



September 2015

PUBLIC TRANSIT

Updated Guidance and Expanded Federal Authority Could Facilitate Bus Procurement

GAO Highlights

Highlights of [GAO-15-676](#), a report to the Honorable Matthew Cartwright, House of Representatives

Why GAO Did This Study

Buses are critical to the nation's public transportation services. According to data from FTA's National Transit Database, buses carry more passengers than all other modes combined. FTA provides grants to transit agencies to buy buses. When making these purchases, agencies must comply with a range of federal requirements. GAO was asked to review the transit bus market and federal role in bus procurement.

This report examines (1) the characteristics of the U.S. transit bus market, (2) the federal role in transit bus procurement, and (3) views of selected transit agencies on challenges, if any, agencies face when procuring new buses and federal actions that could address those challenges. GAO reviewed FTA's National Transit Database data from 2004 and 2013 and applicable federal law, regulations, and grant documents; conducted six discussion groups with representatives of 36 rural and urban transit agencies; and interviewed FTA and GSA officials, national transit industry organizations, and transit bus manufacturers.

What GAO Recommends

GAO recommends FTA update its *Best Practices Procurement Manual*, assess its other related guidance, and update that guidance as needed. GAO also recommends FTA work with GSA to develop a legislative proposal to authorize transit agencies that receive relevant FTA grants to access GSA sources of supply for the purchase of transit buses. FTA and GSA agreed with our recommendations.

View [GAO-15-676](#). For more information, contact David J. Wise at (202) 512-2834 or wised@gao.gov.

September 2015

PUBLIC TRANSIT

Updated Guidance and Expanded Federal Authority Could Facilitate Bus Procurement

What GAO Found

Overall, the number of manufacturers of transit buses has declined in recent years, but bus production has remained constant. Transit agencies purchase over 5,000 buses per year—about half are heavy-duty buses and half are smaller buses called “cutaways” because they consist of a bus body on top of a chassis built by another manufacturer. The number of firms that produce most heavy-duty transit buses declined from 10 in 2004 to 4 in 2013, the latest year data were available, due to business failures and consolidation. In contrast, the number of firms that produce most cutaways increased over the same time frame from 13 to 15. The number of buses procured annually by transit agencies from 2009–2013, using grant funds other than American Recovery and Reinvestment Act (Recovery Act) funds, ranged from 4,670 to 5,652. Transit agencies and others used Recovery Act funds to purchase 7,544 more buses in 2009 and 2010.

The amount of Federal Transit Administration's (FTA) grant funding that transit agencies used for bus procurement increased from \$794 million in 2009 to \$1.3 billion in 2013. Also, agencies spent \$1.7 billion in funds from the Recovery Act on buses from 2009 to 2010. FTA oversees transit agencies by requiring them to certify their compliance with a range of federal requirements and by periodic reviews. FTA also provides bus procurement guidance and technical assistance. However, GAO found that some resources provided by FTA, such as its *Best Practices Procurement Manual*, reference obsolete FTA documents. Without updated guidance, transit agency officials may not be able to purchase buses as efficiently as possible because they may need to spend additional time researching the guidance or to repeat a required step in the procurement process.

Transit agency officials GAO spoke with identified a range of challenges they face when procuring buses. Those challenges include difficulties in complying with federal procurement requirements. For example, officials reported that it is time consuming to comply with a requirement to certify that at least 60 percent of the bus's components are made in the U.S. because the agency must conduct pre- and post-award reviews of bus manufacturers. Transit agency officials in four of six discussion groups also identified the procurement process as difficult and resource-intensive, particularly for those transit agencies that do not purchase buses each year and may lack procurement capacity. Transit agency officials in four of six discussion groups stated these challenges could be addressed by allowing agencies access to General Services Administration's (GSA) sources of supply. Purchasing through GSA could allow agencies to decrease the time they spend on bus procurements since GSA would be responsible for ensuring that vehicles comply with federal procurement requirements. Further, purchasing through GSA could result in lower prices for buses, given GSA's ability to purchase vehicles well below the dealer invoice. According to FTA and GSA officials, both agencies have explored the feasibility of establishing a process to allow transit agencies to procure buses through GSA, but neither agency has developed a legislative proposal requesting that Congress grant authority to allow transit agencies to do so. In the past, nonfederal entities, such as state and local governments, have been authorized to purchase items through GSA.

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Figure 1: Transit Agencies Use Heavy-duty and Smaller Cutaway Buses to Provide Transit Services

Abbreviations

| | |
|--------------|--|
| AASHTO | American Association of State Highway and Transportation Officials |
| ADA | Americans with Disabilities Act 1990 |
| Recovery Act | American Recovery and Reinvestment Act |
| APTA | American Public Transportation Association |
| <i>BPPM</i> | Best Practices Procurement Manual |
| CTAA | Community Transportation Association of America |
| DBE | Disadvantaged Business Enterprise |
| ERM | Enhanced Review Module |
| FTA | Federal Transit Administration |
| <i>FAQ</i> | Third Party Procurement Frequently Asked Questions |
| GSA | General Services Administration |
| MAP-21 | Moving Ahead for Progress in the 21st Century Act |
| NTD | National Transit Database |
| NTI | National Transit Institute |
| PSR | Procurement System Review |
| RTAP | National Rural Transit Assistance Program |

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September 10, 2015

The Honorable Matthew Cartwright
House of Representatives

Buses are the most widely used form of public transportation in the United States. In fact, according to data from the Federal Transit Administration's (FTA) National Transit Database (NTD), buses carry more passengers than all other modes—such as commuter rail, light rail, and ferries—combined.¹ Buses play a particularly important role in the provision of paratransit services for people with disabilities.² To support public transportation, Congress, through grant programs managed by FTA provides billions of dollars annually to transit agencies for operations and capital investments, including bus procurement. In fiscal year 2013, transit agencies used \$1.3 billion of the funds provided by FTA to buy buses.³

In total, transit agencies use FTA's grant funding to purchase about 5,000 buses per year, although not all agencies purchase buses each year. New buses are needed to replace aging existing buses or to expand an agency's existing service. Transit agencies have raised concerns about the difficulties of complying with federal procurement requirements for buses and have sought alternative ways to buy buses. For example, many agencies have purchased buses through buying cooperatives or by acquiring the rights to procure buses under another transit agency's existing contract, a process known as piggybacking. Both methods of procurement are acceptable to FTA, if done in compliance with federal procurement requirements.

¹For the purposes of this report, we refer to buses as vehicles used by transit agencies to provide transportation services on a fixed-route or in response to calls from passengers, but not including automobiles, sports utility vehicles, mini-vans, and passenger vans. The NTD is maintained by FTA and includes operational data on agencies' bus fleets as well as data on all other transit modes.

²Paratransit services operate based on requests from riders and are accessible to individuals with disabilities.

³For the purposes of this report, "transit agency" refers to any organization that provides public transit service using buses and receives FTA grant funding. Fiscal year 2013 is the latest year these data are available.

You asked us to review the market for transit buses, the relevant federal role, and impediments to transit bus procurement. This report examines (1) the characteristics of the U.S. transit bus market, including manufacturing capacity and the production of new buses; (2) the federal role in transit bus procurement, including funding, procurement requirements, and oversight and guidance; and (3) the views of selected transit agencies on challenges, if any, that they face when procuring new buses and federal actions that could address those challenges.

To determine the characteristics of the U.S. transit bus market, we reviewed FTA's Annual Statistical Summaries from 2009 to 2013, the latest year data are available, and American Recovery and Reinvestment Act of 2009 (Recovery Act) Statistical Summaries. We reviewed data from the NTD for the years 2004 and 2013 to evaluate changes to transit agencies' bus fleets over time. We included vehicles agencies used for fixed route, demand response, and deviated-fixed route services and excluded vehicles used for other services—commuter buses, inter-city buses, trolley or specialty buses, vanpool vans, and automobiles—because these excluded vehicles represent a small portion of all vehicles used. To assess the reliability of NTD data, we spoke with FTA officials about data quality control procedures and reviewed relevant documentation and determined that the data were sufficiently reliable for the purposes of this report. We reviewed relevant literature and interviewed officials representing FTA; American Public Transportation Association (APTA); Community Transportation Association of America (CTAA); transit agencies; and transit bus manufacturers. To determine the federal government's role in transit bus funding, procurement requirements, and oversight and guidance, we reviewed applicable federal law, regulations, FTA guidance and grant documents, as well as interviewed FTA officials.

