



March 2019

TRANSIT WORKFORCE DEVELOPMENT

Improved Strategic Planning Practices Could Enhance FTA Efforts

GAO Highlights

Highlights of [GAO-19-290](#), a report to the Committee on Banking, Housing, and Urban Affairs, U.S. Senate

Why GAO Did This Study

FTA provides more than \$12 billion annually to support and expand transit services. The operation of transit systems depends on a skilled, qualified workforce, but impending transit worker retirements and advances in transit technology may create challenges for the transit workforce such as finding eligible applicants for transit jobs and obtaining the technology expertise needed.

GAO was asked to review various issues related to the sufficiency of the transit workforce. This report discusses the extent to which: (1) information exists about future transit workforce needs and (2) FTA assists with addressing current and future transit workforce needs, among other things. GAO reviewed DOT and FTA documents, including strategic and performance plans, and interviewed DOT and FTA officials and other transit stakeholders, including representatives of transit agencies, research organizations, and unions. Stakeholders were selected based on recommendations from other transit stakeholders and for geographic diversity, among other factors.

What GAO Recommends

GAO is making three recommendations to FTA: (1) in collaboration with stakeholders, determine whether additional transit workforce data are needed; (2) develop a comprehensive transit workforce strategy; and (3) develop performance goals and measures for FTA's transit workforce development efforts. DOT concurred with our recommendations.

View [GAO-19-290](#). For more information, contact Mark Goldstein, at (202) 512-2834 or goldsteinm@gao.gov.

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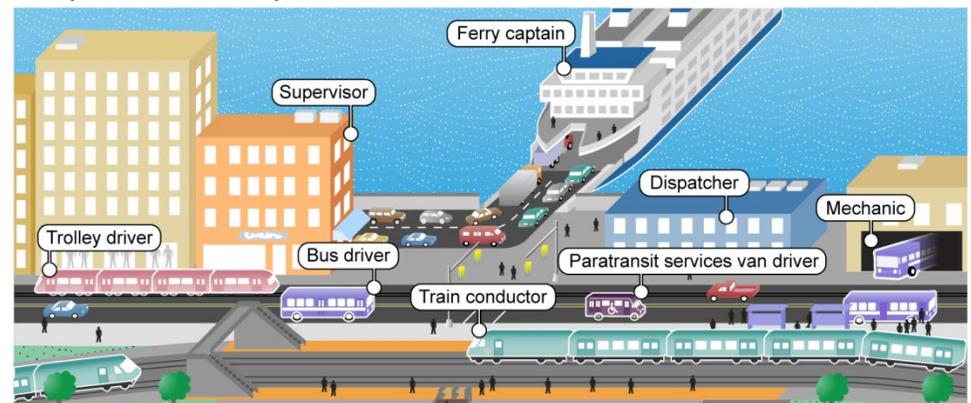
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What GAO Found

The nation's transit infrastructure requires a trained workforce, consisting of a variety of occupations (see figure), to operate, maintain, and oversee it.

Examples of Transit Occupations



Source: GAO analysis of Federal Transit Administration (FTA) information. | GAO-19-290

Information on future transit workforce needs is limited in part by the absence of transit-specific workforce projections. According to Federal Transit Administration (FTA) officials, the best information available is an August 2015 report developed by the Department of Transportation (DOT) and other federal stakeholders to produce transportation job projections. However, the report's transit data are combined with ground passenger transportation data (e.g., school buses, taxis), and many of these services are specifically excluded from the statutory definition of transit. Transit-specific data were not available and would be costly to obtain, according to the researchers who wrote the report. Thus, the report does not exclusively reflect the transit workforce. The views of stakeholders GAO interviewed varied regarding whether additional workforce data were needed. Working with stakeholders to understand what, if any, additional information is needed could enable FTA to weigh the complete costs and benefits of developing future transit workforce data. This approach could also enable FTA to make informed decisions on allocating the appropriate resources toward transit workforce efforts.

While FTA assists transit stakeholders with addressing workforce needs—for example, providing about \$29 million in workforce development assistance in fiscal year 2017—it lacks key strategic planning practices that could ensure its efforts are effective. FTA first reported to Congress in 2016 that it planned to develop a transit workforce strategic plan; however, no clear action has been taken to develop one so far. Further, FTA does not have clearly defined performance goals and measures—as outlined in the Government Performance and Results Act of 1993 (GPRA) and the GPRA Modernization Act of 2010—for FTA's transit workforce development efforts. Without these key strategic planning practices, FTA is limited in its ability to make informed decisions about effectively leveraging its resources to address future transit workforce needs and in measuring the effectiveness of its efforts.

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Abbreviations

ADA	Americans with Disabilities Act of 1990
APTA	American Public Transportation Association
BLS	Bureau of Labor Statistics
CDL	commercial driver's license
DOL	Department of Labor
DOT	Department of Transportation
FAST Act	Fixing America's Surface Transportation Act
FTA	Federal Transit Administration
GPRA	Government Performance and Results Act of 1993
NTD	National Transit Database
NTI	National Transit Institute

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March 14, 2019

The Honorable Mike Crapo
Chairman
The Honorable Sherrod Brown
Ranking Member
Committee on Banking, Housing, and Urban Affairs
United States Senate

Since 1964, the Department of Transportation's (DOT) Federal Transit Administration (FTA) has partnered with state and local governments to create and enhance transit systems, providing more than \$12 billion annually to support and expand rail, bus, trolley, ferry, and other public transit services. The operation of the nation's transit systems—now and in the future—depends on a skilled and qualified workforce. According to DOT, transportation organizations face increasing difficulty in finding qualified workers and managers to fill priority occupations. Changes in the transportation industry, evolving technology, and upcoming retirements in the U.S. workforce create workforce development challenges for transportation organizations, training providers, academic institutions, and other transit stakeholders. In DOT's current strategic plan, DOT states that it will develop and implement strategies that will foster the training and development of the transportation workforce to acquire the needed skills and capabilities to meet the current and future needs of the industry.¹

You asked us to review the sufficiency of the transit workforce. This report discusses:

- the extent to which information exists about future transit workforce needs,
- the actions selected transit stakeholders are taking to address current and future transit workforce needs, and
- the extent to which FTA assists with addressing current and future transit workforce needs.

¹U.S. Department of Transportation, *Strategic Plan for FY 2018–2022* (Washington, D.C.: February 2018).

To address these objectives, we reviewed key DOT and FTA documents including strategic plans, reports to Congress, and reports on transit workforce grants. We conducted interviews with a selection of transit agencies and stakeholders. We selected a non-generalizable sample of eight stakeholders, which included two research organizations, two unions, two trade groups, one membership association of workforce boards, and one transportation-consulting firm. In addition, we interviewed officials from six transit agencies we selected for size and geographic diversity (western, central, and eastern U.S.), among other factors. Although the views of these officials and stakeholders are not generalizable to those of all transit agencies and stakeholders, they represent a range of perspectives and expertise regarding the transit workforce's efforts to address needs.

