



Overcoming Vehicle Supply Chain
Disruptions and Large Cost Increases
Involves Various Strategies Implemented
by Governments



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Overcoming Vehicle Supply Chain Disruptions and Large Cost Increases Involves Various Strategies Implemented by Governments

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Cliff Lippard, Executive Director

June 12, 2025

The Honorable Randy McNally
Lieutenant Governor and Speaker of the Senate

The Honorable Cameron Sexton
Speaker of the House of Representatives

Members of the General Assembly
State Capitol
Nashville, TN 37243

Ladies and Gentlemen:

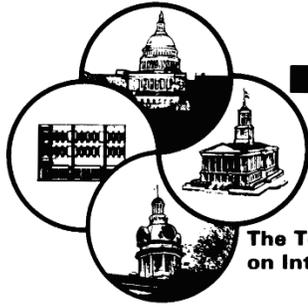
Transmitted herewith is the commission's report in response to a request from commission member Mayor Bob Rial at the January 2024 meeting that the commission study the challenges faced by state and local governments in acquiring vehicles, including fire trucks, salt trucks, and school buses. He asked the commission to assess the availability, timelines for delivery, and the potential effects on public service delivery. The report finds that the supply chain disruptions and rising costs that state and local governments face when procuring rolling stock are largely beyond their control, and they will generally have to make do and adapt using the resources and strategies already available to them. There are several strategies that can be implemented without action by the General Assembly that government agencies can use to mitigate the challenges, including: establish vehicle maintenance and replacement plans, leverage fleet management software and global positioning systems (GPS), consider vehicle repair over replacement, prepare a contingency plan for vehicle leasing or renting, leverage financial incentives for vehicles, use the flexibility built into state purchasing laws, maintain flexibility with vehicle and specification selection, use alternative vehicles, and consolidate vehicle fleets. Further, at the commission's June 2025 meeting, the members voted to send a letter to the Tennessee Department of Economic and Community Development requesting that it solicit, encourage, and, if necessary, incentivize manufacturers of rolling stock—in particular, fire trucks—to locate production facilities in the state.

The commission approved the report on June 12, 2025, and it is hereby submitted for your consideration.

Respectfully yours,

Senator Ken Yager
Chairman

Cliff Lippard
Executive Director



TACIR

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on Intergovernmental Relations



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MEMORANDUM

TO: Commission Members

FROM: Cliff Lippard *Cliff*
Executive Director

DATE: 12 June 2025

SUBJECT: Rolling Stock—Final Report for Approval

The attached commission report is submitted for your approval. It was prepared in response to a request from Mayor Rial at the January 2024 commission meeting for a study of the challenges faced by governments in acquiring vehicles, including fire trucks, salt trucks, and school buses. The commission was asked to assess the availability, delivery timelines, and potential effects on public service delivery. No substantive changes have been made to the report since the draft was presented in January. That report found that the supply chain disruptions and rising costs governments face when procuring rolling stock are largely beyond their control. The commission finds there are several strategies that can be implemented by government agencies without action by the General Assembly to mitigate the challenges. They include

- establish vehicle maintenance and replacement plans,
- leverage fleet management software and global positioning systems,
- consider vehicle repair over replacement,
- prepare a contingency plan for vehicle leasing or renting,
- leverage financial incentives for vehicles,
- use the flexibility built into state purchasing laws,
- maintain flexibility with vehicle and specification selection,
- use alternative vehicles, and
- consolidate vehicle fleets.

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Summary and Findings: Overcoming Vehicle Supply Chain Disruptions and Large Cost Increases Involves Various Strategies Implemented by Governments

Imagine ordering a new ambulance—critical for public safety—then waiting more than three years while encountering rising costs and no clear delivery date. This situation reflects a widespread challenge affecting state and local governments across Tennessee and the nation. Interviews with approximately 30 government officials in Tennessee, representing fire, emergency medical services (EMS), highways, public works, school districts, and purchasing departments, confirm that vehicle procurement delays are extensive and potentially affect the ability to maintain essential public services. Stakeholders report delays of two to five years for specialized vehicles, like fire trucks and ambulances, which complicates vehicle replacement and planning for local governments. Custom features such as color or safety equipment needed for these emergency response vehicles exacerbate the problem, extending delivery times beyond those for basic vehicles like pickup trucks or sedans.