Finally, to identify any challenges transit agencies face when procuring transit buses and federal actions that could address those challenges, we conducted six discussion groups with officials from 36 rural and urban transit agencies with bus fleets. We recruited discussion group participants through a mass e-mail solicitation to transit agencies and solicited the help of three national transit industry groups that work closely with transit and state transportation agencies—APTA, CTAA, and American Association of State Highway and Transportation Officials (AASHTO)—to send our solicitation e-mail to transit agencies. We allocated participants into homogeneous groups based on whether they receive an urban or rural FTA grant, their location, and size of the transit agency. To ensure we received input from urban transit agencies of

varying sizes, we established three size categories: large (with more than 100 buses); medium (with 50–100 buses), and small (with less than 50 buses). We did not group rural agencies into size categories because we selected all who volunteered and 97 percent of rural agencies have less than 50 buses. We conducted two of the four urban group discussions with small agencies due to the higher proportion of small agencies in the total population of transit agencies, and we conducted one group discussion each with medium and large urban-transit agencies. Based on our findings from these discussion groups and a review of literature, we summarized the challenges related to bus procurement into general categories. While these challenges were consistently identified by both urban and rural transit agencies with a mix of bus fleets, their views were based on a self-selecting, non-representative sample of transit agencies, and thus the results are not generalizable to all transit agencies. We also interviewed FTA and General Services Administration (GSA) officials about potential changes to transit bus procurement identified by the discussion groups. Appendix I describes our objectives, scope, and methodology in greater detail.

We conducted this performance audit from October 2014 to September 2015 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.

Background

According to data from the NTD, there were about 2,200 transit agencies in the U.S. in 2013, most of which used buses.⁴ The bus fleets ranged in size from large agencies operating more than a thousand buses to small agencies with a single bus. For example, MTA New York City Transit reported that it had more than 3,300 buses and the city of Goodland, Kansas, reported that it had one. Although bus fleets of transit agencies in most major cities number in the hundreds, 85 percent of all transit agencies operated fewer than 50 buses.

Bus transit services from these agencies include:

⁴A small number of transit agencies operate only rail systems, ferries, or vanpool service.

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- *fixed routes*, in which buses operate according to a set route and schedule;
 - *demand response*, including paratransit service required under the Americans with Disabilities Act 1990, as amended (ADA),⁵ in which buses are scheduled in response to calls from passengers; and,
 - *deviated-fixed routes*, which are fixed routes that allow for minor route deviations in response to passenger calls.

To provide these services, transit agencies reported that they used a total of nearly 92,000 buses, representing a wide range of types and sizes. For the purposes of this report, we categorized buses as follows:

- *Heavy-duty buses*—the largest buses used for public transportation, typically used for fixed-route service (see fig. 1). Almost all heavy-duty buses are made specifically for the transit market, although many major components—including the engine, transmission, axles, and brakes—are also used in heavy-duty trucks.
- *Cutaway buses*—predominately used for demand response (see fig. 1). On cutaways, a bus body is manufactured and mounted on a chassis built by another manufacturer.⁶ Virtually all are equipped to accommodate wheelchairs.

Buses most commonly use diesel as a fuel source, but alternative fuel options are used, including compressed natural gas, biodiesel, and hybrid electric.

⁵Pub. L. No. 101-336, § 223, 104 Stat. 327, 340.

⁶Cutaway chassis is a term the vehicle industry uses to describe a full-size van with the section of the body behind the front passenger seats removed.

Figure 1: Transit Agencies Use Heavy-duty and Smaller Cutaway Buses to Provide Transit Services



Source: Federal Transit Administration. | GAO-15-676

Table 1 compares various characteristics of the types of buses used by transit agencies.

Table 1: Comparison of Heavy-duty and Cutaway Bus Characteristics

| Bus characteristic | Heavy-duty | Cutaway |
|---|--|--|
| Length | 30' to 60' | 16' to 28' |
| Passenger seating capacity | 26 to more than 60 | 10 to 25 |
| Minimum life requirement^a | 10 years/350,000 miles to 12 years/500,000 miles | 4 years/100,000 miles to 5 years/150,000 miles |
| Cost (approximate) | \$164,000 to \$940,000 | \$53,000 to \$100,000 |

Source: GAO analysis of Federal Transit Administration (FTA) and transit industry data. | GAO-15-676

^aMinimum life requirement is the minimum time or mileage that FTA requires a bus to be in service before being replaced.

Transit agencies procure new buses to replace aging existing fleets or when expanding service and FTA policies specify how agencies manage, use, and dispose of buses acquired with federal funds. For example, FTA has established a minimum useful life for buses, in terms of years in service or accumulation of miles, and requires that buses are maintained and remain in use for at least their minimum life. To avoid the purchase of unnecessary vehicles, FTA policy limits the size of each agency's bus fleet to those the agency needs to provide its services. Thus, for each new replacement bus purchased, FTA requires agencies to provide plans for disposition of the vehicle to be replaced.

While some transit agencies purchase buses frequently, most do not make purchases every year and some go years between purchases. When transit agencies purchase buses using federal funds, there are four

procurement methods recognized by FTA that they typically use, depending on their needs:

- *Stand-alone procurement*—conducted by a single agency and resulting in a contract between it and a bus manufacturer or vendor.
- *Joint procurement*—conducted by two or more agencies where each is a party from the outset to a single contract with a bus manufacturer or vendor.
- *Assignment of options (also referred to as “piggybacking”)*—conducted by two or more agencies where one agency with an existing bus procurement contract determines that it inadvertently contracted to purchase more buses than it needs. The agency may assign the rights to purchase some or all of its unneeded buses to other transit agencies.
- *Purchasing from a state schedule*—many states create purchasing schedules by which the state and its subsidiaries may acquire goods, including buses. Some subsidiaries—including cities and counties—are also transit agencies and purchase buses from the state’s purchasing schedule. FTA approves of this procurement method as long as the state ensures that procurement contracts include any clauses required by federal law.

Recipients of FTA assistance are required to conduct procurements in accordance with FTA procurement rules including, for example, that all procurement transactions, such as stand-alone, joint, and assignment of options, be conducted in a manner that provides full and open competition and that recipients agree to purchase a finite number of vehicles based on the agency’s needs. Purchases from a state schedule also must follow FTA procurement rules such as the inclusion of FTA-required clauses and certifications but are typically completed by the state and not a transit agency.

The Number of Bus Manufacturers Has Declined, but Bus Production Has Remained Constant

The Number of Heavy-duty Manufacturers Has Declined

Over the last decade, the number of heavy-duty transit bus manufacturers in the U.S. has declined due to business failures and consolidation. The final assembly of heavy-duty buses purchased by transit agencies using funds from FTA generally takes place in the U.S., in order to meet Buy America requirements.⁷ In 2013, four companies produced virtually all heavy-duty buses used in the U.S.

Transit agencies that receive federal funds are required to report operational data at least annually to the NTD, including information on the agencies' bus fleets. Using these data,⁸ we identified the year and manufacturer of buses that transit agencies reported they owned or used in 2004 and 2013 and compared the two time periods.⁹ Our analysis of this data shows:

⁷See 49 U.S.C. § 5323(j); see also FTA Buy America regulations at 49 C.F.R. Part 661. In general, under these Buy America requirements, all iron, steel, and manufactured products used in FTA-funded projects must be produced in the U.S. When procuring rolling stock, such as passenger rail cars and transit buses, transit agencies are generally not subject to these requirements when the cost of components produced in the U.S. is more than 60 percent of the value of all components used in producing rolling stock and final assembly takes place in the U.S. Some transit agencies have procured foreign-made buses using other than federal funds.

⁸For this analysis, we used data reported by transit agencies that receive Urbanized Area (49 U.S.C. § 5307) grants. Data reported by agencies that receive Rural Area (49 U.S.C. § 5311) grants do not include as much detail as data reported by urban recipients. For example, rural agencies do not report vehicle manufacturers.

