will expand the STOPS program to quantify measures for accessibility to jobs and healthcare, mobility benefits of transit projects, and service improvements for populations of interest such as low-income, minority, older adults, and others. Because STOPS uses readily-available General Transit Feed Specification (GTFS) data to measure transit service, this product will be more accurate and much easier to implement than traditional regional model-

based approaches. Users also will be able to determine how capital investments and/or service changes impact these populations of interest. The consistent quantification of various measures nationally will support performance-based planning.

Outputs:

Products include a software package, user guide, example applications, and technical support to users. Expected delivery is December 2017. The project will provide quantified measures of transit accessibility, mobility impacts of transit projects, and service improvements for individual populations of interest.

Outcomes/Impacts:

The project provides better information for local decision-making, Title VI assessments, before-and-after studies of completed project, and other analyses.

FTA Funding: \$200,000

Title: Transportation Research Board Core Program Support

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

Project Description:

This project allows TRB to provide 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 comprise a number of continuing interrelated and interdependent activities that include TRB's Annual Meeting, standing committees and task forces, committee-sponsored conferences and workshops, a field visit program, and responses to inquiries, drawing on the TRB Library and Transportation Research Information Services (TRIS) and publications. FTA has a long history of cooperative agreements and collaboration with the public transportation industry through TRB.

NAS is a prestigious institution known for the high quality of its activities and ability to convene high-impact meetings that provide essential feedback and strategic support to 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:

FTA continuously and actively participates in TRB's Annual Meeting, held in January of each year in Washington, DC. The project promotes networking, the discovery of new research, and the exchange of research ideas. FTA actively participates at TRB's Annual Meeting by organizing and conducting sessions about FTA programs, initiatives, and research and displaying research in exhibit booths. TRB provides complimentary registration for FTA staff, provides space for special transit meetings, supports attendance at committee meetings and sessions, and provides FTA with access to TRB publications, library, and staff.

TRB also manages the Transportation Research Information Service (TRIS), a bibliographic database that collects information and provides literature searches to government organizations, the transit industry, and the private sector. Transit agencies use TRIS to learn how other organizations have handled similar problems and to benefit from their experience. Research sponsors use TRIS to avoid costly duplication and assure timely dissemination of results. TRB processes approximately 30,000 new transportation-related publications into TRIS per year, and TRB staff conduct TRIS searches for FTA staff.

Outcomes/Impacts:

This program supports the exchange of transit research information and results at the national level. Research results are made available to the transit industry through TRB's Annual Meeting, TRB standing committees and task force activities, a field visit program, responses to inquiries, publications, and the Transportation Research Information Database.

FTA Funding: \$250,000

The TRB Annual Meeting and Conference provides a venue to explore ideas, breakthroughs, challenges, and solutions for building livable communities with transit and provides a strong, engaged, and growing network of industry leaders. The meeting covers all transportation modes, with 5,000+ presentations in nearly 750 sessions and workshops, addressing topics of interest to policy-makers, administrators, practitioners, researchers, and representatives of government, industry, and academia. It also provides the

public transportation industry with technical assistance to more effectively and efficiently provide service and improve public transportation. FTA staff and grantees are active participants, enabling FTA staff to deliver face-to-face technical assistance to stakeholders such as planners, community activists, transit officials, consultants, developers, lenders, grassroots organizations, academicians, elected officials, health advocates, and housing advocates and share cutting-edge information and learn how these activities benefit communities across the U.S.

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

Grantee: Smart Growth America (SGA)

Project Description:

The Transit-Oriented Development (TOD) Technical Assistance Initiative is a project created to provide technical assistance through the development of tools, guidance, and other resources for enhancing TOD within transportation corridors and around public transportation stations, including economically-distressed communities. This project seeks to improve access to public transportation, foster real estate development, new economic opportunities, and pathways to employment. A key objective of TOD is to create mixed-use development and high-quality walking environments near transit facilities that leverage both existing and planned, transit infrastructure to promote economic development, revitalization, and expand housing options in response to housing market demands.

Outputs:

This project assists FTA in providing technical assistance to communities and a wide range of local governmental entities, including private sector stakeholders beyond FTA's traditional public transportation agency grantees. It includes support for economically-distressed communities. A forum for communities receiving technical assistance as well as other communities well-versed in TOD activities was established to begin dialogues and exchange ideas. Once the TOD technical assistance is complete, communities will receive an individual report with a summation of the technical assistance and recommendations for next steps for how to advance TOD within their community. Communities will benefit by learning to work with multiple stakeholders for the implementation or enhancement of TOD and associated activities.

The project provided direct technical assistance to eight communities in the U.S., a Peer Network of communities to share TOD experiences, and a website to serve as a national portal for TOD resources. A summary report documenting the impact and outcome of the technical assistance provided through this project will be made available on the FTA website.

Outputs:

Results to date include:

- Direct technical assistance to eight communities seeking to advance or support TOD within their community – direct technical assistance was launched on May 31, 2016, and concluded September 23, 2016. A report titled “Transit-Oriented Development Technical Assistance: First Summary

Report” was made available in FTA’s website at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Report_No._0101.pdf.

- Facilitation of relationships at the local level among transit agencies, government staff, and community organizations to amplify the message regarding TOD and the associated benefits – this is a continuing effort through the duration of the program.
- Launch of a new national website giving communities a venue to identify various resources to assist with TOD activities – in addition to resources, the website includes a toll-free number and a direct e-mail address to respond to specific inquiries about TOD planning, research, and *ad hoc* questions. The website was launched on July 6, 2016, at <https://todresources.org>.
- A Peer Network of communities to share best practices and facilitate conversations about the successes of TOD within their community – the Peer Network was launched on July 6, 2016, in coordination with <https://todresources.org/about/connecting-professionals/>.
- A database with a curated list of TOD research and resources from the past and that will host additional resources to help advance and support TOD – the database was launched on July 6, 2016, in coordination with <https://todresources.org/resources/>.
- Published blog posts to highlight community-specific technical assistance and ways to build successful TOD in communities – the first blog was posted on October 18, 2016 at <https://todresources.org/blog/strong-prospects-kansas-city/>.

Outcomes/Impacts:

The TOD Technical Assistance Initiative addressed a variety of TOD challenges in communities with unique economic and geographic attributes that are supported by various modes of public transportation, such as light rail and bus rapid transit (BRT). For instance, the City of Richmond was selected during the first year of the project to receive direct technical assistance to support the “Pulse” BRT project. The technical assistance focused on market assessments for the Pulse BRT station areas with a focus on the eastern terminal station and surrounding areas. This resulted in a set of recommendations for the City of Richmond, which then used the information and recommendations by incorporating them into a Pulse Corridor Plan that will be presented to the Richmond City Council for formal adoption in 2017.

FTA Funding: \$1,000,000



The Powhatan Community Center was the site of a May 2016 urban design charrette, a component of the technical assistance provided to Richmond, Virginia, through this Initiative. The charrette was facilitated by Smart Growth America (SGA) in partnership with FTA. At the charrette, City Council members, local and regional government staff, and community members from the areas surrounding the Pulse eastern terminal station, such as Greater Fulton, had the opportunity to participate in facilitated discussions to envision how the community would look following the introduction of BRT service. SGA gathered input during the

charrette to develop initial design concepts of the areas surrounding the eastern terminal station. The design concepts, along with other recommendations, were incorporated into the Pulse Corridor Plan.

Training – National Transit Institute (NTI)

Title: National Transit Institute

Grantee: Rutgers University

Project Description:

The National Transit Institute (NTI) is an agreement with Rutgers University, a public 4-year degree-granting institution of higher education as required in 49 U.S.C. 5314(c):

“In cooperation with the Federal Transit Administration, State transportation departments, public transportation authorities, and national and international entities, the institute [. . .] shall 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.”

The mission of NTI is to provide training and education services in support of public transportation and the quality of life in the United States.

Outputs:

NTI currently has 72 active courses, and 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 rules and regulations, and its training techniques are beyond classroom-style training and include interactive CD-ROMs, videos, teleconferencing, and distance learning. Examples of course subject matter include compliance with the ADA, disadvantaged business enterprise policies, planning regulations, use of advanced technologies, workplace safety and security issues, and procurement regulations. Management development courses focus on the skills needed to develop a well-qualified transit workforce and cover a broad range of transit topics and skill enhancement techniques. Table 6 shows NTI training and educational programs that include courses in recent developments, techniques, and procedures.

Rutgers operates the NTI program with a staff of 12. As of June 30, 2016, through 25 years of operation, NTI delivered 5,999 courses to a total of 171,238 participants.