Alongside these delays, vehicle costs have surged since the beginning of the COVID-19 pandemic in 2020. For instance, in 2015, an ambulance cost approximately \$178,000, and in 2023, a similar ambulance was approximately 70% more, according to a representative of the Tennessee Ambulance Service Association, and the City of Gallatin fire chief said fire truck costs nearly doubled since 2021, rising from \$600,000 to \$1.1 million. The cost of other critical vehicles, like school buses and salt trucks, has also considerably increased. Many departments are now forced to keep older vehicles on the road longer, leading to increased maintenance costs and potential service challenges. Recognizing these issues, the Tennessee Advisory Commission on Intergovernmental Relations, in response to a request from commission member and Dickson County Mayor Bob Rial at its January 2024 meeting, directed commission staff to study the challenges faced by state and local governments in acquiring vehicles, including fire trucks, salt trucks, and school buses, and assess the potential effects on public service delivery. The commission finds there are several strategies to improve planning and flexibility that state and local governments can use to mitigate the effects of delays and cost increases for rolling stock. Each of these strategies can be implemented without action by the General Assembly.

Both state and local officials in Tennessee confirm that vehicle procurement delays are extensive, and vehicle costs have surged since the beginning of the COVID-19 pandemic in 2020.

Delays in vehicle delivery and rising costs stem from global supply chain disruptions that are rooted in or were exacerbated by the COVID-19 pandemic when production was shut down—they are national and international issues not specific to Tennessee.

Procurement challenges vary in part because state and local governments buy and use a wide variety of vehicles to provide public services.

State and local governments rely on a mix of light-, medium-, and heavy-duty vehicles to deliver public services. While all types of vehicles can be essential to government operations, the extent and likelihood of procurement challenges vary in part based on vehicle type.

- Light- and medium-duty vehicles, such as sedans, mini-vans, SUVs, police cruisers, and pickup trucks, support administrative functions, maintenance, public safety, and other basic services. These vehicles are generally easier to acquire than heavy-duty vehicles because they align more closely with vehicles that manufacturers produce for the general public, making them somewhat less vulnerable to supply chain issues than their heavier counterparts.
- Heavy-duty vehicles, including fire trucks, ambulances, dump trucks, and school buses, are crucial for emergency response, public safety, infrastructure maintenance, and student transportation. But they often involve complex and customized components, requiring a more intricate manufacturing process and leading to prolonged procurement times.

Procurement challenges are mostly the result of national and international supply chain and federal regulatory issues.

For light-, medium-, and heavy-duty vehicles, the challenges related to acquiring them are not specific to Tennessee—they are national and international issues. In general, the delays in vehicle delivery and rising costs stem from global supply chain disruptions that either have their roots in or were exacerbated by the COVID-19 pandemic when production was shut down, triggering severe bottlenecks in manufacturing. According to national industry organizations such as the American Public Works Association and the National Association of State Procurement Officials, no state has been immune to these obstacles or seems to have solved the problem.

A primary pandemic-related factor causing delays has been the global shortage of microchips, a crucial component in modern vehicles. During the pandemic, many microchip manufacturing facilities shut down. The automotive industry, which relies on advanced microchips for functions like navigation, safety, and fuel efficiency, has been hit especially hard by the resulting shortage. Public service vehicles are no exception—the lack of microchips has delayed production across all vehicle types, affecting

light-duty administrative vehicles as well as highly specialized units like ambulances, for example.

Labor shortages and workforce reductions in vehicle manufacturing plants are two other pandemic-related factors that have affected vehicle production timelines. The automotive manufacturing workforce experienced steady growth from 2016 to 2019, only to sharply decline in 2020 because of the COVID-19 pandemic, according to data from the US Bureau of Economic Analysis. Through a combination of layoffs and retirements, manufacturing facilities were left with a reduced workforce, hindering production—from parts fabrication to final assembly—across nearly every stage of vehicle manufacturing. It has been especially problematic for producing complex, heavy-duty public service vehicles, which require skilled labor for specialized assembly and customization. While employment levels in the automotive manufacturing sector have rebounded since 2021, reaching pre-pandemic levels by 2023, the lingering effects of the workforce reductions during the pandemic continue to strain the supply chain and, as a result, government agencies.