⁹For 2004, we identified manufacturers of buses for model years 2004 to 1999; for 2013, the latest year data are available, we identified manufacturers of buses for model years 2013 to 2008. Some bus manufacturers are not included in the data presented because they produce no buses or a very small number. For example, there are at least two manufacturers of battery-powered buses in the U.S., but no agency reported that they own or use a bus from either company.

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- *The number of heavy-duty manufacturers declined*—in 2004, 10 manufacturers produced almost all of the reported buses; by 2013, four manufacturers produced almost all of the buses.¹⁰
 - *Smaller manufacturers stopped bus production*—most manufacturers that stopped producing heavy-duty buses between 2004 and 2013 were relatively small, with each making 4 percent or fewer of the 2004 reported buses, although one manufacturer made 11 percent.
 - *The market share for the largest manufacturers increased*—in 2004, the largest three manufacturers produced 68 percent of the reported heavy-duty buses; in 2013, the same three manufacturers produced 81 percent of the buses.

The Number of Cutaway Manufacturers Has Remained Consistent

In contrast with heavy-duty manufacturers, the number of manufacturers of cutaway transit buses has remained about the same. As with heavy-duty buses, final assembly of cutaway buses purchased by transit agencies using funds from FTA generally takes place in the U.S., to meet Buy America requirements. According to FTA, transit agencies generally procure cutaways through dealers representing the manufacturers; each bus is to be produced to an agency's specifications. There is also a substantial private market for cutaway buses. Specifically, hotels, rental car agencies, and universities also purchase cutaway buses. In 2007, FTA estimated that sales to these entities surpassed transit-related sales. Our analysis of bus information reported by transit agencies in 2004 and 2013 shows that:

- *Almost all cutaway bus manufacturers continued to produce buses*—of the 13 largest manufacturers in 2004, all continued to produce transit buses in 2013.
- *At least two companies started producing buses*—two companies not identified in 2004 each produced about 4 percent of the cutaway buses in 2013.
- *Market share is more evenly distributed*—in 2004, the three largest manufacturers made 64 percent of the cutaway buses; in 2013, the three largest manufacturers made 47 percent. In general, because the

¹⁰In 2004, 10 manufacturers produced 98 percent of the reported buses; in 2013, 4 manufacturers produced 99 percent of reported buses.

market share of the largest manufacturers declined, other manufacturers had larger shares.

Production of Transit Buses Has Remained Constant

The decline in the number of heavy-duty bus manufacturers has not affected the number of buses produced.¹¹ Excluding buses purchased with funds from the Recovery Act, the number of buses procured by transit agencies annually varied slightly from 2009 through 2013 (see table 2). Approximately half of the bus purchases were for heavy-duty buses and half were for cutaway buses, although the percentages vary from year to year. The Recovery Act provided additional funds for capital projects, including bus procurement, in 2009 and 2010.¹² Specifically, transit agencies and others purchased 7,544 buses using Recovery Act funds over those 2 years.¹³

Table 2: Number of Buses Procured by Transit Agencies Using Non-American Recovery and Reinvestment Act (Recovery Act) Funds, Fiscal Years 2009–2013

| Year | Number of buses (non-Recovery Act) |
|--------------|------------------------------------|
| 2009 | 4,903 |
| 2010 | 4,670 |
| 2011 | 5,652 |
| 2012 | 5,523 |
| 2013 | 5,562 |
| Total | 26,310 |

Source: GAO analysis of Federal Transit Administration Annual Statistical Summary data. | GAO-15-676

The number of transit buses produced annually is relatively small compared to heavy-duty trucks. Specifically, there are approximately 2,500 heavy-duty buses produced each year and approximately 300,000 heavy-duty trucks. Similarly, of the 370,000 cutaway chassis sold annually, 2,500 are purchased and modified for transit use. According to a 2007 FTA report, this situation is both beneficial and problematic for the transit industry.¹⁴ Components shared by multiple industries likely make

¹¹Bus manufacturers custom-make each bus based on a contract with a transit agency.

¹²Pub. L. No. 111-5, 123 Stat. 115, 209 (2009).

¹³According to FTA officials, Recovery Act bus purchases are not identified by fiscal year because the grants were awarded from March 2009 through September 2010.

¹⁴FTA, *Useful Life of Transit Buses and Vans* (April 2007).

their costs lower than if they were used only for transit. Conversely, the transit industry as a whole exerts little influence on availability of components or their design.

FTA Funds Bus Procurements through Grant Programs and Provides Oversight and Guidance to Transit Agencies

FTA provides support for public transportation by awarding federal funding—about \$11 billion in 2013—to transit agencies in the form of grants. Grant recipients have specific responsibilities associated with the use of this funding. For example, transit agencies are required to conduct procurements involving federal funds in compliance with applicable federal requirements. FTA is responsible for ensuring compliance with these requirements and for ensuring that these agencies use the funding prudently. In addition, FTA describes its role as one where, in general, FTA does not substitute its judgement for that of its recipients by making contract decisions for recipient transit agencies entering into procurement contracts with third parties, such as bus manufacturers or vendors.¹⁵

Federal Funding Used for Bus Procurement Increased from 2009 through 2013

There were at least 11 federal grant programs in fiscal year 2013 that allowed funds to be used for bus procurement. The rules associated with use of grant money vary by program, but generally transit agencies have flexibility in deciding how to use these funds. For example, an agency may use most of its grant funding one year on a commuter rail project and use most of its funding for bus procurement in the next year. Transit providers may, and often do, receive funding from more than one program. Further, in each year, FTA may obligate funds—that is, enter into a grant agreement with a transit agency to, for example, procure buses—that were appropriated in that year or in prior years.¹⁶ As a result, the amount obligated by FTA in any given year is not the same as is appropriated. Four federal grant programs provide 95 percent of the funding awarded to transit agencies for bus procurement:

¹⁵See e.g., FTA Circular 4220.1F – *Third Party Contracting*, in which FTA cites Executive Order 13132, *Federalism*, 64 Fed. Reg. 43255 (Aug. 4, 1999) as directing federal agencies to refrain from substituting their judgment for that of their state recipients unless the matter is primarily a federal concern.

¹⁶The number of years that appropriated funds are available to recipients varies by grant program. For example, the Urbanized Area Formula Program funds appropriated for fiscal year 2013 are available for obligation by the recipient for 6 years—the year of the apportionment plus 5 additional years.

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- *Urbanized Area Formula Program (49 U.S.C. §5307)*—provides funds to urban areas, defined as those with a population of at least 50,000 based on census information. Funds provided under this program may be used for capital projects, such as purchasing buses, planning, job access and reverse commute projects, and operating and other expenses.
 - *Bus and Bus Facilities Formula Program (49 U.S.C. §5339)*—provides funds to allow transit agencies to overhaul and retrofit their buses as well as purchase new buses and construct bus-related facilities, such as bus maintenance facilities.
 - *Enhanced Mobility of Seniors and Individuals with Disabilities Program (49 U.S.C. §5310)*—provides funds to transit agencies and other organizations for transportation programs for seniors and individuals with disabilities that go beyond the scope of public transportation fixed-route service as well as providing funds for ADA complementary paratransit services. At least 55 percent of these funds must be used on capital expenses, such as bus procurement.
 - *Rural Area Formula Program (49 U.S.C. §5311)*—provides funds to states and tribal areas for use in areas with populations of less than 50,000. States distribute these funds to non-urban and rural areas. Funds can be used to support public transportation in rural areas in order to support the needs of rural areas such as access to healthcare, education, employment, public services, and recreation. Funds can also be directed towards capital, operating, and other expenses.

Transit agencies have recently used increasing amounts from their grant funds to purchase buses. Specifically, from fiscal years 2009 to 2013, the most recent year data are available, obligations made by FTA to transit agencies for bus procurement increased (see table 3). These figures represent only the money that transit agencies have decided to use towards bus purchases and do not represent all other forms of transit spending. In addition, transit agencies have used funds from other sources to procure buses. For example, transit agencies and others used approximately \$1.7 billion provided by the Recovery Act for procuring 7,544 buses from 2009 to 2010.