Table 3 *Current NTI Courses Available to Transit Industry*

Training and Education Programs	Current NTI Courses Offered
Intermodal and Public Transportation Planning	<ul style="list-style-type: none"> • National Transit Database (Urban Reporting) • State and Metropolitan Transportation Programming • Title VI and Public Transit • Transit-Oriented Development • Transportation and Land Use • Public Involvement in Transportation Decisionmaking
Management	<ul style="list-style-type: none"> • Building Diversity Skills in the Transit Workplace (Direct Delivery) • Building Diversity Skills in the Transit Workplace (Train-the-Trainer) • 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 • Overview of Transit Procurement for Senior Leadership • Senior Leadership • Senior Leadership for Public Transportation • Transit Academy
Environmental Factors	<ul style="list-style-type: none"> • 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

Table 3. (cont'd.) Current NTI Courses Available to Transit Industry

Training and Education Programs	Current NTI Courses Offered
Procurement Strategies for Public Transportation Systems	<ul style="list-style-type: none"> • Bus Procurement Workshop • 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
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 • Introduction to Environmental Justice • Managing Community Mobility • Paratransit Management and Operations • Understanding ADA
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
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
Contract Administration	<ul style="list-style-type: none"> • Procurement Series – IV – Contract Administration
Inspection	<ul style="list-style-type: none"> • Quality Assurance and Quality Control in Transit
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
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) • Robbery: Pick Pocket and Identity Theft • 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)

Outcomes/Impacts:

- NTI yearly expenses average approximately \$4.5 million, and over the last Rutgers program year, the program delivered 322 training courses throughout the US to 7,738 participants at an average cost per course of about \$13,000 and an average cost per participant of approximately \$580. Available data show that the average annual expenditure per adult learner is \$800 and the average cost per college credit hour is \$594.² NTI's cost averages appear to be very efficient, especially since NTI also supports other activities outside of these training courses that come out of their yearly funding allocations. These additional activities in FY 2016 included supporting a Workforce Summit for workforce grantee information-sharing as part of educational summits that provide the public transportation industry with an opportunity for peer to peer learning. This is an example of the innovative educational techniques used to provide real-time impact to industry issues as they arise, such as the current shortages and issues in workforce recruitment and retention.
- NTI conducted 120 sessions of All Hazards Awareness and Preparedness for Transit Employees in preparation for Super Bowl 50 at Levi's Stadium in Santa Clara, California in February 2016, with 1,437 staff of the Santa Clara Valley Transportation Authority (VTA) trained. This training, as well as other training for transit systems, requires courses to be conducted at all hours of the day and night and seven days per week so as to not disrupt the active operation of the transit system.
- FTA requested that NTI provide multiple deliveries of Supervisor, Management, Procurement, and Public Involvement training for the Detroit transit system as it recovered from the City's bankruptcy.
- NTI often is called upon to conduct specialized and customized training for transit systems, recently completing six weeks of customized Procurement training for METRA, Chicago's commuter railroad, as well as a series of Procurement and Management trainings for WMATA in Washington, DC.

FTA Funding: \$5,000,000

² According to the World Education website, the average annual expenditure per adult learner is around \$800 (http://www.worlded.org/Managed/docs/Adult%20Ed%20Facts_Mar2014.pdf). An article noting Department of Education average cost per credit hour indicates that figure to be \$594 (<https://studentloanhero.com/featured/cost-per-credit-hour-study/>).

Jeffrey A. Nelson, General Manager of the Rock Island County Metropolitan Mass Transit District (MetroLINK) in Moline, Illinois, and a participant in NTI classes, stated that “NTI is the leading force in providing current and quality programming that benefits transit professionals throughout the country. Up-to-date educational sessions ensure that our industry is well-informed about current and new standards affecting public transit today. NTI is a vital clearinghouse of information, educating transit professionals and offering access to best practices in support of a well-rounded and stronger industry.”



David A. Lee is the General Manager for Connecticut Transit (CTtransit), which operates the State-owned bus transit systems serving the greater Hartford, New Haven, and Stamford areas. He has participated in NTI courses and has seen benefits from its classes, noting that “At a time when regulatory compliance for transit agencies is becoming ever more complex, when the need to disseminate best practices throughout the industry is more pressing, and when we are trying to attract new talent into transit who need to be educated on key fundamentals, the course offerings of the National Transit Institute have never been more essential. NTI has not only developed a comprehensive list of courses on subjects of great interest and urgency within the transit community, but the program is constantly updating curricula to ensure timeliness and relevance. Speaking for my own agency, there is absolutely no question that CTtransit staff have benefitted from the opportunity to attend NTI courses on issues ranging from fare collection technology to procurement procedures to project management. It is especially important that NTI is able to offer courses at locations throughout the country in order to minimize the expense of staff travel. NTI is an invaluable asset to the national transit community.”



SECTION
2

Human Resources and the Innovative Workforce Development Program

Introduction and Background to Workforce Development Activities Authorized in 49 U.S.C. 5322 (2012)

Under the authority of 49 U.S.C. 5322 (2012), FTA announced \$8.2 million in workforce grants to 17 recipients in FY 2015. The FAST Act repealed Section 49 U.S.C. 5322 (2012) and incorporated the activities into Section 5314. Section 49 U.S.C. 5322 (2012) requires FTA to report on the measurable outcomes and impacts of grants issued under this section. These grants were part of FTA's Innovative Transportation Workforce Development competitions held in Fiscal Years, 2011, 2012, and 2015. Eligible public transportation programs for such grants included employment training, outreach to increase minority and female employment, and research on personnel and training needs. This FTA initiative has issued almost \$20 million in grants to 43 recipients since 2011. To ensure that grantee results are applicable broadly to the industry and issues facing public transportation providers, FTA's sub-goals for the Workforce Initiative included:

- Assisting in the development of innovative workforce activities addressing human resource needs of large, small, urban, and rural public transportation providers.
- Advancing training related to maintenance of alternative energy, energy efficiency, or zero emission vehicles and facilities used in public transportation.
- Targeting areas with high rates of unemployment.
- Addressing current or projected workforce shortages in areas that require technical expertise and skills.

Workforce Development grant selection was conducted through a competitive solicitation process.

Measurable Outcomes and Impacts of Workforce Programs

Section 49 U.S.C. 5322 (2012) requires FTA to select recipients that met the goals noted above. FTA's outcomes demonstrate success in addressing these requirements. To provide the breadth of the outcomes of the Workforce Initiative, FTA is providing in this report a summary of all grantee results in these areas and a detailed account of projects outcomes and impacts to date. Most of the 14 grants funded in late FY 2015 were obligated in FY 2016.

Geographic Diversity

Workforce grants are geographically diverse, with projects located in large cities such as Los Angeles and Chicago and small towns such as Pierre, South Dakota, and Pablo, Montana. In FY 2012, the program funded projects in 12 states and 16 cities. Figure 1 shows locations that have received Workforce Development grants since program inception.