In addition to these pandemic-related factors, stakeholders interviewed and industry literature point to expected changes in environmental emissions regulations as another factor affecting supply chain and cost. Whether these changes will be implemented or rolled back under the current federal administration is unclear. Regardless, the mere possibility that manufacturers might have to comply with stricter standards has affected the industry—manufacturers are already making changes to new model years. These modifications not only add complexity to the manufacturing process and lengthen production times but also require investment in research, development, and new equipment, contributing to higher costs for both manufacturers and their customers. Heavy-duty, specialized vehicles are particularly affected because these vehicles often require specific engineering to maintain both performance and regulatory compliance.

State and local solutions to supply chain disruptions and rising costs are limited, but there are ways to mitigate some of their worst effects.

The supply chain disruptions and rising costs that state and local governments face when procuring rolling stock are largely beyond their control. Short of producing their own vehicles—a private EMS company based in Chattanooga has started buying transit vans and refitting them with necessary features to function as ambulances because it is faster and cheaper than ordering and waiting for chassis—they will generally have to make do and adapt using the resources and strategies already available to them.

Supply chain disruptions and rising costs faced by state and local governments when procuring rolling stock are largely beyond their control, and they generally have to make do and adapt using the resources and strategies already available to them.

Planning and flexibility are approaches that help governments address issues resulting from supply chain disruptions and prepare for uncertainty, optimize resources, and maintain essential services despite external pressures.

Federal grant funding—a method for offsetting costs to state and local governments—is available and can be used for rolling stock, though to a certain extent it increases competition for vehicles in short supply potentially also increasing the prices governments pay for these vehicles. The American Rescue Plan (ARP) Act, passed in response to the pandemic, included funding that could have been spent on public safety vehicles, and local officials in Tennessee reported using this funding for rolling stock. Access to these ARP funds ended in December 2024. Other federal programs are still available, though they may be limited to certain types of vehicles. For example, the US Environmental Protection Agency’s Clean School Bus Program provides funding for electric or propane buses. Several school systems in Tennessee have accessed this funding to add electric buses (Putnam and Union counties) and propane buses (Clarksville-Montgomery County) to their fleets. Congress also passed the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act in 2022 to boost domestic production of microchips—including those used in public service vehicles—to reduce dependency on foreign suppliers and stabilize the supply chain, thereby potentially reducing lead times for vehicle production. With early improvement becoming evident, this represents a strategic federal effort to mitigate one of the core issues contributing to vehicle procurement challenges faced by state and local governments. Whether the current federal administration will continue or roll back these initiatives is uncertain.

At the state and local level, planning and flexibility are key approaches for addressing issues resulting from supply chain disruptions because they enable governments to respond proactively and adaptively to delays and price increases. Planning allows governments to anticipate potential delays, allocate resources efficiently, and develop contingency measures, while flexibility helps them adjust to changing market conditions and explore alternative solutions. Together, these approaches help governments prepare for uncertainty, optimize resources, and maintain essential services despite external pressures. The identified strategies include

- establish vehicle maintenance and replacement plans,
- leverage fleet management software and global positioning systems (GPS),
- consider vehicle repair over replacement,
- prepare a contingency plan for vehicle leasing or renting,
- leverage financial incentives for vehicles,
- use the flexibility built into state purchasing laws,
- maintain flexibility with vehicle and specification selection,
- use alternative vehicles, and
- consolidate vehicle fleets.

Further, at the commission's June 2025 meeting, the members voted to send a letter to the Tennessee Department of Economic and Community Development requesting that it solicit, encourage, and, if necessary, incentivize manufacturers of rolling stock—in particular, fire trucks—to locate production facilities in the state. A copy of the letter can be found in appendix A.

Analysis: Supply Chain Disruptions and Cost Increases are Affecting Procurement of Rolling Stock

National and international supply chain issues have contributed to state and local governments' vehicle procurement challenges. Commission staff interviews with representatives of organizations such as the National Association of State Procurement Officials (NASPO), National Alliance of State and University Fleet Administrators (NASUF), American Public Works Association (APWA), and East Tennessee Purchasing Association (ETPA) confirm the widespread nature of these disruptions.¹ Other states are experiencing similar difficulties, and stakeholders acknowledge that their capacity to influence global supply chain bottlenecks is extremely limited. Global supply chain issues are affecting vehicle delivery times and increasing costs for everyone, not just governments in Tennessee.

Because of the challenges and state and local leaders' concerns, the Tennessee Advisory Commission on Intergovernmental Relations, in response to a request from commission member and Dickson County Mayor Bob Rial at its January 2024 meeting, directed commission staff to study the challenges faced by state and local governments in acquiring vehicles, including fire trucks, salt trucks, and school buses, and assess the potential effects on public service delivery. While no legislative changes are recommended, the commission's report identifies available strategies and resources to help governments navigate these persistent supply chain issues. These strategies focus on enhancing planning and improving fleet management to maintain consistent public service.