Table 3: Federal Transit Administration (FTA) Funds Obligated for Bus Purchase by Grant Program, Fiscal Years 2009–2013 (in Millions)

| Grant Program Name | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|----------------|----------------|------------------|------------------|------------------|
| Urbanized Area(49 U.S.C. §5307) | \$518.4 | \$512.3 | \$622.4 | \$613.1 | \$751.5 |
| Capital Program ^a | \$154.5 | \$138.9 | \$348.2 | \$380.1 | \$416.3 |
| Seniors and Individuals with Disabilities (49 U.S.C. §5310) | \$65.1 | \$56.4 | \$59.0 | \$76.4 | \$46.0 |
| Rural Area (49 U.S.C. § 5311) | \$19.4 | \$22.1 | \$24.7 | \$32.7 | \$48.0 |
| Other ^b | \$36.0 | \$17.4 | \$98.9 | \$67.9 | \$40.7 |
| Year total | \$793.5 | \$747.2 | \$1,153.2 | \$1,170.2 | \$1,302.4 |

Source: GAO analysis of FTA Annual Statistical Summary data. Data are unadjusted for inflation. | GAO-15-676

Note: Numbers in table may not total exactly due to rounding.

^aThe Capital Program from 2009 to 2012 was comprised of three FTA grant programs: Bus and Bus Facilities, Fixed Guideway Modernization, and New Starts. In 2013, the Capital Program was comprised of Bus and Bus Facilities, Fixed Guideway Capital Investment, and State of Good Repair programs, as well as funds from the prior years' Bus and Bus Facilities and Fixed Guideway Modernization programs.

^bOther programs include Clean Fuels, Job Access and Reverse Commute, New Freedom, Sarbanes Transit in the Parks, Transportation Investment Generating Economic Recovery (TIGER), Transit Investment for Greenhouse Gas and Energy Reduction (TIGGER), and Miscellaneous Federal Highway Administration Transfers. The Clean Fuels Program, as well as the Job Access and Reverse Commute, New Freedom, and Sarbanes Transit in the Parks programs were repealed in July 2012 by the Moving Ahead for Progress in the 21st Century Act, Pub. L. No. 112-141, § 20002, 126 Stat. 405, 622 (2012).

Some of these grant programs changed over this 5-year period. For example, the Bus and Bus Facilities program was a discretionary program through fiscal year 2012, after which it became a formula program pursuant to changes made by the Moving Ahead for Progress in the 21st Century Act (MAP-21).¹⁷

Transit Agencies Are Responsible for Complying with FTA's Bus Procurement Requirements

When using federal funds from FTA to procure buses, transit agencies must comply with a range of federal requirements that include government-wide requirements, such as complying with the ADA, as well as FTA-specific requirements, such as providing a local funding match for federal grants. FTA includes federal requirements in the FTA Master Agreement, which contains the terms and conditions applicable to each

¹⁷MAP-21 was the surface transportation authorization in effect for fiscal years 2013 and 2014, and has been extended several times.

grant. Some of the relevant clauses that apply to bus procurements are shown in table 4.

Table 4: Select Federal Requirements for Transit Agencies Procuring Buses Using Federal Funds

- *Full and open competition*—transit agencies must conduct procurements in a manner providing full and open competition that is not restrictive of competition.
- *Recipient's Responsibility to Extend Federal Requirements to Third Party Participants*—transit agencies must ensure that all third party contractors, such as bus manufacturers, also meet all applicable federal requirements.
- *Buy America*—for any purchase over \$100,000, transit agencies must ensure that more than 60 percent of the value of the bus and bus components are manufactured in the U.S. and the bus's final assembly is in the U.S.
- *Local Share* – transit agencies are required to match a portion of each federal grant, typically 20 percent for bus procurement, from local or state sources.
- *Disadvantaged Business Enterprise (DBE)*—transit agencies must have a DBE policy statement in place and procure buses only from FTA-approved vendors.^a
- *Price or Cost Analysis*—transit agencies are required to justify the price they pay for buses. If the bus is commercially available, a transit agency may perform a price analysis. If the bus is not commercially available, the transit agency is required to perform a cost analysis to evaluate the cost elements and proposed profit of a contractor's proposal.

Source: GAO analysis of Federal Transit Administration documents. | GAO-15-676

^aDBEs are small businesses owned and operated by socially and economically disadvantaged individuals such as members of specified minority groups. Under federal law, except to the extent that the Secretary of Transportation determines otherwise, DOT is to use at least 10 percent of the funds authorized for transit financial assistance programs with DBEs. DOT regulations provide that this 10 percent amount is an aspirational goal at the national level, which the Department uses as a tool in evaluating and monitoring DBEs' opportunities to participate in DOT-assisted contracts.

FTA Oversees Transit Agencies' Procurement Process through Agency Self-Certification and Various Reviews

FTA is responsible for ensuring that grant recipients comply with federal bus procurement requirements. According to FTA, it relies on transit agencies to annually certify, for each grant, that its procurement system meets all federal requirements and that those requirements are also met by third party contractors.

FTA conducts periodic reviews to assess transit agencies' performance and adherence to FTA requirements and policies. For example, FTA conducts triennial reviews of transit agencies receiving Urbanized Area grant funds.¹⁸ According to FTA officials, about 600 transit agencies receive Urbanized Area funds and approximately one-third of these agencies (200) undergo a triennial review each year. These triennial reviews include a review of an agency's procurement system but may

¹⁸We previously reported on FTA's triennial review process. See GAO, *Public Transportation: FTA's Triennial Review Program Has Improved, But Assessments of Grantees' Performance Could Be Enhanced*, [GAO-09-603](#) (Washington, D.C., June 30, 2009).

also include an Enhanced Review Module (ERM) with a specific focus on procurement. ERMs can be triggered by factors including high funding levels, open or repeated findings from previous reviews, unusual or complex procurements, a large number of change orders, bid protests, or Buy America issues. Based on its own risk assessment findings,¹⁹ FTA may also conduct a Procurement System Review (PSR). According to FTA officials, these PSRs examine at least 56 different elements of a transit agency's procurement system plus its Buy America certifications to determine if it meets FTA procurement requirements and to identify needed corrective actions.

FTA has found errors in the way transit agencies procure buses. For example, in 2013, FTA found that several bus procurement contracts did not comply with federal procurement requirements that limit the number of buses an agency may purchase to those needed for its public transportation services.²⁰ According to FTA, these contracts, in which the parties contracted to buy more buses than they currently or could reasonably be expected to need, were apparently specifically designed for piggybacking—or assigning contract rights to other transit agencies—at a later date. Under FTA rules, piggybacking is allowed only when an agency inadvertently contracts for more buses than it needs. FTA also found that agencies procured buses from a Minnesota state contract even though the agencies were located outside that state, in violation of FTA rules. FTA noted that under this contract, to purchase a bus, a transit agency needed only to submit a simple, one-third page application to the State of Minnesota, receive a membership permit number, and send a purchase order to the vendor of its choosing listed in the contract. While some states have established purchasing schedules for use by state agencies and other authorized entities, FTA prohibits transit agencies using federal funds from FTA to procure buses from out-of-state contracts. Despite that, at the time of the FTA review, at least 13 transit agencies located outside of Minnesota had pending orders to procure buses through the Minnesota state contract with a single bus manufacturer, according to FTA. In both the piggybacking and Minnesota

¹⁹FTA regional offices use the results of an annual risk assessment of each grantee to identify transit agencies that may have a greater risk for procurement problems and to focus oversight resources on those agencies.

²⁰These requirements are intended to prevent agencies from purchasing unnecessary property.

state contract cases, FTA prohibited future purchases but allowed pending purchases to stand.