To determine the extent to which information exists about the future transit workforce needs, we analyzed a report, developed by DOT and the Departments of Labor (DOL) and Education, on the current and future transportation workforce, and we interviewed officials from those agencies. We also reviewed the *Standards for Internal Control in the Federal Government (Federal Internal Control Standards)* for criteria on quality information and compared FTA actions to this information.² To identify the actions that selected transit stakeholders are taking to address current and future transit workforce needs, we included examples of actions that stakeholders generally discussed with us, among other things. To determine the extent to which FTA is assisting transit agencies with identifying and addressing current and future workforce needs, we compared FTA's actions to *Federal Internal Control Standards*,³ the Government Performance and Results Act of 1993 (GPRA), and the GPRA Modernization Act of 2010.⁴

We conducted this review from January 2018 to March 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that

²See GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C., September 2014).

³[GAO-14-704G](#).

⁴Pub. L. No. 103-62, 107 Stat. 285 (Aug. 3, 1993); Pub L. No. 111-352, 124 Stat. 3866 (Jan. 4, 2011).

the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

In 2017, transit agencies provided over 10 billion rides to people traveling to and from businesses, homes, and other locations throughout the United States, according to FTA.⁵ Transit infrastructure for those rides includes railways, roads, bridges, tunnels, and stations. According to the 2017 American Public Transportation Association's (APTA) Fact Book,⁶ more than 6,700 organizations provided public transportation in a variety of modes in 2015. Transit modes include:

- fixed-route bus services—the most prevalent transit mode in the country—vehicles operate according to regular schedules along prescribed routes with designated stops;
- rail services—vehicles operating along railways;
- ferryboat services—vessels carrying passengers and/or vehicles over a body of water;

⁵Federal Transit Administration, *2017 National Transit Summary and Trends* (Washington, D.C.: Oct. 2018). National Transit Database (NTD) data are generally 1 to 2 years behind because of reporting deadlines and required reviews. As of February 2019, this was the most recent FTA report available on national transit summaries and trends. NTD data are described later on in this report.

⁶APTA is an international organization that has been providing advocacy for and information to the transit industry since 1882. APTA has published the Public Transportation Fact Book annually since 1943. The Fact Book contains national aggregate statistical data covering all aspects of the transit industry in the United States. The most recent Fact Book (2017) was based on 2015 data from FTA's National Transit Database, which will be discussed later in greater detail. Data in the Fact Book calculated by APTA are statistical expansions of sample data designed to represent the total activity of all public transit agencies. Data in the Fact Book are not projections of the transit workforce in future years. APTA, *2017 Public Transportation Fact Book* (Washington, D.C.: March 2018).

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- paratransit services—generally, accessible, origin-to-destination transportation services that operate in response to calls or requests from riders;⁷ and
 - other demand-response services—sometimes called “dial-a-ride.”

Public transportation, or transit,⁸ is statutorily defined as regular, continuing shared-ride surface transportation services that are open to the general public or open to a segment of the general public defined by age, disability, or low income. This definition has multiple statutory exclusions including intercity bus service, school bus service, and charter bus service.⁹

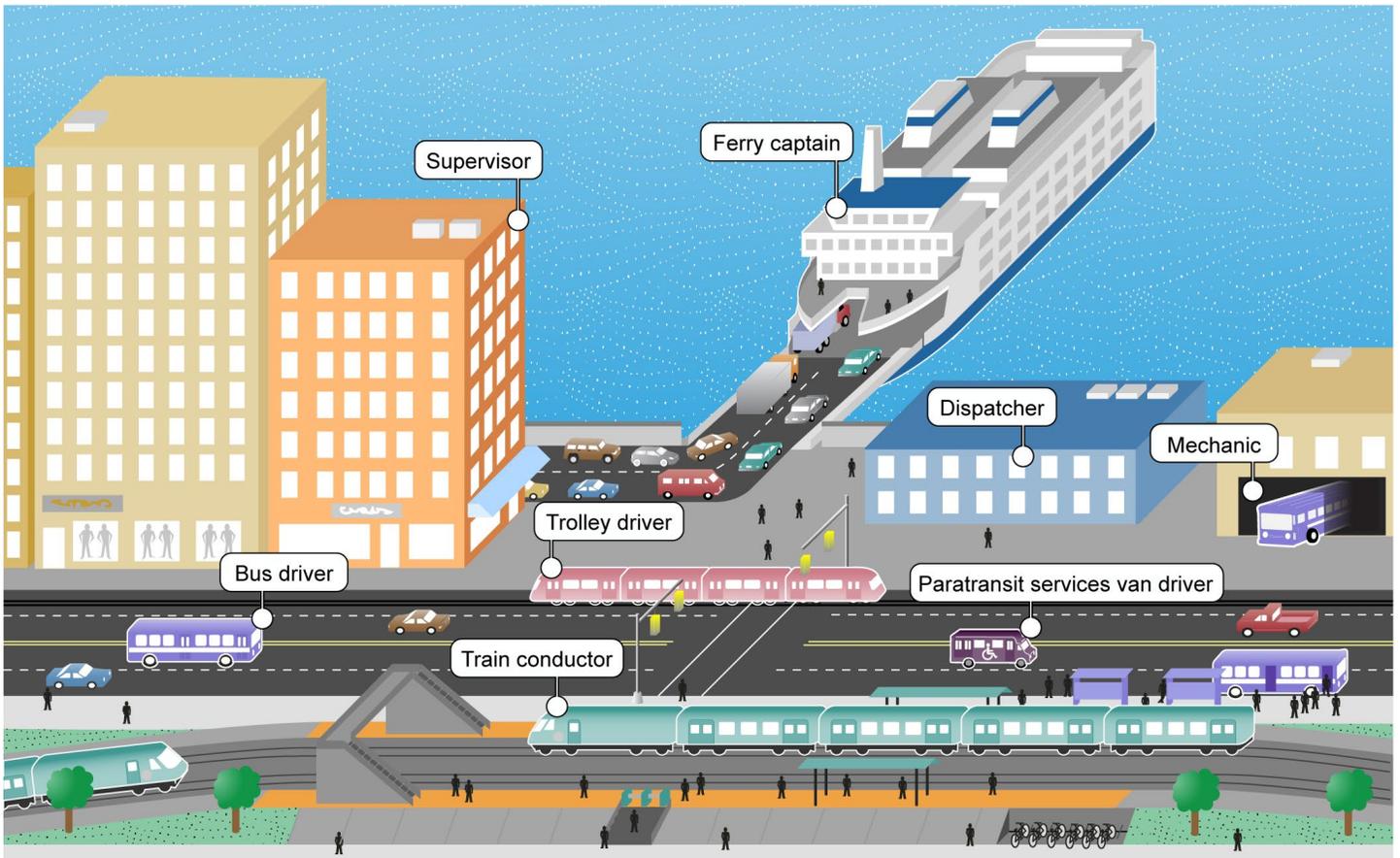
The transit infrastructure requires appropriately trained personnel to operate, maintain, and oversee services and assets (e.g., vehicles). APTA estimated that, in 2015, U.S. public transit agencies employed more than 430,000 fulltime and part-time personnel, including contractors. The transit workforce consists of a variety of occupations, such as bus operators, train conductors, dispatchers, mechanics, supervisors, and other occupations (see fig. 1 for examples.)

⁷The Americans with Disabilities Act of 1990 (ADA) requires, among other things, that public entities that operate fixed-route systems provide paratransit services to individuals with disabilities that is comparable to the level of service provided to individuals without disabilities who use the fixed-route system. Pub. L. No. 101-336, § 223(a), 104 Stat. 327, 340 (July 26, 1990) (codified at 42 U.S.C. § 12143(a)). DOT’s ADA implementing regulations define “paratransit” as comparable transportation services required by the ADA for individuals with disabilities who are unable to use fixed route transportation systems. 49 C.F.R. § 37.3.