State and local governments procure a wide variety of vehicles to deliver public services in Tennessee.

State and local governments in Tennessee rely on a diverse range of vehicles to deliver essential public services, such as emergency response, student transportation, public works, and highway maintenance. These vehicles vary by type and function, encompassing light-duty, medium-duty, and heavy-duty vehicles, each with unique procurement challenges.

Governments' diverse resources, needs, and services lead to variation in vehicle types and sizes that are procured. One common way to describe vehicles is by weight. The US Department of Transportation Federal Highway Administration (FHWA) classifies vehicles into eight categories—

¹ Interviews with Telice Gillom, research and innovation team, procurement content manager, National Association of State Procurement Officials, June 24, 2024; Lauren Myers, executive director, National Alliance of State and University Fleets, October 8, 2024; Regina Santana, utilities director, water department, City of Lebanon, and Nicholas Bradshaw, director of fleet services, City of Knoxville, and American Public Works Association Tennessee Chapter, June 25, 2024; and Lynne Farnham, president, East Tennessee Purchasing Association, August 13, 2024.

Tennessee state and local governments rely on a diverse range of vehicles to deliver essential public services—such as emergency response, student transportation, public works, and highway maintenance—each with unique procurement challenges.

classes—based on weight, grouping them as light-, medium-, or heavy-duty (see table 1).² One manufacturer said they are producing fewer heavy-duty vehicles because they make more money from light-duty vehicles.³ Consequently, light-duty vehicles are often more readily available than medium-, heavy-duty, or specialized vehicles, such as dump trucks, salt trucks, or snowplows. According to representatives of the Dickson County Emergency Medical Service (EMS) and Tennessee Department of General Services, manufacturers prioritize consumer-focused production over government fleet needs.⁴

Table 1. Federal Highway Administration Gross Vehicle Weight Ratings and Categories

| | Class of Vehicle | Gross Vehicle Weight Rating in Pounds | Examples |
|-------------|------------------|---------------------------------------|---|
| Light Duty | 1 | up to 6,000 | passenger cars, light trucks, mini vans, full-size pickups, sport utility vehicles, and full-size vans |
| | 2 | 6,001 to 10,000 | |
| Medium Duty | 3 | 10,001 to 14,000 | delivery trucks, utility vehicles, motor homes, package parcel trucks, ambulances, small dump trucks, landscape vehicles, small flatbed and stake-type trucks, refrigerated and box trucks, and small- and medium-duty buses (school and local transit buses) |
| | 4 | 14,001 to 16,000 | |
| | 5 | 16,001 to 19,500 | |
| | 6 | 19,501 to 26,000 | |
| Heavy Duty | 7 | 26,001 to 33,000 | large delivery trucks, motor coaches, all tractor-trailer combinations, refuse trucks, and construction vehicles |
| | 8 | over 33,000 | |

Source: US Department of Energy 2012; and US Department of Transportation 2009.

Supply chain disruptions have created challenges with procuring vehicles.

The global supply chain issues surrounding vehicle procurement have roots in multiple overlapping events, greatly heightened by the COVID-19 pandemic. Although domestic vehicle production had already been falling, the pandemic brought production to a standstill in 2020, as manufacturing halted, and the world responded to the public health

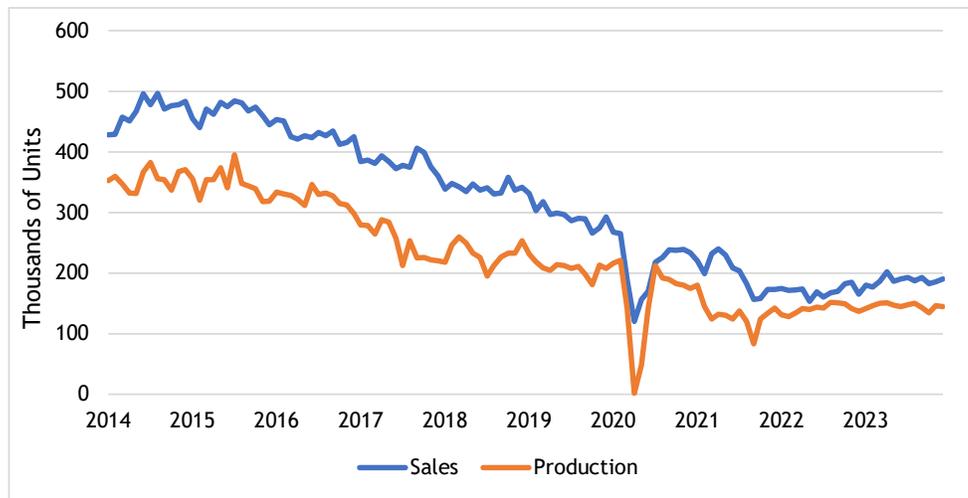
² US Department of Transportation 2009.