FTA Provides Guidance to Transit Agencies on Bus Procurement, but Some Is Outdated

FTA provides guidance and technical assistance to help transit agencies comply with federal bus procurement requirements. Transit agencies access this guidance through FTA's website or by contacting officials in FTA regional offices. According to FTA, the primary source of procurement guidance from FTA is FTA *Circular 4220.1F – Third Party Contracting Guidance*, which describes how transit agencies can comply with federal requirements when using federal funds for procurements, such as for buses. FTA issued the current version of the circular in November 2008, and revised it most recently in March 2013. In addition, individual circulars for some of the grant programs used for bus procurement provide guidance related to that program. For example, the circular for the Urbanized Area grant program provides information on the eligible uses of funding, such as for bus replacement, overhaul, or expansion of service. Further, FTA periodically issues Administrator's Policy Letters to clarify FTA procedures or indicate changes to an existing policy. For example, FTA issued a policy letter in March 2013 to clarify the conditions under which transit agencies could piggyback off another transit agency's contract.

FTA also provides supplemental guidance through its *Best Practices Procurement Manual (BPPM)*, *Third Party Procurement Frequently Asked Questions (FAQ)*, and an online tool that transit agencies can use to assess their procurement systems. This supplemental guidance is designed to assist transit agency officials throughout the procurement process and facilitate their compliance with FTA regulations. However, this guidance is outdated.

- The *BPPM* addresses each step in the procurement process using a standardized format consisting of requirements, discussion, and best practices. Requirements include relevant sections from FTA circulars, the Master Agreement, federal laws and regulations, and FTA Administrator's Policy Letters. The discussion sections provide definitions and guidance concerning the meaning or purpose of the topic being presented, and the best practices section describes practices that have proved to be effective in the past, according to FTA. Although FTA states that it envisions the *BPPM* to be an ongoing and expanding document that will be updated periodically, FTA has not updated sections of the manual in at least 10 years. As a result, the manual includes outdated references to important

procurement policy documents. For example, it includes a previous version of FTA *Circular 4220.1E*, which was replaced by the current version, FTA *Circular 4220.1F*, in 2008. Moreover, the fiscal year 2015 FTA Master Agreement notes that the *BPPM* may lack the necessary information for compliance with certain federal requirements. In June 2015, an FTA official told us that FTA made draft revisions to the *BPPM* but FTA is awaiting internal approval before releasing it and has not set a time frame for approval.

- The *FAQs* on FTA's website is an online resource for transit agencies to review FTA's answers to frequently asked procurement-related questions.²¹ Visitors to the site can also submit questions to FTA. FTA adds new answers to the website but also retains undated answers with outdated guidance. For example, the bus procurement category includes answers added in 2014 but undated answers refer to the outdated *Circular 4220.1E*.
- FTA's online *Procurement System Self-Assessment Guide* can be used by transit agencies to assess whether their own procurement system complies with FTA procurement requirements in 10 common areas of deficiency. However, the guide also includes outdated information. For example, the guide references the *BPPM* for additional guidance; as discussed previously, the *BPPM* includes outdated information. Furthermore, the guide does not include instructions for completing the self-assessment or obtaining results, and a user is not able to answer the self-assessment questions online. Although there is an area that allows for electronic submission of the self-assessment form to FTA, any form submitted this way would be blank because the form does not allow a user to enter any text.

It is important to have updated guidance because transit agencies and state departments of transportation rely on the guidance when procuring buses to ensure compliance with federal requirements. *Standards for Internal Control in the Federal Government* states that management should ensure that there are adequate means of communicating with external stakeholders that may have a significant impact on the agency

²¹The *FAQs* is also referred to as *Third Party Procurement Helpline and Frequently Asked Questions* in *Circular 4220.1F*. See <http://www.fta.dot.gov/grants/14032.html>.

achieving its goals.²² Without updated guidance, transit agencies may not be able to purchase buses as efficiently as possible; for example, they may need to spend additional time researching the guidance or they may have to repeat a required step in the procurement process. As discussed in the next section, transit agency officials in four of our six discussion groups identified outdated guidance as a challenge in bus procurement.

FTA also provides technical assistance and training on bus procurement. According to FTA, the National Transit Institute (NTI) developed two-day training on bus procurements in 2011 and held 12 training sessions from 2011 through 2013. The training is now held annually and transit agencies can use FTA grant funds to send personnel to the training.²³ In addition, an FTA headquarters official stated that he provides in-person bus procurement trainings to transit agencies approximately 8 times per year. FTA and APTA developed a standardized format for transit agencies to use for bus procurements.²⁴ This format is designed to provide a common method of contracting and is intended to save time and effort for the parties to a particular transaction. According to APTA, industry stakeholders such as bus manufacturers and transit agencies contributed to the standard's development. Use of the standardized format is not required but FTA and APTA encourage its use.

Finally, the National Rural Transit Assistance Program (RTAP) offers technical assistance and training, including for procurement, to transit agencies in rural areas. For example, RTAP developed and made available a free web-based application that is designed to guide agencies through FTA procurement procedures as well as provide required federal clauses and certifications.

²²GAO, *Standards for Internal Control in the Federal Government*. [GAO/AIMD-00.21.3.1](#) (Washington, D.C.: November 1999).

²³FTA held one training in 2014 and has one training scheduled for July 2015.

²⁴American Public Transportation Association, *Standard Bus Procurement Guidelines* (May 2013).

Selected Transit Agencies Identified an Array of Bus Procurement Challenges and Potential Strategies to Address Them

Transit Agencies Identified a Wide Range of Procurement Challenges

Transit agency officials we spoke to told us that they face an array of challenges in procuring buses. A 2006 FTA report concluded that “the greatest challenges cited by both transit agencies and bus manufacturers were related to bus procurement and contracting.”²⁵ As discussed previously, to identify and understand procurement challenges faced by transit agencies, we conducted six discussion groups with officials of 36 rural and urban transit agencies.²⁶ We recruited discussion group participants through mass e-mail solicitation and allocated participants into homogeneous groups based on their location and size of the transit agency.²⁷ Our six discussion groups included the following:

- two groups of officials from small, rural transit agencies;
- two groups of officials from small, urban transit agencies;
- one group of officials from medium, urban transit agencies; and

²⁵FTA, *Non-Rail Vehicle Market Viability Study*, (Jan. 19, 2006).

²⁶For the purposes of this report, rural agencies are recipients of Rural Area (49 U.S.C. § 5311) grants and urban agencies are recipients of Urban Area (49 U.S.C. § 5307) grants.

²⁷To ensure we receive input from a range of sizes of urban agencies, we established three size categories: large (more than 100 buses); medium (50–100 buses), and small (less than 50 buses). Using these categories, approximately 7 percent of urban agencies are large, 16 percent are medium, and 77percent are small. For rural agencies, we did not group into size categories because they tend be very similar in size (97 percent have less than 50 buses).

Compliance with Federal
Procurement Requirements

- one group of officials from large, urban transit agencies.²⁸

Participants in all six discussion groups identified some aspect of FTA's guidance, as well as some federal legal and regulatory requirements, as posing challenges to procuring new buses. For example:

- *FTA guidance:* Participants from four groups noted that some FTA guidance is outdated, as discussed in the previous section. Participants in three groups also cited that getting technical assistance from FTA was challenging. For example, a participant said that they contacted FTA officials about the applicability of a particular requirement but FTA officials would not provide a specific answer, leaving it to the transit agency to interpret. Participants in two rural groups said that they do not have the resources or experience to interpret these FTA requirements. While some participants appreciated the assistance from FTA regional staff, other participants in the large and small urban groups reported variation in the assistance received from FTA; some participants stated that FTA staff gave inconsistent advice or showed a lack of technical expertise. Participants in one group mentioned that FTA could be more proactive and provide more assistance to agencies during the procurement process.
- *Requirements:* Participants from two groups described instances where procurement requirements are seemingly unnecessary or not relevant. For example, participants in the discussion groups representing large and medium urban-transit agencies said that some FTA requirements do not reflect the reality of the transit bus market. According to these participants, FTA requires transit agencies to conduct a price analysis to ensure the price is reasonable, but this requirement seems unnecessary when there is only a single manufacturer that builds a specific type of bus. However, FTA does not require a price analysis when there is only a single manufacturer of a bus but does require a different type of analysis.²⁹ This discrepancy illustrates that some transit agency officials are confused

²⁸We conducted four of the six groups with officials from small agencies due to the proportion of small agencies in the total population of transit agencies. Our findings are based on a self-selecting, non-representative sample of transit agencies, and thus the results are not generalizable to all transit agencies.