⁸A DOT official told us that “transit,” “public transportation,” and “mass transit” are used interchangeably; for the purposes of this report, we will use the term “transit.”

⁹49 U.S.C. § 5302(14). Other statutory exclusions include sightseeing service, courtesy shuttle service for patrons of one or more specific establishments, intra-terminal or intra-facility shuttle services, and intercity passenger rail transportation provided by Amtrak.

Figure 1: Examples of Transit Occupations



Source: GAO analysis of Federal Transit Administration (FTA) information. | GAO-19-290

FTA supports transit agencies' workforce development by providing financial and technical assistance, among other things. FTA's financial assistance efforts include implementing the Innovative Public Transportation Frontline Workforce Development Program, which provides competitive grants to transit agencies (transit workforce grants) to assist with the development of innovative human resources activities.¹⁰ FTA awarded transit workforce grants in fiscal years 2011, 2012, and

¹⁰49 U.S.C. § 5314(b)(2).

2015.¹¹ Grant-eligible projects included employment training, outreach to increase minority and female employment in transit, research on transit personnel and training needs, and training and assistance for minority business opportunities.¹² Grant recipients included transit agencies, non-profit community groups, schools, and others. Additionally, recipients can use up to one-half of one percent of certain grant funds, such as Urbanized Area Formula Grants,¹³ for eligible human resources and training activities with the approval of DOT.¹⁴

FTA also administers the National Transit Database (NTD), which is intended to provide information to assist in transit planning efforts. All recipients and direct beneficiaries of grants from the Urbanized Area Formula Program and Rural Area Formula Program,¹⁵ such as local transit agencies, are required to report certain data to the NTD.¹⁶ FTA also encourages agencies not receiving grants from these programs to report voluntarily so the NTD can be more complete. In 2016, over 2000 transit agencies submitted full or partial reports to the NTD.¹⁷ The NTD stores information from local transit agencies, such as financial and operating data, to inform transit service planning for government agencies and other organizations. Some workforce data, such as the number of

¹¹FTA funded the transit workforce grant program in those years. The fiscal years 2011 and 2012 transit workforce grants were authorized by 49 U.S.C. § 5322, according to FTA officials, while the fiscal year 2015 transit workforce grants were authorized by 49 U.S.C. § 5322(b). The Fixing America's Surface Transportation Act (FAST Act) changed the statutory authority for the transit workforce grant program to 49 U.S.C. § 5314(b)(2) and repealed 49 U.S.C. § 5322. Pub. L. No. 114-94, §§ 3009, 3030(d), 129 Stat. 1312, 1469, 1497 (Dec. 4, 2015).

¹²The FAST Act added additional eligibility requirements, though, according to FTA officials, the FAST Act changes did not apply to the most recent round of transit workforce grants in fiscal year 2015.

¹³Urbanized Area Formula Grants are available for capital projects, planning, and other specified activities. 49 U.S.C. § 5307.

¹⁴49 U.S.C. § 5314(b)(4).

¹⁵Formula grants for rural areas can be used by recipients in rural areas for planning, capital projects, certain operating costs, and other specified activities. 49 U.S.C. § 5311.

¹⁶49 U.S.C. § 5335(b).

¹⁷Federal Transit Administration, *Transit Profiles 2017 Top 50 Summary* (Washington, D.C.: September 2018). According to FTA officials there are more rural reporters but they do not report workforce data.

full-time and part-time transit agency employees, is reported to the NTD.¹⁸ NTD data provide information on the transit workforce at the time the data are reported, but are not used to project future transit workforce needs.

FTA partners with the National Transit Institute (NTI), hosted and staffed by Rutgers University, to provide workforce development educational resources and training.¹⁹ NTI delivers over 300 courses per year nationwide to public transit employees and government transportation agency employees at all levels. These courses focus on compliance with federal regulations and developing skills to operate a transit agency.

At the department level, in August 2015, DOT, DOL, and the Department of Education worked with industry stakeholders to project the employment and skill needs of the transportation industry from 2012 to 2022.²⁰ Primary sources for the report included the DOL's Bureau of Labor Statistics (BLS) employment projections, current population survey (demographics), and analysis from Economic Modeling Specialists International. The effort developed a variety of transportation workforce statistics and resulted in the *Strengthening Skills Training and Career Pathways Across the Transportation Industry: Data Report on Future Transportation Workforce Needs (Transportation Industry Report)*. Among other things, the report:

- projected that an additional 4.6 million transportation workers will need to be hired to fill vacancies created by separations (occupational transfers, retirement, and other exits from the workplace), and net job growth from 2012 to 2022;

¹⁸Federal Transit Administration. *National Transit Database 2018 Policy Manual Full Reporting*, (Washington, D.C.:2018).

¹⁹NTI was created by the Intermodal Surface Transportation Efficiency Act of 1991. Pub. L. No. 102-240, § 6022, 105 Stat. 1914, 2185 (Dec. 18, 1991) (codified as amended at 49 U.S.C. § 5314(c)). The FAST Act authorized \$5 million annually for NTI through fiscal year 2020. Pub. L. No. 114-94, § 3016, 129 Stat. 1312, 1479 (codified at 49 U.S.C. § 5338 (a)(2)(H)).

²⁰DOT, DOL, and Department of Education, *Strengthening Skills Training and Career Pathways Across the Transportation Industry* (Washington, D.C., August 2015).

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- provided data on current worker distribution (at that time) by age and sex for six transportation sectors and by race and ethnicity for selected transportation occupations;²¹ and
 - included top job occupations by sector and projected industry and occupational job openings based on separations and job growth.

Limited Information Exists on Future Transit Workforce Needs

The extent of future transit workforce needs is unclear due to the absence of transit-specific workforce projections, unclear communication on the data that are available, and because the data that are available do not extend past 2022. The best information available on future transportation workforce needs, according to FTA officials is the August 2015 *Transportation Industry Report*.²² The *Transportation Industry Report* does have projections on transportation workforce needs, but the transit industry data are combined with other ground passenger transportation industries such as intercity buses, charter buses, taxis, school buses, and limousines. Thus, the report does not exclusively reflect the transit workforce.

According to researchers who wrote the report, the transit and ground passenger transportation data were reported as one industrial sector because it would be a significant undertaking to focus solely on transit workforce data without funding a study for this specific area. The *Transportation Industry Report* was developed with data, in part, from BLS, which does not exclusively report on occupational projections for public transportation. BLS develops workforce projections of the U.S. labor market by industry, subsector, and occupational codes, including the number of employees and types of employers.²³ BLS officials we

²¹The transportation sectors included (1) trucking, (2) transit and ground passenger transportation, (3) air transportation, (4) highway construction and maintenance, (5) rail transportation, and (6) maritime transportation.

²²Other sources of information we reviewed, such as the NTD and the APTA Fact Book, do have some information on the current transit workforce, but the data are not projections of future transit workforce needs. Further, while some transit agencies might collect data relative to their own agency, this data would not be useful to predict transit workforce needs for the industry.