³ Jenkins et al. 2010; and testimony at commission meeting by Donny Bear, EMS director, Dickson County, May 30, 2024.

⁴ Testimony at commission meeting by Donny Bear, EMS director, Dickson County, May 30, 2024; and Michael Neely, category specialist, Central Procurement Office, Tennessee Department of General Services, May 30, 2024. See also Stephens 2024a.

emergency.⁵ US auto manufacturers were largely shut down for about two months during the early stages of the pandemic. Most automakers paused production in mid-to-late March 2020. By mid-May 2020, many plants began to reopen with new safety protocols and government restrictions in place, including staggered shifts, which reduced the number of people on site. Reduced production coupled with persistently high demand created a significant backlog that continues to affect government fleets.⁶ For example, many fleet managers, unable to secure new units, have had to rely on older vehicles, resulting in heightened repair and maintenance costs.⁷ Figure 1 highlights the production declines and the corresponding recovery in vehicle manufacturing post-pandemic.

Figure 1. Seasonally Adjusted Domestic Auto Production and Sales, 2014-2023



Source: Bureau of Economic Analysis 2024c; and Bureau of Economic Analysis 2024a.

Another major hindrance to vehicle production has been the microchip shortage that began in the first half of 2020, following the start of the COVID-19 pandemic.⁸ Modern vehicles are essentially advanced computer systems with hundreds of microchips (see figure 2), and without sufficient chips, manufacturers could not meet production demands even after pandemic restrictions eased.⁹ Additionally, over 100 industries need microchips, creating increased competition.¹⁰ The global chip shortage was caused by a surge in demand for electronics during the COVID-19

⁵ Bureau of Economic Analysis 2024c; and Bureau of Economic Analysis 2024a.

⁶ Bureau of Economic Analysis 2024c; and Bureau of Economic Analysis 2024a.

⁷ Email from Steve Emfinger, administrative service manager, Department of General Services, Metropolitan Government Nashville and Davidson County, September 10, 2024.

⁸ Interview with Russell Moles, regional fleet sales manager for East and West Tennessee, Chrysler Dodge Jeep RAM Fiat of Columbia, August 14, 2024.

⁹ Interview with Russell Moles, regional fleet sales manager for East and West Tennessee, Chrysler Dodge Jeep RAM Fiat of Columbia, August 14, 2024; and Buchanan 2022.

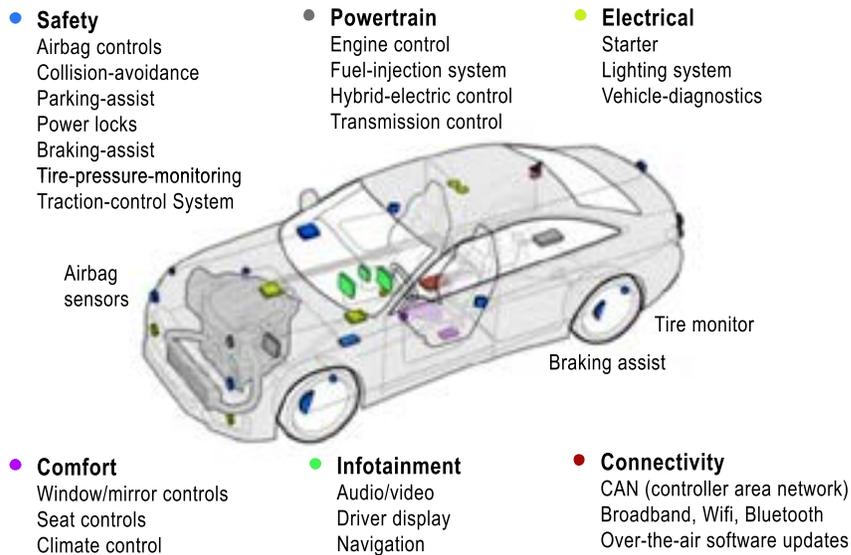
¹⁰ Howley 2021.