²⁹When there is only a single source for an item, such as a bus, FTA requires transit agencies to conduct a cost analysis, as described in table 4.

about FTA requirements. Participants in the medium urban group said they find a lack of potential bidders when they attempt to procure buses, and also have difficulty demonstrating that pricing is fair and reasonable, which is required by federal regulations.

- *Buy America:* Participants from four groups told us that the Buy America certification requirements can be burdensome, complex, and costly. FTA requires transit agencies procuring buses with federal funds from FTA to certify compliance with Buy America requirements through pre-award and post-delivery reviews of bus manufacturers.³⁰ Participants in two discussion groups from rural and medium urban transit agencies explained that their agencies needed consultants' help with required pre- and post-award audits for the Buy America certification.
- *Contract Length:* Participants in one small urban group told us that a federal requirement intended to encourage competition among manufacturers creates challenges. Specifically, the federal statutory provision prohibits transit agencies from entering into multiyear rolling-stock contracts with options to buy additional rolling stock or replacement parts for longer than 5 years if federal funds are used. Although FTA officials told us that the requirement is in place to ensure that the market is fair and open, participants told us that the restriction is burdensome; if they decide to procure new buses after the 5th year, they must initiate the procurement process all over again, which can be lengthy and costly.
- *Joint Procurement and "Piggybacking:"* While participants in some of the groups we spoke with said piggybacking in particular is a useful procurement tool, other participants cited challenges and limitations associated with piggybacking. For example, one small urban agency said that piggybacking was the only way they could procure a small quantity of buses—such as one or two—because they did not receive any bids in response to a request for proposal. Participants in three

³⁰The pre-award review, to be conducted before an agency signs a procurement contract with a manufacturer, requires agencies to either certify that at least 60 percent of the bus' components will be made in the U.S. and that final assembly of the bus will take place in the U.S. or obtain an FTA waiver exempting the bus from the Buy America requirements. The post-delivery review requires agencies to certify that either the manufacturer actually met these requirements for the buses procured or the procurement was subject to an FTA Buy America waiver.

groups from rural, small, and medium urban-transit agencies said that the opportunities for joint procurement and piggybacking may be limited because there is no formal mechanism to identify mutually beneficial opportunities for joint procurement or piggybacking and the regulations regarding piggybacking are confusing. As a result, some participants who had previously used piggybacking began to handle their own procurements. Participants in two groups told us that transit agencies are not generally aware of other transit agencies' procurement plans, and there is no entity to formally help facilitate joint purchases.³¹ Some participants said they have learned of these types of procurements through informal means, such as existing relationships with other agencies or at industry conferences, and through representatives of bus manufacturers. In addition, even if agencies identify piggybacking opportunities, some participants found the rules confusing. For example, officials in three discussion groups (rural, small, and medium urban) were confused about whether FTA allows agencies to participate in piggybacking options. FTA officials told us that piggybacking options are allowed as long as an agency unintentionally orders more buses than it requires. Transit agency officials in two groups stated that piggybacking rules limit agencies' options related to the buses to be procured. These rules allow some changes to the buses originally ordered that are within the general scope of the contract—such as seat fabric or exterior paint color—but prohibit changes outside the scope of the contract.³² One small urban participant said these rules effectively prevent them from piggybacking because the features his agency prefers to include in their buses—such as an extra wheel-chair securement location—are not features most other agencies include in contracts. Instead, the participant said his agency prefers to conduct its own procurement so it can get the features it needs.

³¹GAO previously reported on challenges faced by transit agencies in procuring transit rail cars. We recommended that FTA develop a process to systematically identify and communicate opportunities for transit agencies with similar needs to participate in joint rail car procurements. FTA has not yet implemented our recommendation. See GAO, *Transit Rail: Potential Rail Car Cost-Saving Strategies Exist*, [GAO-10-730](#) (Washington, D.C.: June 30, 2010).

³²FTA's *BPPM* provides that if a change is not within scope, it is considered a cardinal change that is beyond the scope of the contract. There are various tests used to determine if a change is within scope, according to the *BPPM*.

In addition to the challenges above, some transit agency officials in our discussion groups cited challenges that specifically affect rural, urban small and medium-sized agencies:

- Participants in four groups noted that the procurement process is difficult and resource intensive. Participants in four groups (rural, small, and medium urban) noted that smaller agencies tend to have few or no dedicated procurement staff and lack technical, engineering, or specification-writing expertise needed for bus procurement. Several participants noted that the procurement process can take from 6 months to a year. Further, small agencies said that they procure buses infrequently, such as every few years, so it is difficult for them to become familiar with the process. In addition, these procurements are often for 1–3 buses and sometimes generate few bids from manufacturers.
- Participants in three groups stated that procurement training opportunities through the NTI are not always designed to meet the needs of smaller agencies. Some participants told us that the material in the training courses is targeted to larger agencies, for example by assuming a level of support staff similar to what a larger transit agency would have. When these participants asked questions specific to their situations, they said the course instructors were not able to answer them. Additionally, participants in the rural group explained that with their limited staff resources, it was difficult to spare anyone to attend off-site training for multiple days.

Challenges Related to Transit Bus Industry Changes

Participants in all six discussion groups cited the following challenges stemming from changes in the transit bus industry:

- Participants in all six discussion groups said there is limited competition to produce heavy-duty buses. Specifically, participants told us that there are currently three heavy-duty bus manufacturers and one that makes 60 foot buses. According to participants in one small urban group, the limited number of heavy-duty bus manufacturers has led to a longer delivery time (18 months) and the price of new buses has increased faster than inflation.
- Furthermore, participants also noted a lack of vendors for vehicle components. Specifically, participants told us that there is currently only one engine manufacturer for heavy-duty buses that complies with Buy America requirements. Participants in four discussion groups stated that Buy America and DBE requirements and consolidation of

the industry have contributed to the lack of available vehicle component vendors.

Funding Challenges

Participants in four discussion groups stated that it was a challenge to secure funding for transit buses. Transit agencies may use federal, state, and local funds to purchase or replace buses but must weigh these purchases against other capital and operating needs. Transit agencies also told us that the federal surface transportation authorizations and appropriations process creates year-to-year uncertainty that can be a challenge for long-term planning. Obtaining state or local funding to meet federal local match requirements was identified as a challenge by participants in three discussion groups. Constrained state and local budgets can make securing these funds difficult. We have previously found that some states provide limited or no state funds for rural transit, a process that increases the pressure on rural transit agencies to secure local funds.³³

Transit Agencies' Access to Federal Sources of Supply Could Address Many Challenges

Participants in all six discussion groups offered ideas about possible ways that the federal government could address some of the procurement challenges they identified (see table 5).

Table 5: Transit Agencies Suggested Actions to Address Bus Procurement Challenges

| Challenge area | How challenge could be addressed |
|---|---|
| Federal procurement process and Federal Transit Administration (FTA) Guidance | <ul style="list-style-type: none"> • Develop a national procurement schedule for transit agencies similar to a General Services Administration (GSA) procurement schedule • Update the Best Practices Procurement Manual (<i>BPPM</i>) • Create a template for cutaway bus procurement with standardized specifications for rural and small transit agencies • To reduce the burden of reporting required information to the National Transit Database, FTA allows agencies with 30 or fewer buses to report less information less frequently. Consider raising the threshold to 75 buses • The procurement process for small purchases—those less than \$100,000—is simpler and with fewer federal requirements than for larger purchases. Consider raising the threshold to \$150,000 • Consider shifting the responsibility for certification for Buy America to manufacturers |

³³GAO, *Public Transportation: Federal Role Key to Rural and Tribal Transit*. [GAO-14-589](#), (Washington, D.C.: June 24, 2014)

| Challenge area | How challenge could be addressed |
|--------------------------------|---|
| Piggybacking/Joint procurement | <ul style="list-style-type: none"> Consider an e-commerce/ electronic clearinghouse as an effective portal for information exchange to help facilitate joint procurement and piggybacking opportunities |
| Procurement training | <ul style="list-style-type: none"> Provide procurement training tailored for transit agency size (large v. small) and types of buses being purchased Offer flexibility in training options such as via webinar or WebEx |