²³BLS measures labor market activity and working conditions in the overall U.S. economy. BLS collects, analyzes, and disseminates economic information, including nationwide employment projections for 10 years in the future. The *Transportation Industry Report* used BLS employment projections for 2012–2022.

interviewed said that industry and occupational data sets do not allow the level of specificity that would be needed to identify only transit agencies.²⁴

The *Transportation Industry Report* predicted 1 million job openings in the transit and ground passenger transportation sector from 2012 to 2022 and listed the top 10 projected job openings. However, these projected job openings include a number of occupations within services that are statutorily excluded from the definition of transit.²⁵ For example, the three largest categories of job openings—comprising about 72 percent of the projected openings—have the following key transit exclusions:

- **School bus and special client bus drivers** made up approximately 33 percent of the projected openings (330,699 job openings). However, school bus services are specifically excluded from the statutory definition of transit, as are sightseeing services, charter bus services, courtesy shuttle services for patrons of one or more specific establishments, and intra-terminal or intra-facility shuttle services.
- **Transit and intercity bus drivers** made up almost 20 percent of the projected openings (199,727 job openings). However, intercity bus service (for example, Greyhound bus service) is specifically excluded from the statutory definition of transit.
- **Taxi drivers and chauffeurs** made up almost 19 percent of the projected openings (188,895 job openings). However, these services may not meet the statutory definition of transit.²⁶

However, when communicating about the report, FTA has not always made clear that the data in the *Transportation Industry Report* combine both transit and ground passenger transportation workforce projections, though this was not intentional, according to FTA officials. FTA has

²⁴For example, the report used BLS transit and ground passenger transportation subsector data from the transportation and warehousing sector.

²⁵49 U.S.C. § 5302(14).

²⁶We previously reported on FTA's considerations when determining if transportation services meet the statutory definition of transit. See GAO, *Public Transit Partnerships: Additional Information Needed to Clarify Data Reporting and Share Best Practices*, [GAO-18-539](#) (Washington, D.C.: July 30, 2018). For example, according to FTA officials we spoke to for that report, for a transportation service to be "open to the general public," it cannot be limited to a specific group (except those groups specified in the statutory definition), and neither the driver nor passenger can deny another person on board. For example, a service provided by a ridesourcing company in which a passenger or driver can refuse additional passengers would not be considered "open to the general public," according to FTA officials.

presented the combined data as representing the “transit” or “public transit” workforce in recent annual reports to Congress and a few public presentations. For example, one of the findings in the *Transportation Industry Report* is that the combined sector of transit and ground passenger transportation has the highest percentage of older workers who are at or nearing retirement age. However, in recent reports to Congress,²⁷ FTA states that, *public transit* has the highest percentage of older workers at or nearing retirement age.²⁸ However, this statement did not reflect that the percentages included transit and ground passenger transportation data. We also found similar information involving retirement percentages and job openings in a number of FTA presentations that are available to the public online.²⁹ In addition, we found two examples of incorrect numbers in recent reports to Congress that FTA officials said were “typos” that have now been corrected in the most recent fiscal year 2017 report.³⁰

FTA’s characterization of this data could confuse transit stakeholders, including Congress, on needs, retirements, and growth in the transit industry. When FTA identifies combined information as “transit” projections, the audience may not understand the extent to which the data reflect services that do not meet the statutory definition of transit. We found evidence that this may have already occurred to some extent. During our review, we found examples of stakeholders in the industry repeating the same statistics that FTA has presented as “transit” in publications and in our interviews with them, raising questions about whether the industry may have misconceptions about the future transit workforce. FTA officials told us that the combination of transit and ground

²⁷Federal Transit Administration, *FTA Annual Report on FY 2016 Technical Assistance and Workforce Development Projects*, FTA Report No. 0109 (Washington, D.C.: June 2017) and *FTA Annual Report on Technical Assistance and Workforce Development for FY 2017*, FTA Report No. 0121 (Washington, D.C.: April 2018). FTA is required to report to Congress on the Frontline Workforce Development Program each fiscal year. 49 U.S.C. § 5314(b)(2)(E).

²⁸We could not verify whether FTA’s statement was accurate because public transit data are combined with ground passenger data in the *Transportation Industry Report*.

²⁹See, for example, Federal Transit Administration, *Workforce Development in an Era of Emerging Technology* (Washington, D.C.: Oct. 2017) and *Federal Transit Administration Public Transportation Innovative Workforce Initiatives* (Washington, D.C.: Oct. 2017).

³⁰Two typos in the annual report to Congress included: (1) the percentage of workers from ages 45–54, which was 28 percent not 21 percent as listed in the fiscal years 2016 and 2017 reports, and (2) stating that “transit” needed 4.6 million workers between 2012 and 2022, but that number was for the entire transportation industry.

passenger transportation is appropriate because of similarities in the industries and the common practice of transit agencies hiring contractors from ground passenger transportation to supplement workforce personnel. However, the context of this information has not always been clear in reports to external parties.

Further, the *Transportation Industry Report's* projections on the future transportation workforce are only estimated through 2022.³¹ DOT officials said that they do not have plans to update the report beyond 2022 or to develop a report that focuses solely on transit workforce projections. FTA officials told us that they plan to hire a data scientist to assist them with transit workforce issues. FTA officials also told us in November 2018, that the report was intended to provide trend information and that they do not plan to use the transit numbers from the *Transportation Industry Report* in future reports and presentations, and considering that the report will soon reach the end of its projections in 2022, we are not making a recommendation about how to communicate the context of the information in the *Transportation Industry Report*.

Opinions on the need for additional transit workforce data and projections varied among transit stakeholders we interviewed. Several stakeholders cited the difficulties of collecting transit-specific projections or other types of data, while others pointed to the need for more data such as data identifying shortages in specific occupations and retirement age of transit employees. However, officials from the Community Transportation Association of America, which represents small and rural transit agencies, said that requiring additional data from transit agencies could be a time-consuming burden for local transit officials. The association officials suggested that transit stakeholders should work together to use existing workforce data from FTA or BLS to develop workforce projection data. Transportation Research Board officials also said that additional transit workforce data would be costly and difficult for transit agencies to provide. However, the Director of Eno's Center for Transportation Leadership, a research organization, stated that it is extremely difficult to develop

³¹BLS officials also noted that the *Transportation Industry Report* is not "up to date" because the report uses 2012–2022 data and 2016–2026 data are now available. Further, the report uses Current Population Survey data and Occupational Employment Statistics data from 2014, and 2017 data are now available for both programs. In addition, the officials noted that the report used experimental data from a new occupational separations methodology that BLS has now adopted as its official method, but there were some improvements in the methodology from 2012–2022 that are reflected in the most recent data.

national policies, programs, and grants to address systemic workforce problems because of the gaps in transit workforce data.

Federal Internal Control Standards highlight the importance of using quality information to make informed decisions and identifying the information requirements needed to do so while considering the expectations of internal and external users.³² While the views of stakeholders we interviewed varied on the extent to which additional transit workforce data and projections are needed, new transit workforce projections could inform decision-making on transit workforce planning to address potential future shortages or other needs. We have previously reported that agencies should weigh data collection decisions carefully, noting that there is a cost to data collection, and that only needed data should be collected.³³ Working with stakeholders to understand what, if any, additional transit-specific workforce data transit stakeholders need and the related collection costs could enable FTA to weigh the complete costs and benefits of developing future data for the transit industry and to make informed decisions on allocating the appropriate resources toward those efforts.