pandemic, creating an overall shortage in microchips, coupled with supply chain disruptions and miscalculations by the automotive industry, which cut orders early on, significantly affecting the industry.¹¹ Contributing factors included natural disasters affecting key manufacturers, geopolitical tensions leading to stockpiling of chips, and the long lead times required to scale semiconductor production, all straining an already limited manufacturing capacity.¹²

Figure 2. Microchips in Modern Vehicles

A Computer on Wheels

The average car is packed with 1,400 semiconductors that control everything from airbags to the engine. Modern cars simply cannot run without chips.



Source: Buchanan 2022.

The global chip shortage has improved, with shorter delivery times and increased production, thanks in part to initiatives like the federal Creating Helpful Incentives to Produce Semiconductors, or CHIPS and Science Act.¹³ Signed in 2022, the Act allocated \$52.7 billion to boost US semiconductor manufacturing, strengthen supply chains, and invest in research and development, encouraging major companies to build facilities domestically.¹⁴ While the shortage has eased, challenges such as potential future supply constraints and geopolitical tensions make the Act a crucial step toward long-term resilience in the chip industry.¹⁵ For example, such

¹¹ Mohammad, Elomri, and Kerbache 2022.

¹² Mohammad, Elomri, and Kerbache 2022; and Titcomb 2024.

¹³ The White House 2022a; H.R.4346 - CHIPS and Science Act, 117th Congress (2021-2022); and Miller 2024.

¹⁴ The White House 2022a; H.R.4346 - CHIPS and Science Act, 117th Congress (2021-2022); and Miller 2024.

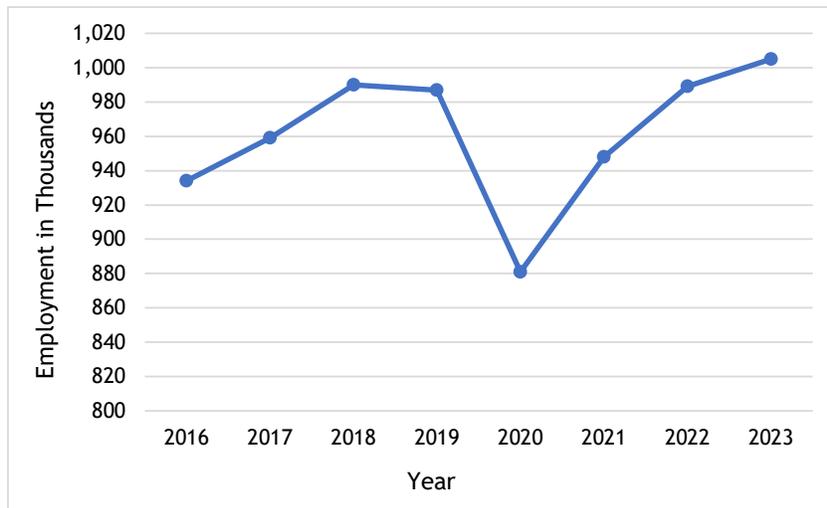
¹⁵ Miller 2024.

resilience has become increasingly important following Hurricane Helene, a natural disaster that caused a quartz mine that is critical to microchip production to temporarily close.¹⁶

Labor shortages and workforce reductions in vehicle manufacturing plants during the pandemic have affected production timelines. According to the US Bureau of Economic Analysis, the automotive manufacturing workforce experienced steady growth between 2016 and 2019, but sharply declined in 2020 because of the COVID-19 pandemic.¹⁷ This decline resulted from layoffs and retirements, leaving manufacturing facilities understaffed and hindering production at every stage—from parts fabrication to final assembly.¹⁸ The issue has been especially pronounced for producing complex heavy-duty public service vehicles, which rely on skilled labor for specialized assembly and customization. While employment levels in the automotive manufacturing sector rebounded to pre-pandemic levels by 2023, the lingering effects of earlier workforce reductions continued to strain supply chains, affecting government agencies and other vehicle-dependent sectors (see figure 3).¹⁹ Despite the slow workforce recovery, the 2023 rebound may help explain the gradual improvement in light-duty vehicle procurement.