Source: GAO analysis of discussions with transit agencies. | GAO-15-676

Participants in four discussion groups from rural, urban-medium, and urban small-transit agencies suggested that FTA develop a national procurement schedule similar to that of the GSA's. GSA establishes long-term government-wide contracts for millions of products with commercial firms and provides federal agencies and others with access to these sources of supply.³⁴ According to GSA officials, GSA negotiates volume discounted prices and its policies and procedures are designed to ensure that vendors comply with federal procurement requirements. Transit agencies are not permitted to purchase through GSA because they are not federal agencies or other authorized users. In the past, entities other than federal agencies have been authorized to purchase items through GSA. For example, states and units of local government have been authorized pursuant to statute to purchase equipment, including vehicles, in support of counter-drug, homeland security, and emergency response activities.³⁵ Purchasing through GSA could allow for more streamlined procurement for transit agencies and potentially cost savings because GSA would be responsible for ensuring that any bus procured through GSA complies with federal and FTA requirements. As a result, transit agency officials would not need to develop their own specifications or procurement requirements and would not be required to ensure the buses comply with the Buy America certification. In addition, GSA officials noted that they are usually able to secure very good pricing because the purchasing power of the federal government results in volume discounts. For example, they said the price of vehicles they procure averages 17 percent below the dealer invoice price. Officials said these prices compare favorably to prices paid by other large capacity vehicle purchasers, such as rental car companies. According to FTA and GSA officials, both agencies have explored the feasibility of establishing a process to allow transit agencies to procure buses through GSA and both

³⁴Schedules consist of a group of contracts for a category of items, such as vehicles or furniture, from which authorized users place orders directly with vendors.

³⁵10 U.S.C. § 381(c).

agencies support the concept. GSA officials said they have the capability to provide a streamlined procurement process to transit agencies that complies with federal and FTA requirements. However, GSA officials told us that Congress would have to authorize transit agencies to purchase through GSA. Neither agency has submitted a legislative proposal to Congress.

Conclusions

Buses are an important part of public transit. Transit agencies maintain a fleet of buses to provide transit service. In order to do so, transit agencies purchase buses to either replace their existing fleet or expand service. In 2013, transit agencies used over \$1 billion of federal funding to purchase buses. While some large agencies purchase buses each year and have a dedicated procurement staff for doing so, other transit agencies purchase buses only occasionally. Moreover, participants in our discussion groups explained that smaller agencies tend to have few or no dedicated procurement staff and lack expertise needed for bus procurement. Thus, they are challenged to knowledgeably and efficiently complete all of the steps required to procure buses with FTA funds. Therefore, FTA guidance and assistance in helping transit agencies procure buses is important. While this guidance is widely available on-line, some FTA guidance is out of date and refers to incorrect regulations and information. As a result, transit agencies may not be able to purchase buses as efficiently as possible, as they may need to spend additional time researching the guidance or they may have to repeat a required step in the procurement process.

While transit agencies face several challenges in procuring buses, many of these challenges could be alleviated if agencies were allowed to purchase buses through GSA. By purchasing through GSA, agencies would know that they are getting a bus that complies with federal procurement requirements. In addition, transit agency staff—particularly those at smaller agencies who may lack procurement expertise—would be able purchase buses more easily and efficiently. Specified non-federal entities have been authorized to purchase through GSA in the past. Specifically, states and local governments have been authorized under federal statute to purchase through GSA for emergency equipment and homeland security-related items, among other things. Transit agencies could experience cost savings if they were able to purchase buses through GSA, as agencies will not need to spend as much time on the procurement process. Allowing transit agencies to make such purchases could also lead to cost savings because GSA staff have expertise in price negotiation and they have procured vehicles that, given the volume of purchases, are on average 17 percent below the invoice price. Ultimately,

the efficient purchasing of buses may also save money for the federal government, as transit agencies may require fewer federal funds to operate their transit programs.

Recommendations for Executive Action

To ensure that transit agencies have appropriate and current guidance to assist them when procuring transit buses, we recommend that the Administrator of FTA update its *Best Practices Procurement Manual* and assess its other related guidance identified in this report and update that guidance as needed.

To provide a more efficient and cost-effective way for transit agencies to procure transit buses while complying with federal procurement requirements, we recommend that the Administrator of FTA, in conjunction with the Administrator of the General Services Administration, submit a legislative proposal to Congress that would authorize transit agencies that are recipients of FTA grants to access GSA sources of supply for the purchase of transit buses.

Agency Comments

We provided a draft of this report to the Department of Transportation and the General Services Administration for review and comment prior to finalizing the report. The Department of Transportation provided written comments, which are reprinted in appendix II, and agreed with our recommendations. The General Services Administration provided written comments, which are reprinted in appendix III, and agreed with our recommendations. GSA also provided technical comments on the draft that we incorporated as appropriate.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the Department of Transportation and the General Services Administration. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-2834 or wised@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 made key contributions to this report are listed in appendix IV.

A handwritten signature in black ink that reads "David J. Wise". The signature is written in a cursive style with a large, prominent "D" and "W".

David J. Wise
Director
Physical Infrastructure Issues

Appendix I: Objectives, Scope, and Methodology

The objectives of this report were to examine (1) the characteristics of the U.S. transit bus market, including manufacturing capacity and the production of new buses; (2) the federal role in transit bus procurement, including funding, procurement requirements, and oversight and guidance; and, (3) the views of selected transit agencies on challenges, if any, that they face when procuring new buses and any federal actions that could address those challenges.

To address all three of our objectives, we reviewed relevant literature from the Federal Transit Administration (FTA), industry, and academia and interviewed officials representing FTA; General Services Administration (GSA); American Public Transportation Association (APTA); Community Transportation Association of America (CTAA); transit agencies; and bus manufacturers.

To determine the characteristics of the U.S. transit bus market, we reviewed FTA's Annual Statistical Summaries from fiscal years 2009 to 2013, the latest year data are available, and American Recovery and Reinvestment Act (Recovery Act) Statistical Summaries. We reviewed data from the National Transit Database (NTD) for the years 2004 and 2013 to evaluate changes to transit agencies' bus fleets over time. We chose those years because 2013 was the latest data available and 2004 represented data 10 years earlier, which we believe to be sufficient to show any changes in the industry. We included vehicles used for fixed-route, demand-response, and deviated-fixed route services and excluded vehicles used for other services—commuter buses, inter-city buses, trolley or specialty buses, vanpool vans, and automobiles—because these vehicles represent a small portion of all vehicles used. To assess the reliability of data from NTD, we interviewed officials about data quality control procedures and reviewed relevant documentation and determined that the data were sufficiently reliable for the purposes of this report.

We categorized buses generally and for the purposes of this report as heavy-duty or cutaway. FTA also uses these categories as well as three others, which we did not include for ease of reporting and because the heavy-duty and cutaway categories encompassed over 95 percent of transit buses, according to FTA in 2006.¹

¹*Non-Rail Vehicle Market Viability Study*, FTA, January 19, 2006

To identify bus manufacturers, the number of buses produced, and any changes over time, we reviewed NTD urban vehicle inventory reports from 2004 and 2013, the most recent year data are available. Transit agencies receiving federal grant funding from FTA are required to report operating information to NTD, including detailed information on their bus fleet.² For each year, we limited the data to reported vehicles that are 1) used to provide bus or demand response transportation services; 2) shown as bus and articulated bus vehicle types; and 3) within a 5-year model range of the year of the data report (2004 to 2000 model years for the 2004 data and 2013 to 2009 for the 2013 data). We further grouped the data set by vehicle length: generally, vehicles 30 feet in length or greater (heavy-duty buses) and vehicles less than 30 feet (cutaway buses). For each group, we identified the number of vehicles from each manufacturer and calculated an approximate market share by dividing that number by the total number of vehicles.