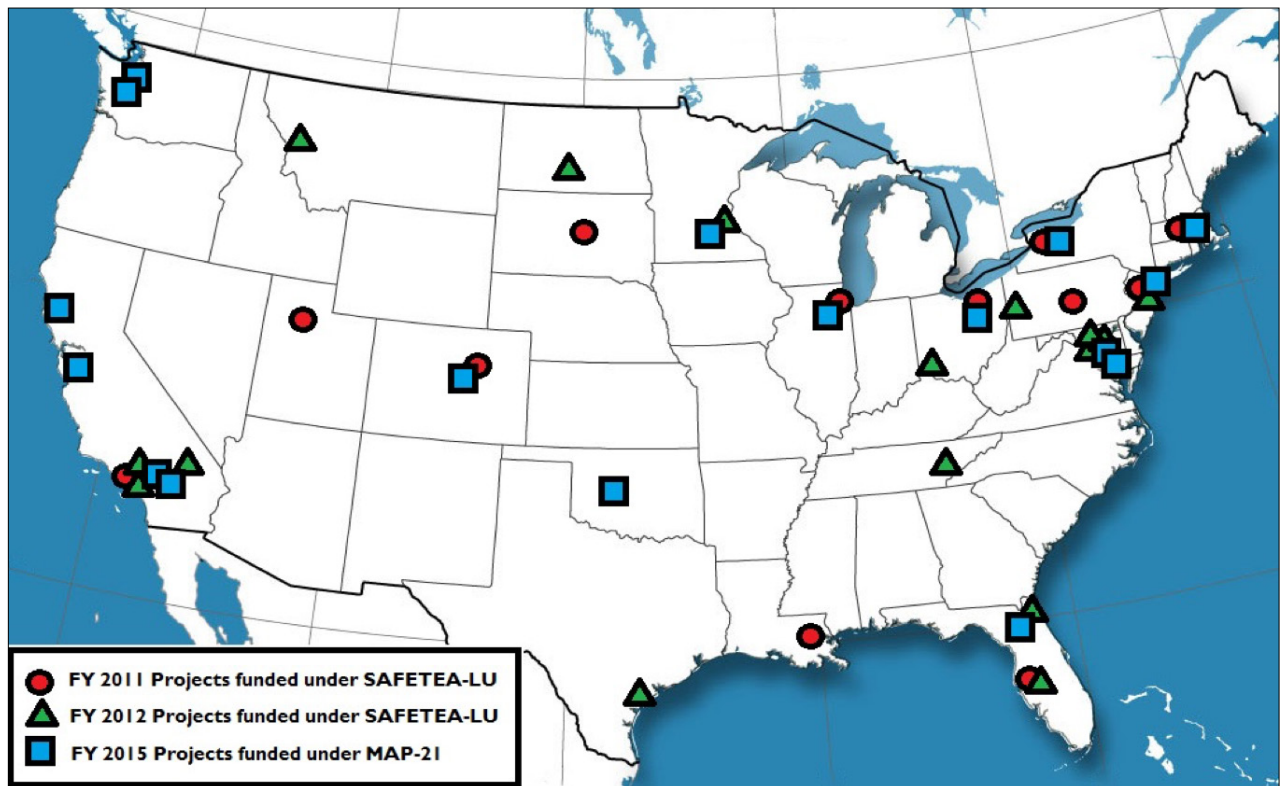


Figure 1 Map of Innovative Workforce Development Initiative Grantee Location

Addressing Workforce and Human Resource Needs of Small and Large Public Transportation Providers

The Workforce Development Program addressed the workforce and human resource needs of small and large public transportation providers. An example for small public transit providers is the Minnesota Transit Partnership project in Minneapolis, which provided training and professional development for operations and maintenance workers and shared innovative methods of encouraging youth from disadvantaged backgrounds to pursue careers in public transportation. An example for large public transit providers is the Bus/Rail Operator Training Academy (BOTA) in Los Angeles, which developed a model to recruit and train bus and rail operators from disadvantaged populations and provided training to 220 participants, with 89% obtaining employment.



The training model developed by BOTA on Pre-Trip Inspection Instruction proved extremely valuable. It placed the participants in a work environment that helped them see themselves as future employees, encouraged them to be on time and dress appropriately. Daily interaction with other Metro employees in the elevator and the lunchroom increased their comfort level and allowed them to begin integrating into the Metro organizational culture. It also provided easy access to Metro staff that frequently visited the class and raised the visibility of the program within Metro.

Metro staff taught the Bus Inspection and Safety Check portion of the training at the OCI Facility, thus helping successful applicants become familiar with the training site and trainers they would encounter during their on-the-job training.

Addressing Workforce and Human Resource Needs of Rural and Urban Public Transportation Providers

The Workforce Development Initiative also has ensured that training is provided for rural and urban areas with large populations and areas in which residents may have challenges with public transportation. For example, the North Dakota Statewide Transit Intelligent Transportation System (ITS0) Workforce Training Program provided ITS training for transit workers statewide and also provided initial Intelligent Transportation System (ITS) and computer-aided dispatch (CAD) training for 31 rural transit systems across the state. Urban public transportation provider needs were addressed in the regional Workforce Initiative Now (WIN) project in Denver, where the Regional Transportation District of Denver created a workforce partnership that leveraged existing training providers to assess, train, and place community members from disadvantaged backgrounds into careers in transportation and transit.

construction, employing 1,000+ persons on Denver transit construction projects and providing long-term employment.

Providing Advanced Training

FTA funded programs providing advanced training related to maintenance of alternative energy, energy efficiency, and electric vehicles and facilities used in public transportation. For example, the Hybrid Technology Maintenance Education Program in Cincinnati developed a Transit Maintenance Workforce Training Program that provided technical training in hybrid engine technology that helped improve its maintenance program and the quality of its hybrid bus fleet. The Florida Department of Transportation's Certified Transit Technician program resulted in 13 hires and the opportunity to gain greater certification and a college degree.

Targeting Areas with High Rates of Unemployment

FTA funded projects such as the Community Career Development Ladders—Moving Employees into Transit-related Opportunities (METRO) helped populations in areas with high rates of unemployment gain employment in the public transportation industry.

Addressing Current or Projected Workforce Shortages

The enormous growth in transit-related construction has not been met with enough technical skilled workers to meet the demand. Addressing current and projected workforce shortages is a priority of FTA. An example of this type of project is the Puget Sound Region Ladders of Opportunity Initiative, which is creating a pipeline of skilled workers ready to enter the construction and transit industries through training in mechanical and technical skills and career building. Another example is the Greater Cleveland Regional Transit Authority's (GCRTA) Career Pathways Program that addresses all aspects of the transit workforce, from student internships to upper-level management. A partnership with El Barrio Workforce Development Center will recruit and train 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. In addition, a partnership with Cleveland State University will expose undergraduate and graduate students to a variety of transit career opportunities.

Workforce Development Grants and Results

FTA's Innovative Workforce Development Initiative announced a set of grants in FY 2015 and awarded most of the grants in FY 2016 to stimulate innovative solutions to pressing workforce development issues. These awards were announced in August 25, 2015.

Section 49 U.S.C. 5322 (2012)(b) authorized FTA's discretionary Innovative Public Transportation Workforce Development Program, which allowed FTA to award funds to transit agencies and other entities to undertake workforce development activities and continued the authorization of the Workforce Development Program started under SAFETEA-LU.

In October 2014, FTA published a Notice of Funding Availability (NOFA) for \$9 million for the Innovative Transit Workforce Development Program/Ladders of Opportunity. A total of 50 applications were evaluated that requested more than \$27 million in funding; from these applications, 16 projects were selected for funding in 13 states. FTA added \$500,000 to the already-advertised \$9 million, and \$9.5 million was announced to grantees in August 2015.

Table 4 shows the Workforce Development grants funded in FY 2015. In total, 14 projects were funded in FY 2016 for a total of \$8,114,346 in grants awarded, with 2 additional grants slated for award in early FY 2017. Five areas were targeted for the FY 2015 workforce grants: expanding new entrants from disadvantaged backgrounds, focusing on incumbent training so the skills of workers are current and cutting-edge, increasing outreach and engagement with youth to encourage careers in public transit, creating pathways to careers in public transit through internships and apprenticeships, and making sure that minority-owned businesses that are under-represented in the transit industry receive adequate assistance with curriculum and business development so they are connected with transit projects and succeed. Once all are awarded, the various projects span the five investment areas: four projects focused on New Entrants; eight addressed the needs of Incumbent Worker Training; four addressed Internships, Apprenticeships, Work-Based Skills Training, or New Technology Training; one addressed youth engagement and outreach; and one addressed transit curriculum development. Each of the projects approved and awarded in FY 2015 applies to one or more activity areas and meets one or more of the criteria authorized in Section 49 U.S.C. 5322 (2012).

Table 4. 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	San Francisco Bay Area, CA				x		\$750,000
Workforce Initiative Now! 2.0	Regional Transportation District	Denver, CO		x				\$663,256
Back-2-Work	Jacksonville Transportation Authority (JTA)	Jacksonville, FL					x	\$200,000
Second Chance	Chicago Transit Authority	Chicago, IL	x			x		\$750,000
Massachusetts Construction Career Development	Mass DOT	Hopkinton, MA				x		\$750,000
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	Cleveland, OH		x				\$407,780
N2N Automotive University	Grand Gateway Economic Development Association	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
Total FY 2015 Projects Funded								\$8,114,346

* 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

Building and maintaining human capital involves targeting areas and needs in the lifecycle of the transit workforce so that the public transportation system can continue to be competitive and efficient. FTA made grants to transit agencies and other entities to develop employment training programs, conduct outreach programs to recruit minority and female employment into transit careers, build partnerships, and enhance or develop curricula. Grantees made many advances in their work plans over the first full year of their programs. The following sections note examples of successful projects in each grant focus area, provides detailed project descriptions with results as of March 31, 2017, and concludes with a summary of the overall program accomplishments as of March 31, 2017. Most of these grants are still active and moving into their second year; final results and outcomes will be noted in future reports. A program evaluation will begin in FY 2017.

New Entrants

FTA targeted career pathways projects in areas of high unemployment with projects that helped new entrants to public transportation gain both short-term employment opportunities and sustainable careers. Veterans, women, individuals with disabilities, and other focused populations benefited from these projects. One example is the Chicago Second Chance project.

Incumbent Worker Training

Supporting the development and retention of current employees is another important area of workforce development. Career laddering and training protocols are needed to retain workers within the transit industry and provide them with the tools to remain effective and productive within the industry. An example of success in this area is the GCRTA's Career Pathways Program.

Youth Engagement and Outreach

A major goal of the Workforce Development program is to increase the awareness of youths about the public transportation industry and encourage them to explore careers in transportation and develop as future leaders. To ensure that the public transportation industry reaches out to youths, FTA has invested in projects that target them at the high school and college levels. Discover Opportunities in Transit (DO IT!) in Santa Clara, California, provides training and work opportunities to youths in high schools and vocational schools.