Labor shortages and workforce reductions in vehicle manufacturing plants have affected production timelines.

Figure 3. Automotive Manufacturing Employment, 2016-2023



Source: Bureau of Economic Analysis 2024b.

¹⁶ Titcomb 2024.

¹⁷ Bureau of Economic Analysis 2024b.

¹⁸ IndustryNet 2024.

¹⁹ Bureau of Economic Analysis 2024b.

An influx of federal funding related to the pandemic that could be used for procuring essential vehicles, along with possible federal regulations, led to increased demand for and cost of vehicles.

Federal funding and regulations can also contribute to the cost of vehicles.

Increased demand also plays a role. The American Rescue Plan (ARP)—passed in 2021—allocated billions of dollars to state and local governments to address pandemic-related needs, creating an influx of funds that could be used for procuring essential vehicles such as ambulances, fire trucks, and school buses.²⁰ While this funding was critical for addressing immediate operational gaps, it also intensified competition for vehicles, particularly within the emergency services sectors where production is backlogged.²¹ This surge in procurement activity placed additional pressure on manufacturers already constrained by supply chain disruptions and contributed to longer lead times and increased costs.

Looking forward, the US Environmental Protection Agency’s emissions regulations that are scheduled to apply starting with vehicle model year 2027 may increase vehicle costs, particularly among class 8 vehicles (heavy-duty trucks exceeding 33,000 pounds), because of more stringent production requirements, presenting additional budgetary challenges for governments.²² One stakeholder highlighted anticipated changes in environmental emissions regulations as a key factor affecting supply chains and costs.²³ Although it remains uncertain whether stricter standards will be implemented or rolled back under the current federal administration, the possibility of compliance has already influenced manufacturers. To meet potential requirements, manufacturers must make changes to their vehicles.²⁴ These adjustments not only add complexity to production and extend timelines but also demand significant investment in research, development, and equipment, driving up costs for manufacturers and consumers alike. Regulations aimed at reducing emissions may drive up the cost of producing class 8 vehicles, adding financial strain to government budgets.²⁵ Heavy-duty and specialized vehicles are especially affected, as they often require specific engineering to maintain both performance and regulatory compliance, further compounding these financial pressures.

²⁰ The White House 2022b; US Environmental Protection Agency 2024c; and Tennessee Comptroller of the Treasury “American Rescue Plan Act Guidance for Local Governments.”

²¹ Carey 2023; and interview with Matt Gay, assistant chief, Madison County Fire Department, June 21, 2024.

²² Cole 2024; and US Environmental Protection Agency 2024b.

²³ Interview with Michael Neely, category specialist, Central Procurement Office, Tennessee Department of General Services, October 3, 2024.

²⁴ Ulitskaya 2023; and US Environmental Protection Agency 2023.

²⁵ Cole 2024.

Delivery delays and cost increases are the two main vehicle procurement issues that Tennessee state and local government representatives discussed.

Delivery delays and rising costs are the primary challenges related to vehicle procurement reported by Tennessee state and local governments, potentially affecting essential services such as emergency response and student transportation. Stakeholders report long delays for specialized vehicles like ambulances and fire trucks, with timelines extending several years and costs exceeding budget projections. While light-duty vehicles are becoming more accessible—a trend likely to continue—there are still delays in procurement. Comparatively, some medium- and heavy-duty vehicles continue to pose procurement and maintenance challenges for state and local governments and require specialized equipment and servicing. Lead times for fire engines now range from 36 to 42 months for delivery, with aerial ladder trucks requiring up to 57 months, according to a University of Tennessee Municipal Technical Advisory Service (MTAS) fire management consultant.²⁶ For example, Dickson County EMS is experiencing a three-year delay for a new ambulance.²⁷

These delays compel local governments to rely on aging fleets, increasing maintenance expenses and creating reliability challenges. For instance, the Metro Nashville Department of General Services reported that its maintenance costs more than doubled from \$476,767 in fiscal year 2020-21 to \$1.1 million in fiscal year 2021-22, and repair costs increased from \$10.8 million to \$13.4 million during the same period because of challenges procuring new vehicles.²⁸ Such financial strain forces governments to allocate a larger share of their budgets to repairs, limiting funds available for other critical needs.