Selected Transit Stakeholders Are Taking Steps to Address Transit Workforce Needs and Cited Ongoing Recruiting and Retention Challenges

³²[GAO-14-704G](#).

³³GAO. *Federal Real Property: National Strategy and Better Data Needed to Improve Management of Excess and Underutilized Property*, [GAO-12-645](#) (Washington, D.C.: June 20, 2012), and GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, [GAO/GGD-96-118](#) (Washington, D.C.: June 1996).

Selected Stakeholders' Actions

Transit stakeholders we interviewed highlighted actions they are taking to address transit workforce needs but also noted continuing difficulties with recruiting and retaining staff. Examples of actions they have taken to address workforce needs, either with a transit workforce grant or with other funding include:

- Career enhancement: Los Angeles County Metropolitan Transportation Authority officials told us that they have developed a program that offers growth opportunities by providing “upskilling” resources at all levels of the agency including employee development, management/leadership, and transportation senior leadership, among other things.
- Courseware development: The Transportation Learning Center organized three industry consortiums to develop national standards-based courseware—Rail Car, Signals, and Elevator/Escalator Technicians, according to the Transportation Learning Center.³⁴ For example, under the Signals Training Consortium, 25 new courses have been developed covering the inspection, maintenance, and troubleshooting of transit and commuter rail signaling equipment. The curriculum is planned to include both classroom and on-the-job training.
- Internships: The Conference of Minority Transportation Officials developed a program to prepare college, university, and vocational school students to enter transit and transportation-related fields, according to conference officials. In 2018, this program placed 29 interns nationwide in architectural and engineering firms as well as state and local government agencies.
- Managerial training: The Eno Center for Transportation provided classes for mid- and senior-level transit executives and has started one for first-line supervisors, according to an Eno official. This training includes lectures, classes, job shadowing, informal mentoring, field trips, and meetings with counterparts.
- Research: The Community Transportation Association of America reported on a survey it conducted of its members in June 2018 on the salary and benefits for professional transit positions in the industry. The survey’s 236 respondents provided information on hourly and/or

³⁴The Transportation Learning Center is a national organization that focuses on the frontline workforce in public transportation and transportation in general by developing and supporting technical training partnerships for the current and future workforce. The Center receives funding from FTA and DOL.

salary information, operating budget, available benefits, services provided, and number of employees, among other things. According to the Association, the members asked for this survey because it helps them make staffing and employment decisions within their agencies.

- Technology education: Jacksonville Transportation Authority officials told us that they have established a “Workforce of the Future” working group whose charge is to prepare the workforce to incorporate emerging technologies as it transitions its aged elevated, automated people-mover system—the “Skyway”—to autonomous vehicle technology. The working group supports a public automated-vehicle test track as well as employee town halls to develop the tools to discuss these issues in their communities.

Other Transit Workforce Grant-Supported Actions

FTA’s transit workforce grants also supported stakeholder actions to address transit workforce issues including:³⁵

- In fiscal year 2011, FTA awarded 12 workforce grants totaling \$3 million. For example, the Chicago Transit Authority received a grant to develop and validate a transit-manager competency model to help supervisors recognize and support skills and leadership potential in their staff. In addition, the Florida Department of Transportation received a grant for its Certified Transit Technician Program, which resulted in 13 hires, each receiving the opportunity for additional certification and a college degree.
- In fiscal year 2012, FTA awarded 17 grants totaling \$7.05 million.³⁶ For example, the Southwest Ohio Regional Transit Authority (Cincinnati) received a grant to develop a program that provided technical training in hybrid engine technology to improve its maintenance program and hybrid bus fleet. The Corporation to Develop Communities of Tampa, Inc. received a grant to recruit, train, and employ up to 30 people in the transit industry, including transit operations and maintenance workers.

³⁵This information was obtained primarily from FTA’s annual reports (fiscal years 2016 and 2017). The numbers and dollar amounts are taken from the fiscal year 2016 report, because that report provided the detailed information by year.

³⁶In February 2019, FTA officials told us one of the 17 projects was found not worthy, so there were actually only 16 grants awarded in fiscal year 2012.

- In fiscal year 2015, FTA awarded 16 grants for \$8.1 million.³⁷ For example, the Bay Area Rapid Transit District was awarded a grant to create a pathway to employment in the transit industry for traditionally under-represented individuals. The Workforce Development Council of Snohomish County, Washington, received a grant to bring together local partners to create a pipeline of skilled workers ready to enter the transit and construction industries. The partners have targeted women, minorities, and native tribes to access apprenticeships, social services, and job placement programs.

Recruitment and Retention Challenges

Notwithstanding these efforts, the transit stakeholders we spoke with identified ongoing recruiting and retention challenges as shown in table 1.³⁸

Table 1: Examples of Challenges That Selected Transit Stakeholders Cited in Recruiting and Retaining Transit Workers (2018)

Challenge	Examples cited by stakeholders
Job requirements	In many locations, the pool of applicants eligible to meet the job requirements for transit jobs or who already have transit related skills is small. For example, many agencies require that operators have a commercial driver's license (CDL) with a passenger endorsement. (Drivers with CDLs who plan to operate special types of commercial motor vehicles must pass additional knowledge and/or skills tests to obtain any endorsements placed on their CDL, such as an endorsement for operating vehicles that carry passengers.) One stakeholder specifically noted that the difficulty of passing the CDL test, obtaining passenger endorsements on their CDL, drug-testing requirements, the high cost of required physicals, and skills gaps were the primary reasons for their challenges in finding bus operators. Another stakeholder said that attendance issues affect retention because transit is a very structured environment and requires punctuality to keep transit running on time.
Pay and benefits	Transit agencies cannot always provide competitive wages and benefits, particularly in rural areas or areas with low unemployment; this situation can make hiring and retaining employees difficult. For example, one stakeholder noted problems with competing with wages paid by local fast food establishments.

³⁷In February 2019, FTA officials told us 19 projects were selected but 2 projects were found ineligible so 17 grants were awarded in fiscal year 2015.

³⁸For the purposes of this report, we asked stakeholders open-ended questions about the challenges to get a general idea of the kinds of challenges they face. We list themes that we heard more than once; however, just because a stakeholder did not mention a specific challenge, does not mean that that a stakeholder has not experienced that challenge.

Challenge	Examples cited by stakeholders
Transit automation and technology	Obtaining in-house expertise for technology-related challenges is difficult. For example, knowledge of more sophisticated vehicles, electronics, and operations software is required, and workers with those skills are difficult to find. One stakeholder stated that buses and trains are, in effect, really big computers so a different skill set is needed for operators. Several stakeholders said that preparing for automation is difficult because there are not many workers available who know how to operate or maintain automated transit vehicles or to train future workers, and one stakeholder indicated that the rapid advancement of technology makes it difficult to remain current on training and best practices.
Work schedule	Many transit positions are assigned according to seniority, meaning that newer workers are often required to work unappealing shifts—such as split shifts and late night shifts—or routes. One stakeholder specifically noted that trucking companies and car dealerships are attractive to transit operators and mechanics because they offer a more traditional work schedule. Also, according to another stakeholder, most transit agencies are so short staffed that they require their employees to work overtime.
Workplace health and safety	Transit workers face health and safety concerns that can make transit jobs unappealing. One stakeholder specifically noted risks including assault from passengers, poor ventilation (on buses) that has led to asthma problems among drivers, and inadequate scheduling of breaks by automated-scheduling systems. Another stakeholder noted that abusive behavior by passengers toward other passengers or transit agency drivers is also a deterrent to hiring.