Internships, Apprenticeships, Work-Based Skills Training, or New Technology Training

FTA encourages grantees to create partnerships with community colleges, transit agencies, and workforce investment boards to create direct and accessible pathways to employment in the transit industry. Through internships, apprenticeships, skills

training, and new technology training, the transit industry provides opportunities for individuals in low-income areas, communities with high unemployment and underemployment, and disadvantaged groups such as veterans, women, and minorities. FTA has invested in programs around the country that provide these opportunities. Examples include the Workforce Development Training Program in Jersey City and the Los Angeles Trade Technical College program.

Curriculum Development

Many of the transit industry's key partners are small and minority-owned businesses, and FTA encourages them to provide their services to the transit industry. With funding from the Workforce Development Program, small and minority-owned businesses can receive assistance to help them develop curricula and learning management systems to support employee training and business development that provide historically disadvantaged groups with the opportunity to connect to the economic growth and development brought by transit projects. FTA has provided funding for the development of curricula, learning management systems, and 3D transit modeling systems to assist new and incumbent transit employees with opportunities to grow in their jobs and in careers. International Transportation's Learning Centers Consortium for Signals Training Program is an examples of transit curricula developed specifically for transit and transit careers.

Tables A-1 and A-2 in Appendix 3 list the workforce development grants funded in FY 2011 and FY 2012. These grants provided important information in the development of the FY 2015 Ladders of Opportunity Grant Program. FTA held a Workforce Summit in June 2016 with all grantees to exchange and share lessons learned. Listening and learning from various public transportation stakeholders and building upon that learning are essential components of how FTA's Workforce Initiative has developed over the last five years. This will ensure a very strong and sustainable long-term impact for these investments.

2015 Workforce Program Projects

Following is detailed information on each workforce program/project funded in FY 2015, including a description of the project, outputs, and outcomes/impacts. In total, 14 of the 16 grants were awarded and active in FY 2016. As of the end of March 2017, most grantees were almost 50% through their grant activities. Grantees are tracking qualitative and quantitative outcomes, including the number of direct participants they expect to serve through their various programs. For many, the primary area of focus is training, either developing new training curricula or seeking to recruit and train specific groups, especially those who are under-represented in the public transportation workforce. The following descriptions include quantitative outputs for these grants, which are

only a part of what they are achieving. However, two years from obligation of grant funds, a comprehensive evaluation will be conducted that will show the depth and breadth of results for the grantees after they have completed their innovative workforce activities. These activities are meant to be a testing ground for new approaches and, as such, for many grantees there is a need for significant planning and development to their programs. Of the \$8.1 million awarded to date, approximately 77% goes directly to serving program participants. The remaining \$1.9 million is for investments in curriculum development, program start-up, and planning activities.

Title: Workforce Development Training

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

Project Description:

The JCETP operates an evidence-based re-entry program in close partnership with the Hudson County Department of Corrections Community Reintegration Program. JCETP provides a full complement of wrap-around case management services, sober housing, connection to insurance and benefits, 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 Department of Transportation's \$240 million Bayonne Bridge project. The project will recruit participants from impoverished target groups who would otherwise rely on public social benefits and train them to create 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. The grant relies on a strong network of partners, including Department of Labor One Stop Centers, unions, and county and city governments by working with the social services provider Jersey City One Stop, JCETP is ensuring 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 reached 400 people with its outreach and orientation sessions. Returning Citizens JCETP has trained 164 individuals, with 22 currently preparing to obtain their GED with Workforce Learning Link software, 6 have completed CDL license training through the Jersey City Department of Public Works (DPW), and 7 are in training through DPW.

Outcomes/Impacts:

As of March 31, 2017, JCETP placed more than 30 applicants in apprenticeships or unions, with 9 in the process of taking pre-tests and 126 people becoming employed. JCETP has expended about 41% of its total grant funding. By the end of the grant, JCETP expects to help at least 360 people get a job at a projected cost per direct participant of \$538, which is an extremely impressive figure 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 Fiscal Year 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%. This grant program is expected to serve almost 2,000 people and train more than 350 people in programs like SkillUP, a 45-hour pre-employment boot camp to help participant assess career interests and aptitudes, and the Transit Tech Institute provides three career ladder training programs designed to expand the pipeline of entry-level transportation workers.

Outputs:

WIN has provided outreach and orientation activities to 896 persons to date and trained 100 Denver residents on the local FasTracks and infrastructure expansion projects, and 178 people became employed. RTD has expended about 55% of its total grant funding as of the end of March 2017 and expects to have assisted 350 individuals.

Outcomes/Impacts:

WIN 2.0 is training and placing participants from underserved communities on large construction projects while adding a new training program for participants targeted for operations and maintenance positions. WIN expects to train at least 350 people and help at least 200 people get a job. WIN expects to achieve a strong and highly efficient cost per participant of \$166 – over 80% lower than the average cost per participant for these grants. This clearly demonstrates the

effectiveness of having a large network of partners and building upon an already successful training program. The program is also successfully staying within the target retention rate of a least 90% for these participants in middle-skill transit and construction careers. WIN 2.0 has also achieved a position advancement rate of 15% and has expended a little over 50% of grant funds as of March 31, 2017.

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, JTA created the Back-2-Work program to tie workforce needs with major construction project bids. JTA will fund more than \$100 million for 27 transportation project over a five-year period as part of its Mobility Works Initiative. JTA staff will work with prime contractors to develop a listing of subcontractor and labor opportunities, including disadvantaged business enterprise goals. By working with strategic partners, including the Florida Small Business Development Center, Jacksonville Job Corps, and Duval County Public Schools, this innovative program will help workers and small business owners from minority communities provide their services to the transit industry and address the workforce needs for these major transportation projects. Each prime contractor bidding on transportation projects will be required to develop its own workforce utilization program.

Outputs:

JTA identified labor needs and potential employees and trainees and trained 189 participants. A total of 26 JTA contractor small and disadvantaged business partners benefited from the program. One of the overall goals of the project is to assist 75 small and disadvantaged businesses.

Outcomes/Impacts:

JTA's goal is to impact 75% of individuals and businesses that enter and complete the JTA's Business Development Academy through the FTA funded Back 2 Work program. The current success rate of the program is that 113 people became employed - 60% of those trained were placed with contractors. It is expected that 45% will be retained after 90 days. The program expects to directly assist at least 240 people become employed and train a total of 270 individuals and business owners. The expected cost per participant of \$527 is more than 40%

below the average cost per participant for all 2015 workforce grants of \$986. As of March 31, 2017, JTA expended about 44% of its total grant funding. By the end of the grant, JTA expects that 79% of funding will directly assist program participants.

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 (LACTMA) has a significant shortage of bus operators and with impending retirements, data suggests they 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 to recruit low-income individuals, including underserved groups such as women, veterans, and minorities, from communities throughout metropolitan Los Angeles that 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 includes financial assistance, career counseling, career coaching, and other services. Upon completion of the grant, CCD expects to assist at least 200 individuals with training and more than 90 people with a full year of employment support services.

Outputs:

As of March 31, 2017, CCD expended 59% of its grant and trained 221 people, and 79 people became employed. Marketing activities reached 400 people, and those employed will now receive individualized support at the forecasted cost per participant of \$1,499.

Outcomes/Impacts:

The Bus Operator Training Academy (BOTA) Bridge class has trained 201 people to meet the job needs for highly-skilled transit workers in the Los Angeles area. The program is addressing job shortages, with a target to employ at least 93 people as a result of these activities. To date, CCD has reached veterans, developed a strong relationship with a new partner, Santa Monica Big Blue Bus, and is replicating the BOTA training model with their new partner. The projected

cost per participant of \$1,499 includes a full complement of training and support services to aid in retention and job success. The program is expected to generate \$5+ million in new wages and assist the LACMTA and MV Transit in their impending job shortages resulting from eligible retirement opportunities. LACMTA expects to hire 200–300 new bus operators annually, and MV Transit will need to hire an additional 250 annually. The training provided in this program will allow these positions to be filled.

FTA Funding: \$331,313

Title: Second Chance

Grantee: Chicago Transit Authority (CTA)

Project Description:

Second Chance offers Chicago residents in difficult circumstances a path to economic stability. This grant expands the Second Chance program 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/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 obtain 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;¹⁴ social service agencies were selected to work with qualified job seekers.

Outputs:

To date, 195 participants entered the program and were trained in fields such as maintenance, operations, and customer service through the Second Chance program. Second Chance has provided permanent front-line and entry level transit jobs at the CTA for 25 program participants in positions including bus servicers, rail car servicers, rail car repairers, customer service representatives, and bus operators.