Within the data set, some records included missing data, particularly for manufacturer's name and for model year. We excluded these records from our analysis. The number of vehicles associated with missing data records represented 11 percent of the total number of vehicles in the 2004 data and 10 percent in the 2013 data. We also manually reviewed all records and identified some information that appeared to be incorrect based on other data in the record. Most commonly, vehicles were categorized as a vehicle type van when other evidence, such as the manufacturer name, indicated they should be categorized as a bus.³ We included these vehicles in our analysis. In more limited cases, vehicles were categorized as a bus when other evidence indicated they should be categorized as a van. We excluded these vehicles from our analysis. The net change in vehicles because of these changes represented less than 3 percent of the total number of vehicles in the 2004 and 2013 analyses.

To determine the federal government's role in procurement of transit buses—including funding, oversight and guidance, and procurement requirements—we reviewed applicable federal law, regulations, guidance,

²For this analysis, we used data reported by transit agencies that receive Urbanized Area (49 U.S.C. § 5307) grants. Data reported by agencies that receive Rural Area (49 U.S.C. § 5311) grants do not include as much detail as data reported by urban recipients. For example, rural agencies do not report vehicle manufacturers.

³NTD's 2013 *Urban Module Reporting Manual* states that cutaway vehicles should be classified as buses.

and FTA documentations on federal grant programs including FTA's Master Agreement; *Circular 4220.1E*; *Circular 4220.1F*; Administrator's Policy Letters; *Best Practices Procurement Manual*; Triennial, State Management, and Procurement Systems reviews; and APTA's *Standard Bus Procurement Guidelines*.

To identify any challenges transit agencies face when procuring transit buses and federal actions that could address those challenges, we conducted six discussion groups with 36 rural and urban transit agencies. We recruited discussion group participants through mass e-mail solicitation to approximately 1,900 transit agencies that report to the NTD. In our email, we requested participation from transit agencies that had received funding from FTA since 2009 and that were interested in speaking with us on challenges they faced regarding transit bus procurement. We also solicited the help of three national transit industry groups to send our solicitation e-mail to rural transit agencies— APTA, CTAA, and American Association of State Highway and Transportation Officials (AASHTO) —that work closely with transit and state transportation agencies.

For each volunteer received, we identified whether it was an urban or rural recipient, the number of buses each reported, and their NTD identification number to identify the FTA region. From our pool of volunteers, we recruited participants based on a range of criteria, including: agencies that purchase and operate buses; a mix of urban and rural FTA grantees; a mix of the size of bus fleet and type of bus used; and geographic diversity of various FTA regions. In order to include a wide geographical distribution of participating agencies, we conducted all six discussion groups remotely via WebEX. We established three size categories to ensure we received input from a range of sizes of urban agencies: large (more than 100 buses); medium (50–100 buses), and small (less than 50 buses). We did not group rural agencies into size categories because 97 percent of these agencies have less than 50 buses. After grouping the full list of volunteers, we allocated transit agency participants into six homogeneous groups. Our six discussion groups included the following:

- two groups of rural transit agencies (total of 9 agencies);
- two groups of small, urban transit agencies (total of 13 agencies);

- one group of medium, urban transit agencies (total of 6 agencies);
and
- one group of large, urban transit agencies (total of 8 agencies).

In order to ensure the appropriateness of the questions for the discussions, we pretested our moderator guide with three transit agencies and modified the guide based on those pretest results as needed. We conducted four of the six groups with rural and small urban transit agencies due to the proportion of rural and small agencies in the total population of transit agencies. As we were unable to accommodate all volunteers with our discussion groups, we gave the non-selected volunteers the opportunity to send us written responses to the discussion questions; nine transit agencies provided written responses about the challenges they faced procuring transit buses. Based on our findings from the discussion groups, written responses and a review of literature, we summarized the challenges related to bus procurement into general categories. While these challenges were consistently identified across agencies we spoke with, our findings are based on a self-selecting, non-representative sample of transit agencies, and thus the results are not generalizable to all transit agencies.

We conducted this performance audit from October 2014 to September 2015 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.

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 Avenue, SE
Washington, DC 20590

JUL 23 2015

David J. Wise
Director, Physical Infrastructure
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

The mission of the Federal Transit Administration (FTA) is to improve public transportation for America's communities. Public transportation includes buses, subways, light rail, commuter rail, monorail, passenger ferry boats, trolleys, inclined railways, and people movers. Buses carry more passengers than all other forms of public transportation combined and the FTA provides federal financial assistance to transit agencies across the country to purchase these buses. In 2013, transit agencies used \$1.3 billion in FTA grant funding for bus procurement, and more than \$166 million for bus maintenance facilities.

FTA undertakes many efforts to provide an efficient procurement process. We strongly encourage the use of Joint Procurements among smaller grantees and permit the use of piggybacking as methods for our grantees to efficiently obtain buses in compliance with Federal rules. Upon request, FTA also provides ad hoc technical assistance reviews for our grantees' Requests for Proposals and Invitations for Bids for bus purchases. These efforts typically result in suggested improvements in the solicitation language, a reminder to include all federally required clauses, and, in some instances restructuring of the way prices are to be submitted.

Additionally, to ensure compliance with Federal regulations when purchases are made, FTA updated its Triennial Review Program in 2014 to include new Enhanced Review Modules (ERMs), including an ERM for procurements. In 2013, FTA collaborated with the American Public Transportation Association (APTA) to publish the Standard Bus Procurement Guidelines to facilitate the process of purchasing buses among our grantees. FTA and the National Transit Institute also created the Standard Bus Procurement Course. During FY13 and FY14, this two day, interactive course was attended by more than 600 representatives of our grantees to educate them on best practices and Federal requirements in bus procurements.

Upon preliminary review, we agree with the recommendations provided in this report. The Department will provide a detailed response to the recommendations within 60 days of the GAO report issuance.

We appreciate this opportunity to offer additional perspectives on the GAO draft report. Please contact Patrick D. Nemons, Deputy Director of Audit Relations, at (202) 366-4986 with any questions or if you would like to obtain additional details about these comments.

Sincerely,

Jeff Marootian
Assistant Secretary for Administration

Appendix III: Comments from the General Services Administration



The Administrator

July 27, 2015

The Honorable Gene L. Dodaro
Comptroller General of the United States
U.S. Government Accountability Office
Washington, DC 20548

Dear Mr. Dodaro:

This letter is in response to the U.S. Government Accountability Office (GAO) Draft Report entitled, *Public Transit: Updated Guidance and Expanded Federal Authority Could Facilitate Bus Procurement* (GAO-15-676). In the report, GAO recommends that the Administrator of the U.S. General Services Administration (GSA), in order to provide a more efficient and cost-effective way for transit agencies to procure transit buses while complying with Federal procurement requirements, work in conjunction with the Administrator of the U.S. Federal Transit Administration (FTA), to submit a legislative proposal to Congress which would authorize transit agencies that are recipients of FTA grants to access GSA procurement schedules for the purchase of transit buses.

GSA has reviewed the report in depth and understands that efficiencies can be achieved with streamlined procurements. Currently, transit buses are not procured through GSA Multiple Award Schedules, but rather through a series of separate and distinct procurement contracts. Therefore, a more effective change may involve access to GSA sources of supply generally for the purchase of transit buses rather than procurement schedules specifically. GSA looks forward to coordinating with FTA, along with other appropriate executive branch agencies, to explore possible solutions, including potential legislative changes, in terms of purchasing transit buses.

If you have any additional questions or concerns, please do not hesitate to contact me at (202) 501-0800 or Ms. Lisa Austin, Associate Administrator, Office of Congressional and Intergovernmental Affairs, at (202) 501-0563.

Sincerely,

A handwritten signature in blue ink, appearing to read "Denise T. Roth".

Denise Roth
Acting Administrator

cc: Mr. David Wise, Director, Physical Infrastructure, GAO

U.S. General Services Administration
1800 F Street, NW
Washington, DC 20405
Telephone: (202) 501-0800
Fax: (202) 219-1243

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

David J. Wise, (202) 512-2834, or wised@gao.gov

Staff Acknowledgments

In addition to the contact named above, John W. Shumann (Assistant Director), Melissa Bodeau, Timothy Guinane, Geoffrey Hamilton, Rosa Leung, Erik Shive, Travis Thomson, Elizabeth Wood and William T. Woods made key contributions to this report.

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