Source: GAO analysis of stakeholder information. | GAO-19-290

FTA Helps Address Transit Workforce Needs, but Improved Strategic Planning Could Better Focus Assistance

FTA Provides Transit Workforce Assistance

FTA has taken a number of actions to assist transit agencies with future workforce needs including:

- *FTA provides technical assistance, standards development, training, and workforce development projects for the transit workforce.*³⁹ In fiscal year 2017, the active projects totaled over \$29 million.⁴⁰
 - Almost 13.3 million (approximately 46 percent) of this funding went to technical assistance projects. For example, FTA spent

³⁹In fiscal year 2017, these projects were authorized under 49 U.S.C. § 5314.

⁴⁰FTA Annual Report (fiscal year 2017).

almost \$4 million to assist the National Aging and Disability Transportation Center with efforts that include developing online courses and training materials to assist certain FTA grant recipients with providing transportation services to older adults and people with disabilities.⁴¹ The funds were also used to present a podcast, as part of an online course on the Americans with Disabilities Act of 1990 (ADA). The podcast addressed common ADA questions related to customer service, wheelchairs on vehicles, and service animals.

- Over \$8.3 million (approximately 28 percent) funded 17 active transit workforce development projects from the fiscal year 2015 transit workforce grants discussed previously for developing new training curriculums, or seeking to recruit and train specific groups, especially those who are underrepresented in the transit workforce.
- \$5 million (approximately 17 percent) funded NTI development and delivery of training programs for federal, state, and local transportation employees. For example, NTI delivered 270 training courses throughout the U.S. to 7,298 participants in fiscal year 2017. NTI also supported a workshop to help address industry issues as they arise, such as workforce shortages and issues in recruitment and retention.
- \$2.5 million (approximately 9 percent) funded a Transit Standards Development Program at the Center for Urban Transportation Research (University of South Florida) to provide research and analysis on needs and gaps, and recommendations for new standards, or to modify existing standards. For example, one of the reports discussed fatigue management, among other things. According to FTA, the ultimate effects of this program are increased safety and reduced injuries and fatalities.
- *FTA is collaborating with NTI to conduct an industry workforce needs assessment aimed at identifying training, skills, and educational gaps that exist in the industry as well as within current NTI programs. They are conducting this assessment because of transit's changing workforce, technologies, and operating environment. This assessment is intended to result in a report that provides a road map for the transit workforce's development and training and may identify some of the*

⁴¹The National Aging and Disability Training Center is a program partially funded by FTA that seeks to increase access to transportation for older adults, people with disabilities, and caregivers.

gaps in transit workforce needs. As of November 2018, NTI has held focus groups at key transit conferences, which have provided a preliminary picture of the transit industry's critical need, according to FTA. NTI has also completed a draft of a survey of transit agency needs and FTA is reviewing it, according to an NTI official. The next steps include conducting the survey, mapping NTI's curriculum and courses to desired key skills, and developing a national transit competency framework. The researchers are planning to use a statistically significant sample that represents the needs of the industry, both for urban and rural agencies, with estimated completion of the survey and analysis in early 2019.

- *FTA is evaluating the effectiveness of the transit workforce grant program.* FTA funded an evaluation of the 12 fiscal year 2011 transit workforce grants. The report discussed whether the projects met goals, the effect of the programs, and whether the programs were worth further investment. The report noted a number of outcomes including introducing 2,608 youth to transit, and training 1,527 people. FTA also plans to evaluate transit workforce grants awarded in fiscal years 2012 and 2015 and to create outreach materials from the grant projects for transit stakeholders. The evaluation is also intended to provide important best practices and lessons learned for other transit operators.
- *FTA is researching the potential effects of automation on the transit workforce.* In January 2018, FTA released the *Strategic Transit Automation Research Plan*, which established a research and demonstration framework.⁴² One of the research projects in the plan is an assessment of the effect of automation on the transit workforce. Specifically, the assessment is planned to provide a qualitative analysis of labor-related considerations with transit bus automation including potential workforce changes, perspectives of organized labor, statutory and regulatory provisions, and other societal factors. A follow-on project is planned to evaluate changes in staffing levels, job responsibilities, labor hours, and training needs to provide a quantitative approach to estimating automation's effects on transit employment levels, workforce needs, and wages.

⁴²Federal Transit Administration. *Strategic Transit Automation Research Plan* (Washington, D.C.: January 2018).

FTA's Transit Workforce Development Efforts Are Not Guided by a Strategy, Performance Goals, and Measures

Strategy

Although FTA has assisted transit stakeholders with workforce needs, it lacks key strategic planning practices that could ensure its efforts are as effective as possible. FTA reported in its fiscal years 2016 and 2017 annual reports to Congress that it planned to develop a transit workforce strategic plan.⁴³ Federal Internal Control Standards indicate that plans, such as strategic plans, should set up the effective and efficient operations necessary to fulfill desired objectives.⁴⁴ Effective operations produce the intended results from operational processes, while efficient operations do so in a manner that minimizes the waste of resources. However, FTA does not have a comprehensive strategy showing the operations and processes to be developed to guide FTA's efforts to assist transit agencies with addressing future transit workforce needs.

FTA has had a number of starts and stops in producing a transit workforce strategy since it first reported this intention to Congress in 2016, but no clear action has been taken to develop a strategy so far. In July 2018, FTA officials told us that the reason they had not yet drafted a comprehensive strategy is because they considered developing their strategy as part of an overall DOT strategy, rather than a transit workforce strategy as a stand-alone product. However, DOT does not currently plan to develop a comprehensive department-wide transportation workforce strategy. Nevertheless, DOT has consistently identified addressing the transportation workforce as a priority over time in key DOT documents, including its last three strategic plans and the last two performance plans. DOT officials told us that the strategic plan is not intended to provide such detail; rather, it is designed to be a top-level strategic plan that provides a broad framework for DOT. In November 2018, FTA officials told us that they intend to create a "workforce consortium" and a new technical assistance project that would result in a strategy. However, FTA officials did not provide a time frame for when these actions would be taken.

⁴³FTA Annual Report (Fiscal years 2016 and 2017).

⁴⁴[GAO-14-704G](#).

Performance Goals and Measures

Considering the importance of the transit workforce to efficient operation of the transit infrastructure, a transit workforce strategy would be consistent with internal controls, such as setting up effective operations, whether this strategy is developed as part of a department-wide strategy, as a stand-alone project, or through a workforce consortium. Without a comprehensive strategy to guide FTA's ongoing activities to assist with transit workforce needs, FTA lacks a roadmap to ensure it is effectively leveraging its resources to help address future transit workforce needs. In addition, it may be difficult for Congress to understand the merits of investing in future transit workforce programs because it may not be clear absent a vision of how individual programs fit within the overall transit workforce strategy.