Outcomes/Impacts:

A total of 53 of the 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. As do a number of grants, programs with support services provided for a year or more average this level of cost, which equates to about \$125 per month per person per support session. Individualized assistance would usually take at least an hour per month and average anywhere from \$60–150 per hour. Second Chance has achieved a 27% employment rate for those who attended training. By the end of the grant, CTA will have trained at least 265 people and hopes to help most of them become employed. As of March 31, 2017, CTA expended approximately 45% of its total grant funding.

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 under-represented groups such as women and minorities. To support the enhancement of local transportation pre-apprenticeship programs, MassDOT will work with four existing anchor programs—Community Works, Building Pathways, the Worcester-Fitchburg Building Pathways Programs, and Youth Build Boston. Transportation employers in Massachusetts have indicated support to work with hiring sources that refer trained, screened employees through proven pre-apprenticeship program such as the four targeted for this grant.

Outputs:

To date, these four programs have reached 1,194 people through outreach and orientation sessions, and 128 people have been trained. Significant planning and development activities were completed with each partner; 53% of grant funding is being used to further refine and develop the four anchor programs.

Outcomes/Impacts:

In total, 78 people became employed through these four pre-apprenticeship programs out of the 169 people who directly participated in various activities of this grant program, a 46% employment rate. An additional 18 people received apprenticeships, and the program expects to ensure that at least 51 people receive apprenticeships. Having expended more than 63% of grant funding, this

initiative has met its employment target and projects a cost of approximately \$2,086 per direct recipient.

FTA Funding: \$750,000

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 relating to career training in rail car maintenance to create and connect two related but too-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 in the Consortium are the Amalgamated Transit Union, the American Federal of Teachers, APTA, CTAA, the Corps Network, the National College Credit Recommendation Service, and the US Department of Education.

Outputs:

As of March 31, 2017, five webinars on heating, ventilation, and air conditioning (HVAC) were conducted. The courseware development team also held three webinars for the Propulsion & Dynamic Braking courses, and the consortia finalized four of the six modules for TC3. In addition, project staff surveyed participating transportation agencies for their training needs and identified core locations and partners and now have 14 agencies that have committed to participation.

Outcomes/Impacts:

ITLC trained has 130 participants to date and expects the cost to be around \$5,000 per participant by the end of the grant. This cost reflects the depth and extensive set of courses that participants will take. ITLC expended about 70% of its total grant funding as of March 31, 2017. By the end of the grant, ITLC expects to have directly assisted 150 individuals. Individuals who complete the coursework will be prepared with core skills and specialized skills that will equip them for essential positions within public transit agencies. The broad reach already achieved—14 agencies across the US will help with fielding and piloting these courses—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:

The Signaling Career Pathways project is addressing the need for highly-skilled signals technicians by enhancing the existing Signals Training coursework through a consortium of agency and union partners. The results will be a full suite of 13 new courses covering an expansive introductory course (Overview to Signal Maintenance) and introduction, inspection and maintenance, and troubleshooting for signaling, interlocking, power distribution, and control panels. These courses include both in-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:

ITLC piloted 12 courses with 89 participants to allow agencies to test and identify any needed changes to the courseware. In addition to courseware, ITLC's Veterans Task Force created a Veterans Outreach and Skills Guide and Women's Toolkit.

Outcomes/Impacts:

ITLC expended about 60% of its total grant funding as of March 31, 2017, and by the end of the grant it expects to have directly assisted 89 individuals at a projected cost of \$6,380 per direct participant. The project is ahead of schedule and has completed all but one of the new courses for the Signal Career Pathway series. The cost per direct recipient is higher than the overall grant average of \$986 because of the 17-module training initiative; at the \$6,380 per trainee, that equates to about \$375 per course.

FTA Funding: \$574,182

Title: Metro Transit Technician Program

Grantee: Metropolitan Council/Metro Transit, Minneapolis

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 Mass Transit Technician (MTT) program is recruiting

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

Outputs:

From 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 (HTC) two-year AAS degree program to become a Medium/Heavy Truck Technician. Of these participants, 19 people became employed. The Metropolitan Council/Metro Transit expended 100% of its total grant funding as of March 31, 2017, and will be submitting its final report to the FTA.

Outcomes/Impacts:

The MTT program expects that at least 20 people will secure a position after completing all phases of the program. At the end of the grant period, MTT expects to have 40 people trained with a cost per person served of approximately \$1,676. Like many other projects under the Innovative Transit Workforce Development Program, this initiative includes a number of phases and services over almost a year. This project is on track to assist the urgent need to secure sufficient technically-skilled workers to support the transportation needs of the Twin Cities.

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 to reach the middle class. CPP is designed for new transit entrants and is targeting low-income, minority, veteran, and female recruits. The program is building a pathway to long-term transit careers in four ways: introduction of career opportunities to front-line worker positions, hiring of college students as interns, development of recent college graduates in a Management Development program, and enhancement of 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:

In total, 105 people were trained and, of those trained, 12 students completed mechanical or electronic repair training provided through Cuyahoga Community College and have begun 12-week internships. Of those participants selected for the training, 77 have obtained employment.

Outcomes/Impacts:

GCRTA expended approximately 53% of its total grant funding as of March 31, 2017. At the conclusion of the grant, GCRTA expects to have assisted 152 individuals at a cost of \$2,683 per participant and to have assisted 110 individuals with finding full-time employment. There is significant variability in the income levels for various public transportation positions; most studies suggest these positions have starting wages in the mid \$40,000s and can go up to more than six figures. Assessing the wage impact of jobs acquired from this program, at an average of \$60,000, 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, Oklahoma Workforce's 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:

The University was launched in FY 2016, when the University began developing courses needed for the program, developing recruitment strategies, hiring staff, and finalizing planning activities.

Outcomes/Impacts:

Once operational in late 2017, the program will identify and train participants primarily from low-income jobs for 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 March, 31, 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 people are expected to obtain employment. The expected average cost per direct participant is \$4,307, including 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

Project Description:

This Initiative brings together eight partners across Snohomish, King, and Pierce counties in Washington State 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 acquiring new recruits to access 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, apprenticeship 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 reached 506 people in outreach and orientation sessions to date and trained 15 participants, with 8 obtaining employment.

Outcomes/Impacts:

When completed, this project is expected to assist 119 people obtain employment, reach 748 people, and train at least 247 at a cost per participant of \$1,930. The Workforce Development Council of Snohomish County expended about 47% of its total grant funding as of March 31, 2017. The program is succeeding in reaching its target to bring more women into pre-apprenticeship programs; all 15 direct participants to date in the program are women.

FTA Funding: \$476,776

Title: Transit Career Ladders Training Program

Grantee: Bay Area Rapid Transit (BART) District

Project Description:

BART in the San Francisco Bay area established the Transit Career Ladders Training (TCLT) Program to create a direct and accessible pathway to employment for traditionally under-represented individuals in the transit industry by partnering with Workforce Investment Boards and community colleges in the Bay Area in three activity areas. The activity areas for the TCLT Program are community outreach, academic bridge/technical training, and non-technical training to address public transit workforce shortages in the Bay Area.

Outputs:

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, 116 were enrolled and participated in the Academic Bridge program for 6 weeks and became eligible to participate in the TCLT program.

Outcomes/Impacts:

A total of 103 people have been trained since the beginning of the program, and an additional 1,610 people have been reached through outreach and orientation. The expected cost per direct recipient is \$5,556. The reason for this level of cost is that participants will go through a two-year program with the goal of finding a position at the end of that time period. Participation in the program is resulting in new recruits for transit careers. Although three individuals achieved employment as of March 31, 2017, this program's main purpose is to prepare participants who successfully complete the TCLT's Program Technical Training phase and pre-employment and background screening phases to become eligible

to participate in the Field Training Program. The Field Training program qualifies persons to compete in the selection test for classifications to be placed in hiring pools at BART. Future employment of those currently in the training pool is forthcoming.

FTA Funding: \$750,000

Title: Institute for Advanced Transportation Technology Training (IATTT)

Grantee: Los Angeles Trade-Technical College (LATTC)

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 significant forecasted workforce shortages for transportation workers in the Los Angeles area and brings together a diverse set of partners to create the IATTT within LATTC. Partnering with LACMTA, local unions, and workforce organizations, LATTC 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:

Since award of this project in September 2015, the partners developed the Transportation Workforce Institute (TWI), developed 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, LATTC has provided orientation to 2,092 individuals to various career options in transportation. In addition to holding these outreach and orientation sessions, LATTC has trained 32 Metro employees in the Joint Apprenticeship Committee (JAC) program. LATTC, as a result of its participation in the FTA Workforce Summit, is working with LA Metro and the US Department of Labor (DOL) to gain approval of the JAC program as an official DOL Registered Apprenticeship. LATTC also held 8 incumbent worker trainings, including 2 Cisco Networking trainings with 21 participants that were held, resulting in 2,092 people trained. LATTC expended about 85% of total grant funding as of March 31, 2017, and anticipates increased employment opportunities for its participants

from Metrolink, LACMTA, Union Pacific, and others in the local region, as this project continues to spur training and career opportunities in transportation.