In addition to not having a comprehensive strategy, FTA lacks key tools to demonstrate the extent to which individual workforce development efforts are addressing future transit workforce needs. In particular, FTA has not established clearly defined performance goals and measures for its transit workforce assistance efforts. Establishing clear goals and measuring progress toward them are consistent with the management principles set forth in GPRA, as enhanced by the GPRA Modernization Act of 2010, and our previous work.⁴⁵

Setting long-term strategic goals is essential for results-oriented management, because such goals explain with greater specificity the results an agency is intending to achieve, as we have previously reported.⁴⁶ FTA discussed the pending development of transit workforce goals at an October 2016 summit with transit stakeholders, but these goals were not finalized. Further, there are no performance goals for transit workforce development efforts in DOT's current annual performance plan, and none is referenced in the current strategic plan.

FTA has developed some performance measures for evaluating the outcomes of transit workforce grants—but not for its transit workforce

⁴⁵For example, see GAO, *Performance Measurement and Evaluation: Definitions and Relationships*, [GAO-11-646SP](#) (Washington, D.C.: May 2011); *Managing for Results: Enhancing Agency Use of Performance Information for Management Decision Making*, [GAO-05-927](#) (Washington, D.C.: Sept. 9, 2005); and [GAO/GGD-96-118](#).

⁴⁶See GAO, *Tax Gap: IRS Needs Specific Goals and Strategies for Improving Compliance*, [GAO-18-39](#), (Washington, D.C.: Oct. 31, 2017) and *Managing for Results: Critical Issues for Improving Federal Agencies' Strategic Plans*, [GAO/GGD-97-180](#) (Washington, D.C.: Sept. 16, 1997).

development efforts at large. In addition, these measures are not tied to performance goals that FTA expects the grants to achieve. We have previously reported that results-oriented organizations first set performance goals to clearly define desired outcomes and then they develop performance measures that are clearly linked to the program goals and demonstrate the degree to which the desired results are achieved.⁴⁷ For example, two of the performance measures for transit workforce grants are “total projected cost per direct participant,” and “number of people expected to be trained overall,” but FTA has not set a goal for what the projected cost per participant should be or the number of people who should be trained by grant awards. By establishing performance measures before establishing specific performance goals that FTA seeks to achieve, FTA may not ensure that the data gained from these performance measures are an effective use of resources.

DOT officials said that performance goals and measures for FTA’s transit workforce grant program were not finalized because no funding has been identified for a subsequent round of these grants. However, FTA’s efforts to assist with transit workforce issues are larger than one grant program. Performance goals and measures are consistent with effective management practices with or without funding for a specific grant program.

Without documented, clearly defined goals and performance measures linked to those goals, FTA is limited in its ability to make informed decisions about transit workforce development efforts. As a result, FTA risks expending resources on efforts that it may not be able to demonstrate are meeting intended goals. Focusing on the intended results of FTA’s transit workforce efforts can promote strategic and disciplined management decisions that are more likely to be effective because managers are better able to target areas most in need of improvement and to select appropriate interventions. Further, agency accountability can be enhanced when both agency management and external stakeholders—such as Congress—can assess an agency’s progress toward meeting its goals. Without performance goals and related performance measures, it will be more difficult for FTA to determine the success of its strategies, adjust its approach when necessary, and remain focused on results.

⁴⁷See GAO, *Telecommunications: FCC’s Performance Management Weaknesses Could Jeopardize Proposed Reforms of the Rural Health Care Program*, [GAO-11-27](#) (Washington, D.C.: Nov. 17, 2010), and [GAO/GGD-96-118](#).

Conclusions

Much is unknown about the workforce needed in the future to operate the nation's transit systems and to transport people to and from work, school, and other destinations. Disaggregating transit workforce data from other transportation data has proved to be challenging, and the best projections of the future transportation workforce needs will expire in 2022.

Additionally, how vehicle automation and other technology advances will affect the future transit workforce is unclear, and FTA's presentations on the transit workforce projections that do exist may have contributed to the lack of clarity on the future needs of the industry. Whether additional, refined data on transit workforce needs—for example, an updated version of the *Transportation Industry Report*—would provide greater benefits to the industry than the cost of collecting these data is something FTA can determine when it better understands the information the industry needs to make effective workforce decisions. At that point, FTA can decide what additional data need to be collected strategically, if any, and at what cost, as part of strategic planning efforts.

FTA has identified the need to create a transit workforce strategy, and has expressed its intention to create one in a number of different ways, but has taken no clear action yet to ensure that FTA's intention will be realized. By taking the initiative to develop a strategy to help address future transit workforce needs, FTA will be in a position to better manage its ongoing transit workforce activities. FTA is undertaking a number of efforts that could provide the foundation for sound strategic planning, including sponsoring an assessment of transit workforce needs, hiring a data scientist, starting a workforce consortium, and initiating research on future automation that could provide more clarity regarding a key aspect of future transit that is, as of now, an unknown factor. Further, FTA has already drafted some performance measures for its transit workforce grants that it may be able to use as a foundation for creating goals and measures for transit workforce development at large. However, more specific strategic planning efforts that include developing a strategy and performance goals and measures can better enable FTA to effectively help transit agencies identify, prepare, and provide a sufficient workforce for the future.

Recommendations for Executive Action

We are making three recommendations to the FTA Administrator:

- The FTA Administrator should determine, in collaboration with transit stakeholders, whether additional transit workforce data are needed to identify potential future occupational shortages in the transit industry

and whether the benefits of this collection would outweigh the cost of gathering it. (Recommendation 1)

- The FTA Administrator should develop and document a strategy that outlines how FTA will help address future transit workforce needs. (Recommendation 2)
- The FTA Administrator should develop and document clearly defined performance goals and measures for its transit workforce development efforts. (Recommendation 3)

Agency Comments

We sent a copy of this draft report to DOT for review and comment. DOT responded with a letter in which it concurred with our recommendations and discussed the successes of its Innovative Workforce Development Program. The letter is reprinted in appendix II. DOT also provided technical comments, which we incorporated in the report as appropriate.

We are sending copies of this report to appropriate congressional committees and to the Secretary of Transportation. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>. If you or your staffs have any questions about this report, please contact me at (202) 512-2834 or goldsteinm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who contributed to this report are listed in appendix II.



Mark Goldstein
Director, Physical Infrastructure Issues

Appendix I: Objectives, Scope, and Methodology

This report addresses: (1) the extent to which information exists about future transit workforce needs, (2) the actions selected transit stakeholders are taking to address current and future transit workforce needs, and (3) the extent to which the Federal Transit Administration (FTA) assists with identifying and addressing current and future transit workforce needs.

For all objectives, we analyzed key Department of Transportation (DOT) and FTA documents such as DOT strategic plans, annual reports to Congress in fiscal years 2017 and 2016, and public presentations, which discussed workforce needs, grant programs, and data involving the transit industry. We also interviewed government officials from DOT, including from FTA, the Office of the Secretary, and the Federal Highway Administration; from the Department of Labor (DOL) and its Bureau of Labor Statistics (BLS); and from the Department of Education. Further, we interviewed three transit stakeholders—the Eno Center for Transportation, the National Transit Institute (NTI), and the American Public Transportation Association (APTA) to understand available data sources, relevant studies, and grant programs focused on the transit workforce. Based on our research and recommendations from those interviews with those three stakeholders and FTA, we selected a non-generalizable sample of an additional eight transit stakeholders for interviews. These selected stakeholders included:

- two research organizations (Transportation Learning Center and the Transportation Research Board, which includes the Transit Cooperative Research Program and the Transit Research Analysis Committee);
- two unions (Amalgamated Transit Union and Transport Workers Union of America);
- two trade groups (Community Transportation Association of America and Conference of Minority Transportation Officials); and
- one membership association of workforce boards (National Association of Workforce Boards);¹

¹The National Association of Workforce Boards represents 550 workforce development boards and their business members who coordinate and leverage workforce strategies to ensure that state and local workforce development and job-training programs meet the needs of employers.