Outcomes/Impacts:

LATTC has nearly achieved its target to train 2,200 individuals. When the grant is completed, it will have assisted at least 32 trainees to receive an apprenticeship. The projected cost per participant is expected to be \$302, about one third of the average for this set of workforce grants. In addition, 22 individuals are participating in the JAC, an agency-based apprenticeship program. The many partners, new curricula, and new framework developed through this new initiative housed within a high- 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 Discover Opportunities – In Transit! (DO IT!) program is recruiting low-income and minority youth in the Santa Clara Valley in California and providing for a career in transportation planning. VTA found it was challenging to find qualified local candidates for their transportation planner series of jobs, so it created this program and partnered 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 is offering staff mentors and at least five paid internships and expects to train 172 students and provide 5 paid internships, consisting of one 12-month internship position and four 6-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 either a Transportation Planning Aide or Transportation Planner I.

Outputs:

This two-year program launched in September 2015. Low-income and minority youth were selected and assigned to training courses. As of March 31, 2017, the program has 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. VTA expended about 46% of total grant funding as of March 31, 2017.

Outcomes/Impacts:

VTA has made significant progress to develop potential workers in transportation training in an efficient manner at a cost per direct participant of \$756, which is less than the average cost per direct participant for the FY 2017 workforce grants. Approximately 65% of the award is being used to directly serve participants.

FTA Funding: \$200,000

Summary of 2015 Projects

All 14 active FY 2015 projects are working to provide opportunities for traditionally-disadvantaged communities or those under-represented in transit and construction. Various projects targeted recruitment of minorities, including Tribal citizens, women, veterans, returning citizens, persons with disabilities, and low-income individuals. In addition, many programs provided support services to overcome barriers to employment for targeted groups, including case management, coaching, or assistance with various program or registration fees.

By March 31, 2017, most of these Innovative Transportation Workforce Development Initiative projects are more than halfway through their projects over 12 months of their 24-month funding and performance period.

Also, as of March 31, 2017, almost 50% of the total funds awarded were expended. The programs trained 3,754 individuals, and 6,168 individuals were selected and able to participate in the programs, 93% of the target. Of the people successfully trained, 576 obtained employment, 79 obtained internships, and 230 obtained employment 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 April 30, 2017, for the quarter ending on March 31, 2017, with their current project activity status. Table 5 provides a summary of key performance metrics for these grants.

Table 5
*Status of FY
 2015 Innovative
 Transit Workforce
 Development Projects
 as of March 31, 2017*

Funds awarded	\$8,401,090
Funds expended	\$4,195,926
Percentage of total grant funding expended as of March 31, 2017	49.95%
Number of people trained	3,754
Total number of direct participants	6,168
Number of people who achieved employment	576
Number of people who achieved an internship	79
Number of people who achieved an apprenticeships overall	230

Once the FY 2015 Innovative Transportation Workforce Development Projects are completed, more than 7,300 people will have been reached, with 4,800 people trained, 1,327 obtaining employment (part-time or full-time), 108 obtaining an internship, and 523 obtaining an apprenticeship in transportation careers and jobs. With wages for public transportation jobs ranging from \$40,000–\$100,000 per year, average \$60,000), 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 the completion of the projects, the average total projected cost to serve a direct recipient is \$986, excluding the cost of doing 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 are being used for these types of 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 costs per participant. Some programs provide significant wrap-around services that last 1-2 years; for these programs, costs per direct participant are \$1,500–\$7,000 and reflect the differences in costs in the various geographic areas as well as in scope of services. A cost of \$7,000 per participant also may include a number of activities such as training courses, individualized coaching, counseling, and other types of social services over a 1-2 time period. Such services can average \$150–\$300 per month, and people may need support at least monthly. Given the unique nature of each community, the cost structure of those communities, and the variability in services provided by these grants, use of financial measures to assess success must be tempered with an understanding of the specific context of each project. These costs provide valuable baselines for future grant programs and for other agencies that might want to replicate their activities.

Finally, among the biggest impacts of these grants are the extensive networks of partners and the new curricula being developed; these achievements ensure a long-term positive outcome for recruiting, training, supporting, and employing skilled workers to overcome the forecasted public transportation workforce

shortages that exist across the country. The primary goal of these programs is to fund innovative approaches to help FTA and the public transportation industry understand what constitute high-impact projects to address the workforce needs of the future and what these types of programs should cost. To date, these 14 active grantees' results are meeting this important goal. FTA's sub-goals are also being met as grantees use the activities to address human resources needs across diverse geographies as they develop new training for emerging infrastructure, target areas of high unemployment, and work to overcome projected workforce shortages.

Table 6 presents the expected outputs of the active grantees at the completion of their period of performance.

Table 6
*Expected Outputs of
FY 2015 Innovative
Transportation
Workforce
Development Projects*

Number of people expected to be trained overall	4,800
Number of people expected to achieve employment overall (part-time or full-time)	1,327
Number of people expected to achieve an internship overall	108
Number of people expected to achieve an apprenticeship overall	523
Unduplicated count of direct participants expected to be served through training, jobs, internship, apprenticeship - does not include outreach)	6625
Total projected cost per direct participant	\$986

Formal program evaluations for these projects will begin in Winter 2017, and evaluations for FY 2012 projects are in process. These evaluation activities will provide additional critical information to assess the impact 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.

SECTION
3

Report on Frontline Workforce Development Program

Section 5314 of title 49 U.S.C. requires FTA 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. FTA is required to include in its Report to Congress a detailed description of activities carried out under Section 5314, an evaluation of the programs carried out by each organization that received assistance under this section, and policy recommendations to improve program effectiveness. Although FTA did not solicit or award any new grants due to limited FY 2016 appropriations, it did continue to advance the Innovative Workforce Development Initiative. This section reviews the results of the initiative pursuant to the requirements for this report.

The Workforce Development Program authorizes innovative frontline workforce development projects that address the human resource needs of the public transportation industry. Eligible projects include:

- Employment training programs
- Outreach programs to increase employment for targeted groups
- Research public transportation personnel and training needs
- Support consensus-based national training standards and certifications in partnership with industry stakeholders

FTA Innovative Workforce Development Initiative Activities and Results in FY 2016

The two major activities conducted by FTA in FY 2016 were the development, implementation, and management of the workforce grantees funded under Section 49 U.S.C. 5322 (2012) and the June 2016 Workforce Summit. Section 2 provides an overview of the grantee results. The statistics and information noted in the report are derived from a special report developed for FTA by Axiom.

Workforce Development Summit

On June 7, 2016, FTA and NTI hosted the Workforce Development Summit: Implementing, Disseminating, and Modeling Ladders of Opportunity, which provided an opportunity for grantees and other participants as well as representatives from the US DOT and the US DOL to share information, network, and learn from each other as they attempt to address the workforce development challenges facing the transit industry. The goals of the Summit were to 1) enable grant recipients to showcase promising practices created from their FTA-funded workforce project, 2) provide peer-to-peer exchanges and collaboration opportunities, 3) discuss how to leverage funds from partners and use funds authorized for workforce development, and 4) enable grant recipients to participate in the development of workforce goals, objectives, and performance measures consistent with Section 5314.

A total of 79 participants from 25 of FTA's 37 grantees attended the all-day event with partners from DOL. External stakeholders from industry associations also attended and participated in the discussions.

The summit achieved all of its stated goals. Peer-to-peer exchanges helped to highlight successes to date across the five types of grantee focus areas, grantees learned ways to leverage funding through other federal partners, and a working session on performance measures provided important feedback from attendees that will inform future grant programs. FTA will make key decisions around a set of consistent performance standards for any future workforce grants, and ensure that any such grants address the program outcomes specified in Section 5314, including:

- Impact on reducing public transportation workforce shortages in the area served
- Diversity of training participants
- Number of participants obtaining certifications or credentials required for specific types of employment
- Employment outcomes including job placement, job retention, and wages using performance metrics established in conjunction with the US DOT Secretary and DOL Secretary and consistent with metrics used by program under the Workforce Innovation and Opportunity Act
- Workers were not precluded in participating with various activities funded under workforce projects without regard to the length of time of their participation in the program

A work session during the Summit reviewed the metrics that grantees are currently tracking, cross-walked with DOL employment statistics. The next step in this process will be a strategic planning activity to finalize a set of

performance metrics for follow-on workforce grants. The proceedings document on the Summit is available at: <https://www.transit.dot.gov/research-innovation/workforce-development-summit-proceedings-fta-report-no-0096>.

Next Steps for the Innovative Workforce Development Initiative

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

- Continue to expand partnerships with DOL.
- Develop a workforce strategic plan.
- Educate and assist 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 our transit industry partners.

Recommendations to Improve Innovative Workforce Program Effectiveness

FTA contracted with Axiom, the contractor who conducted the FY 2011 grantee evaluation³ and that will conduct the FY 2012 and FY 2015 grantee evaluations and provide recommendations for improving program effectiveness based on results to date. Axiom also provided perspectives and trends to provide support to FTA to meet the requirements for this report.

The public transportation industry is at a critical crossroads—supporting a highly-skilled transit workforce is just as important to building and maintaining a competitive and efficient public transportation system as is investing in the physical capital of the nation’s transit system. Under 49 U.S.C. 5314(b), Congress authorized FTA to create programs that address human resource needs as they apply to public transportation activities. As such, a program may include:

- Training programs
- Outreach programs to increase employment for veterans, females, individuals with disabilities, minorities (including American Indians or Alaska

³ The 2011 evaluation report can be found at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Report_No._0094.pdf.

Natives, Asian, Black or African Americans, native Hawaiians or other Pacific Islanders, and Hispanics) in public transportation activities

- Research on public transportation personnel and training needs
- Training and assistance for veteran and minority business opportunities
- Consensus-based national training standards and certifications in partnership with industry stakeholders

Eligible Frontline Workforce Program activities include:

- Developing apprenticeships, on-the job training, and instructional training for public transportation maintenance and operations occupations.
- Building local, regional, and statewide public transportation training partnerships with local public transportation operators, labor union organizations, workforce development boards, and state workforce agencies to identify and address workforce skill gaps.
- Improving safety, security, and emergency preparedness in local public transportation systems through improved safety culture and workforce communication with first responders and the riding public.
- Addressing current or projected workforce shortages by developing partnerships with high schools, community colleges, and other community organizations.

Trends

The transit industry is faced with the dilemma of an aging workforce, a lack of diverse representation in transit positions, and insufficient investments in education and training.

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 has the highest percentage of older workers that are at or nearing retirement age, with 35% over age 55 and 21% ages 45–54. The demographic trend in the workforce—for transit, in particular—is that baby boomers are retiring, mid-career employees are from Generation X (born 1959–1981), and newer employees are from Generation Y or Millennials (born 1982–1993). When examining the entire workforce, in 2015, Millennials, for the first time, 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 the transit industry’s current and future workforce. Between 2012 and 2022, transit 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. Whereas Generation X is very similar to the baby boom generation, Millennials want meaning in their work and seek to understand how it helps or serves a broader purpose. As a group, they are civic minded, well-educated, globally-aware, and diverse. 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 prepared to handle the diverse workforce that is entering the industry.

Lack of 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 under-represented in the technician positions. African Americans and Hispanics are under-represented 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, the technical demands of the job continue to grow. The expected number of transit job openings is currently 68% higher than the completions expected in analogous education programs. This 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 Associate degrees and advanced certifications. Frontline jobs are increasingly becoming more technical, and increases in technology mean some jobs may be easier in terms of physical demand but require more technically-knowledgeable bus and rail operators and 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 spends only 0.6–0.8% of salary on investing in human capital (e.g., training). By contrast, leading American companies spend 4.5%.

Policy Recommendations: Strategies and Approaches for Addressing Workforce Issues

Over the last three rounds of project funding, the Innovative Workforce Development Program has evolved in several ways. Trends show that there are major workforce needs in the transit industry and that there may be no

one “right” or “best” way to meet workforce needs. Fostering a range of options and promoting those that are successful is a reasonable approach. Preliminary indicators and a needs assessment from industry partners and stakeholders concluded that frontline workforce retention and the development of career pathways such as apprenticeships are major priority areas for the public transportation industry. As current rounds of workforce grants are being completed, FTA will assess the need for future policy recommendations. However, FTA recommends a continuation of focus in the following areas.

Improve Awareness and Image of Transit Jobs

Although there are human capital challenges in the transit industry regarding skills and knowledge gaps and a shortage in positions filled with an aging workforce, this also sheds light on a major opportunity to improve awareness and the image of the transit industry and improve outreach to youth and disadvantaged groups. Reports indicate a lack of awareness of the broad array of transit careers as well as an “image” problem. With advanced technology, “green” jobs, higher-than-median wages, and good benefits, FTA and the transit industry have an excellent opportunity to reach the younger generation and disadvantaged groups.

Frontline Workforce Retention

Industry partners and stakeholders indicate that a primary challenge is retaining key workers, including newly-trained staff. The need for proven techniques is instrumental in making sure there are opportunities for training so that the skills of frontline workers keep up with new trends and there are promotional and developmental opportunities for incumbent workers. The transit industry has the highest percentage of workers over age 55 and, with the addition of new technology and the need for training incumbent workers, a focus on frontline workforce retention is vital to making sure America’s public transit system is safe, accessible, reliable, and efficient.

Development of Career Pathways

Establishing pathways for high school and community college applicants into entry-level transit positions will help close the skills gap for incoming applicants by working with the educational system to incorporate the education and skill prerequisites for success in the front line positions in transit. By creating training partnerships, creating pre-apprenticeship programs, and developing apprenticeships, transit agencies will be able to provide applicants with a clear trajectory towards a successful transit career. In addition, recruiting from non-traditional applicant pools so that there is more representation of disadvantaged groups and establishing virtual one-stop shopping for workforce opportunities will help fill the need for more transit applicants while developing career pathways.

Total Proposed Allocations of FY 2017 for Technical Assistance and Workforce Development – \$9 Million

FTA requested \$9 million for technical assistance and workforce development as authorized under Section 5314, which will allow the provision of technical assistance to the public transportation industry and development of standards and best practices. Of this amount, \$5 million is for the NTI program and \$4 million is what is available for technical assistance, standards, and human resources/frontline workforce development. Given the limited funding for workforce initiatives and the importance of helping public transit agencies address these issues, FTA increased the strategic reach of the NTI program. NTI will address public transportation workforce needs through curriculum mapping, strategic engagement of key partners such as APTA, and supporting the frontline workforce area through activities such as a yearly convening of thought leaders.

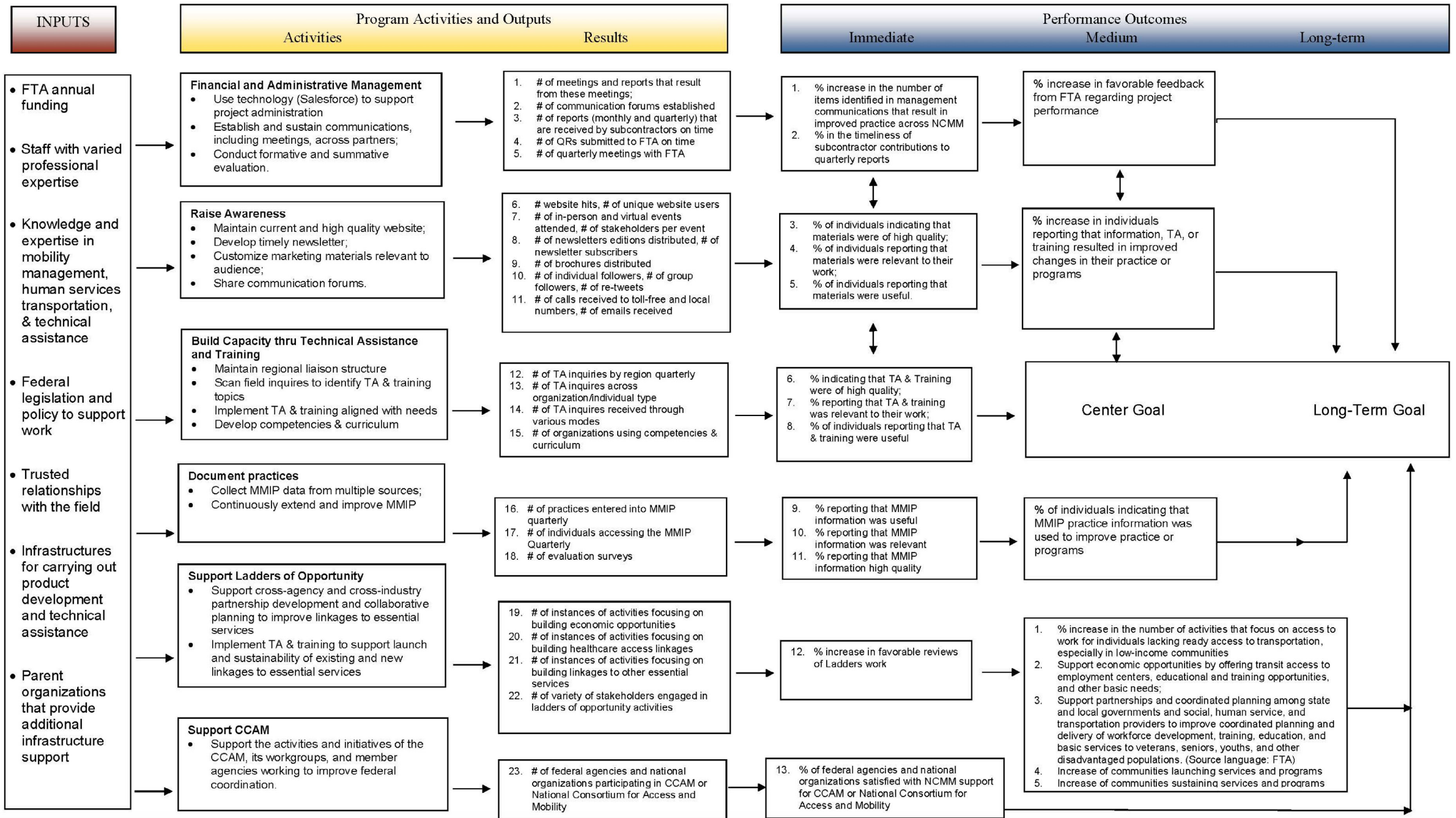
FTA will continue to invest in critical technical assistance activities such as the National Aging and Disability Transportation Center and the National Center for Mobility Management. These projects will allow FTA to continue to partner with experienced national non-profit and other organizations to provide training and guidance on how to effectively implement transit programs and meet Federal requirements. This includes supporting technical assistance centers with the appropriate funding levels for activities that support the mobility of older adults and persons with disabilities. As additional funding is available, FTA will examine ways to support workforce initiatives and standards activities.