- one transportation subject-matter expert (Mort Downey Consulting, LLC).²

In addition, we selected and interviewed officials from six transit agencies to understand their perspectives regarding workforce issues such as recruiting and retention challenges, and efforts to address those challenges.

- We selected and interviewed three urban transit agencies: Los Angeles County Metropolitan Transportation Authority (CA); Regional Transportation District—Denver (CO); and the Jacksonville Transportation Authority (FL). We selected these agencies because (1) each was recommended by more than one transit stakeholder we interviewed for taking specific actions to address workforce issues; (2) as a group, they represented geographic diversity (western, central, and eastern United States); and (3) each was awarded at least one FTA transit workforce grant.
- In order to find smaller, more rural agencies for balance we selected three transit agencies: Advance Transit (Wilder, Vermont); Cache Valley Transit District (Logan, Utah); and the Ki Bois Area Transit System (Stigler, Oklahoma) based primarily on recommendations from the Community Transportation Association of America, which represents thousands of the rural and tribal transit agencies, and then considered geographic diversity (western, central, and eastern United States) and a mix of services offered.

Although the views of these selected officials and stakeholders are not generalizable to those of all transit agencies and stakeholders, they represent a range of perspectives and expertise regarding the transit workforce.

To determine the extent to which information exists about the future transit workforce, we evaluated the *Transportation Industry Report*, which projected the employment and skill needs of the transportation industry from 2012 to 2022.³ We evaluated the scope, methodology, and limitations of the *Transportation Industry Report's* workforce projections,

²Mortimer (Mort) Downey is a former Deputy Secretary of DOT, a former board member of the Washington Metropolitan Area Transit Authority, and a former executive director and chief financial officer of New York's Metropolitan Transportation Authority.

³DOT, DOL, and Department of Education, *Strengthening Skills Training and Career Pathways Across the Transportation Industry* (Washington, D.C., August 2015). In the body of our report, we referred to this product as the *Transportation Industry Report*.

as that report provided the best available information according to FTA officials. We analyzed the report's projected job openings data in the transit and ground passenger transportation sector to understand the extent to which the data represented transit-specific data. In addition, we reviewed FTA's annual reports to Congress for fiscal years 2016 and 2017, and public presentations to document communication to the public involving transit workforce data. We also reviewed FTA's National Transit Database (NTD) 2017 and 2016 calendar year data on transit agency employees. Further, we interviewed BLS officials and reviewed the most recent BLS employment projections from 2016–2026 to understand the extent to which the data could be separated to represent only transit-specific data. We reviewed the *Standards for Internal Control in the Federal Government* on communicating and preparing quality information and compared FTA actions to this information.⁴

To determine what actions selected transit stakeholders are taking to address current and future transit needs, we reviewed efforts to address transit workforce needs taken by stakeholders whom we interviewed. We also reviewed challenges involving recruiting and retaining transit workers discussed during our interviews with those stakeholders. We judgmentally included examples in our report to demonstrate the breadth of actions that are being taken. We analyzed various FTA reports on transit workforce grants awarded in fiscal years 2011, 2012, and 2015 and included examples to demonstrate the variety of projects that the transit workforce grants covered. We also included examples in our report of challenges that transit stakeholders we spoke with generally discussed, grouped under common themes. Themes that we included in the report were cited multiple times by stakeholders we interviewed.

To determine the extent to which FTA is assisting transit agencies with identifying and addressing current and future workforce needs, we interviewed officials from FTA and DOT's Office of the Secretary to document their efforts to identify and address current and future transit workforce needs. We compared FTA's actions to address transit workforce needs to Federal Internal Control Standards, the Government Performance and Results Act of 1993 (GPRA), the GPRA Modernization Act of 2010,⁵ and our previous work.⁶

⁴See GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C., September 2014).

⁵Pub. L. No. 103-62, 107 Stat. 285; Pub L. No. 111-352, 124 Stat. 3866.

We conducted this performance audit from January 2018 to March 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

⁶For example, see GAO, Performance Measurement and Evaluation: Definitions and Relationships, [GAO-11-646SP](#) (Washington, D.C.: May 2, 2011); Managing for Results: Enhancing Agency Use of Performance Information for Management Decision Making, [GAO-05-927](#) (Washington, D.C.: Sept. 9, 2005); and Executive Guide: Effectively Implementing the Government Performance and Results Act, [GAO/GGD-96-118](#) (Washington, D.C.: June 1, 1996).

Appendix II: Comments from the Department of Transportation



U.S. Department of
Transportation

Office of the Secretary
of Transportation

Assistant Secretary
for Administration

1200 New Jersey Ave., SE
Washington, DC 20590

Mark Goldstein
Director, Physical Infrastructure Issues
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

FEB 28 2019

Dear Mr. Goldstein:

The Federal Transit Administration's (FTA) mission is to improve public transportation. An available and highly-skilled workforce is critical to maintaining a competitive and efficient transportation system. As transit continues to evolve and transform, especially with the emergence of new technologies such as automation it is essential to build and maintain human capital as well. In Fiscal Year (FY) 2011, FTA launched the Innovative Workforce Development Program. The overarching goal of this initiative was to support projects and broad partnerships that helped public transit agencies recruit, hire, train, and retain a 21st century public transportation workforce.

In recent years, FTA awarded almost \$20 million in workforce grants for approximately 44 workforce development projects. These projects focused on the following five high-priority workforce areas: (1) recruiting new entrants such as veterans and women; (2) developing incumbent worker training; (3) expanding youth engagement and outreach; (4) developing internships, apprenticeships, or work-based skills training; and (5) developing curricula. The successful implementation of the initiative allowed local grant recipients to achieve the following results:

- train over 4,000 people;
- conduct outreach and other activities to over 6,000 people;
- help employ over 800 people; and
- help over 300 people achieve either an internship or apprenticeship at a public transit agency.

Upon review of the GAO draft report, we concur with the three recommendations. We will provide a detailed response to each recommendation within 180 days of the final report's issuance.

**Appendix II: Comments from the Department
of Transportation**

We appreciate the opportunity to respond to the GAO draft report. Please contact Madeline M. Chulumovich, Director, Audit Relations and Program Improvement at (202) 366-6512, with any questions.

Sincerely,



Keith Washington
Deputy Assistant Secretary for Administration

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

Mark Goldstein, (202) 512-2834 or goldsteinm@gao.gov

Staff Acknowledgments

In addition to the contact named above, Heather MacLeod (Assistant Director); Amy Higgins (Analyst-in-Charge); Nelsie Alcoser; Melissa Bodeau; Lacey Coppage; Terence Lam; Josh Ormond; Pamela Vines; and Elizabeth Wood made key contributions to this report.

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