FTA has a program planning process to develop, review, and provide information for leadership to select programs with the greatest return on investment. This process will be used to develop a specific portfolio of projects for funding consideration. Through the various activities in Section 5314, FTA is in a unique position to bring together partners to address shared challenges and questions through technical assistance, standards development, and human resources projects. Building the capacity of transit providers across the industry is extremely important, particularly given the changing public transportation field. These activities will form a critical foundation for substantive changes that benefit riders and providers.

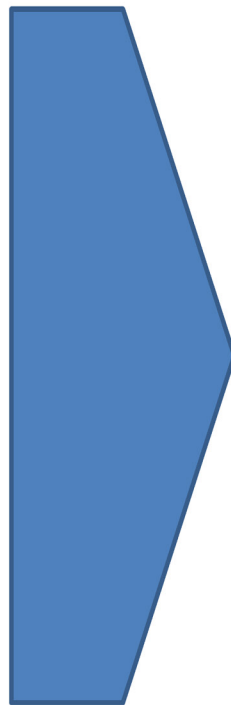
National Center for Mobility Management

Center Goal: Enable the adoption of transportation coordination and mobility management in federal, state, and local transportation programs that are responsive to the mobility needs of older adults, people with disabilities, low-income individuals and families, and other community members.

Long-Term Goal: Sustained increase in the capacity of states, regions, and communities to implement or adopt transportation coordination and mobility management in federal, state, and local transportation programs that are responsive to the mobility needs of older adults, people with disabilities, low-income individuals and families, and other community members.



NADTC Logic Model



Inputs	Outputs	Indicators	Outcomes	Results
<ul style="list-style-type: none"> • Staff • Subcontracts • Stakeholders (professional & consumer) • Federal partners • coalitions • Funding • Technology • Online engagement • Member/affiliate networks 	<ul style="list-style-type: none"> • Online training • webinars • Publications • Targeted TA contacts • Community grants • Web/social media events • Information and referral activities • Community accessibility scorecard • Outreach campaign • Yearly trends report • Broad stakeholder review committees 	<ul style="list-style-type: none"> • # of events • # of learners participating in online training, webinars, NADTC events • Level of satisfaction • # of I&R calls • # of substantial TA contacts • Website analytics • # of grantees • Report on community grant lessons learned <ul style="list-style-type: none"> • # of users of community accessibility scorecard 	<p>Measurable change in:</p> <ul style="list-style-type: none"> • Essential role of accessible transportation • Human service transportation coordination efforts • Target audience ability to access information about available transportation options • Recognition of value of coordinating transportation planning with broader planning 	<ul style="list-style-type: none"> • Increased and improved transportation options available and accessible to target populations, including seniors, people with disabilities, people with low income, caregivers, veterans, communities with limited resources

FTA FY 2011 and 2012 Workforce Grants

Table A-1
 FY 2011 Innovative
 Transit Workforce
 Development
 Projects

Project Name	Grantee Name	City and State	Investment Area*					Funds Awarded
			1	2	3	4	5	
Metro University: Developing the Next Generation of Transportation Professionals	Los Angeles Metropolitan Transit Authority	Los Angeles, CA					x	\$480,000
Regional Workforce Initiative Now (WIN)	Regional Transportation District (Denver)	Denver, CO	x					\$486,465
Certified Transit Technician Program	Florida Department of Transportation	Tampa, FL				x		\$188,881
Transit Leadership Competency Model and Integrated HR Practices	Chicago Transit Authority	Chicago, IL		x			x	\$208,590
Streetcar Maintenance Training Program	New Orleans Regional Transit Authority	New Orleans, LA	x					\$400,000
Public Transit Certificate Program for College Students	Univ. of Massachusetts (UMass Transit Center)	Amherst, MA			x			\$127,284
Transit Academy and Youth Outreach Programs	New Jersey Transit Corporation	Newark, NJ			x			\$183,900
Niagara Frontier Transportation Authority Leadership Training Program	Niagara Frontier Transportation Authority	Buffalo, NY		x				\$50,000
Greater Cleveland Regional Transit Authority Public Management Academy	Greater Cleveland Regional Transit Authority	Cleveland, OH		x				\$286,687
Pennsylvania Innovative Leadership Development Program (PILDIP)	Penn Department of Transportation	Harrisburg, PA					x	\$200,000
Center for Transit eLearning (C-Tel)	Community Coordinated Transportation Systems (River Cities Public Transit)	Pierre, SD					x	\$275,000
Blended Learning Leadership Training Program	Utah Transit Authority	Salt Lake City, UT		x				\$113,193
<i>Total FY 2011 Projects funded under SAFETEA-LU</i>								\$3,000,000

* 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 A-2
 FY 2012 Innovative
 Transit Workforce
 Development
 Projects

Project Name	Grantee Name	City and State	Investment Area*					Funds Awarded
			1	2	3	4	5	
Distance Education Technician Program	Southern California Regional Transit Training Consortium	Long Beach, CA		x		x		\$673,713
Regional Transit Workforce Development Program	OMNITRANS	San Bernardino, CA		x				\$340,000
Bus/Rail Operator Training Academy (BOTA)	Community Career Development	Los Angeles, CA		x				\$443,289
Electric Vehicle Transit Workforce Development Centers	International Association of Nanotechnology	San Jose, CA						\$850,000
Transit Works Program	Washington Metropolitan Area Transit Authority	Washington, DC			x			\$795,334
Hybrid Technology Workforce Training and Implementation	Jacksonville Transportation Authority	Jacksonville, FL				x		\$247,197
Meeting Today's and Tomorrow's Job Needs in Mass Transit	Corporation to Develop Communities of Tampa	Tampa, FL	x					\$234,281
Consortium for Signals Training Courseware Development	International Transportation Learning Center	Silver Spring, MD		x			x	\$425,000
Career Pathways & Career Ladders for the Frontline Workforce	International Transportation Learning Center	Silver Spring, MD		x			x	\$722,500
Minnesota Metro Transit Partnership	Minneapolis Community & Technical College	Minneapolis, MN	x					\$427,444
CSKT Transit Training Program	Confederated Salish & Kootenai Tribes	Pablo, MT			x			\$255,668
ND Statewide Transit Intelligent Transportation System (ITS0) Workforce Training Program	North Dakota Department of Transportation	Bismarck, ND						\$269,423
Transit Virtual Career Network: Raising Awareness & Building The Transit Industry's Workforce	Rutgers, The State University of New Jersey	New Brunswick, NJ	x		x			\$659,784
Hybrid Technology Maintenance Education Program	Southwest Ohio Regional Transit Authority	Cincinnati, OH				x		\$206,973
Gen Y Transit Workforce Connection	Lawrence County Social Services	New Castle, PA		x	x			\$187,850
TRANSIT—Your Ride to the Future	University of Tennessee	Knoxville, TN			x			\$225,442
Management Internship Program	Corpus Christi Regional Transportation Authority	Corpus Christi, TX				x		\$85,000
<i>Total FY 2012 Projects Funded under SAFETEA-LU</i>								\$7,048,898

* 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

ACRONYMS

ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
CTAA	Community Transportation Association of America
DOT	US 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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Federal Transit Administration

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