Escalating costs further compound these challenges, stretching budgets and forcing difficult trade-offs. For example, the Clarksville-Montgomery County School System reports a 30% increase in school bus prices over the past year, rising from \$90,000 to \$135,000 per unit,²⁹ and the City of Gallatin has seen fire truck costs nearly double since 2021, rising from \$600,000 to \$1.1 million.³⁰ Similarly, the Tennessee Department of Transportation (TDOT) noted a 74% increase in heavy truck costs over the past six years.³¹

²⁶ Interview with Donald Pannell, fire management consultant, and David Moore, police management consultant, University of Tennessee Municipal Technical Advisory Service, May 7, 2024.

²⁷ Interview with Donny Bear, director, Dickson County Emergency Medical Service, April 25, 2024.

²⁸ Email from Steve Emfinger, administrative service manager, Department of General Services, Metropolitan Government Nashville and Davidson County, September 10, 2024.

²⁹ Interview with Elizabeth Kong, student transportation manager, and Ricky Phillips, vehicle maintenance manager, Clarksville-Montgomery County School System, August 21, 2024.

³⁰ Interview with Jeff Beaman, fire chief, City of Gallatin, May 14, 2024.

³¹ Email from Justin Underwood, director, Central Services Division, Tennessee Department of Transportation, September 10, 2024.

Vehicle delivery delays compel local governments to rely on aging fleets, and escalating costs further compound challenges, stretching budgets and forcing difficult trade-offs.

These price surges are not limited to vehicle purchases—parts and labor costs have risen by 45%, further complicating fleet management decisions.³² West Tennessee Healthcare, which contracts with Benton, Chester, Dyer, Madison, and McNairy Counties to provide ambulance service, reported that ambulance costs had increased from \$178,000 to \$288,000 since the pandemic.³³ These persistent delays and rising costs underscore the need for adaptive strategies to sustain essential services amid an increasingly constrained procurement environment. Appendix B describes a few examples of procurement delays and cost increases shared by Tennessee state and local government representatives. Figures 4, 5, and 6 discuss standards for ambulances, fire protection vehicles, and school buses in Tennessee, respectively, that also need to be considered.

Figure 4. Ambulances are Subject to Their Own Safety Standards

The US General Services Administration develops standards, commonly referred to as the “Triple K” standards, that are federal specifications to regulate the design, construction, and performance of ambulances. These standards ensure the safety, reliability, and functionality of ambulances used in EMS by providing detailed requirements for their manufacture and operation. Thirty states including Tennessee have adopted these standards. Tennessee adopts them under the authority of Tennessee Code Annotated, Section 68-140-307, and in rules promulgated by the Tennessee Department of Health requiring ambulances to be inspected annually; when they reach 200,000 miles, inspections must occur every 30,000 miles.

Source: US General Services Administration 2007; Horton 2024; Tennessee Department of Health, Division of Health Licensure and Regulation, Office of Emergency Medical Services, Rule 1200-12-01-.02 Emergency Medical Services Equipment and Supplies Specifications; and interview with Joyce Noles, executive director, Medical Center EMS, president, Tennessee Ambulance Service Association, June 17, 2024.

³² Ibid.

³³ Email from Joyce Noles, executive director, Medical Center EMS, president, Tennessee Ambulance Service Association, December 4, 2024.

Figure 5. Standards are Recommended for Fire Protection Vehicles

Fire protection vehicles that meet rigorous design, performance, and operating standards protect both first responders and the public. The National Fire Protection Association (NFPA), a global nonprofit organization that is widely regarded as a leader in fire safety and protection, develops standards for fire apparatus—fire protection vehicles like fire engines and ladder trucks. NFPA’s 1901 standards regulate how fire apparatus are manufactured. NFPA also develops recommended standards—NFPA 1910—that states can adopt that provide guidelines for inspection, maintenance, and replacement timelines, recommending a 15-year frontline use limit and up to 25 years of total service. While Tennessee has not adopted these standards as state law, many local fire departments voluntarily follow them, according to a consultant with the University of Tennessee Municipal Technical Advisory Service (MTAS).

However, the national Occupational Safety and Health Administration (OSHA) is currently in the process of updating its “Fire Brigades Standard” to enhance safety protocols for emergency responders, which could make compliance with the NFPA 1910 standard mandatory. This would increase regulatory requirements for fire departments. The final rule’s publication date will depend on OSHA’s review of all comments and testimony, and once published, the rule is expected to become effective 60 days after its publication. Tennessee’s state program—TOSHA—must be at least as effective as the federal program, and it may take up to two years to implement new standards at the state level.

Source: National Fire Protection Association “About Us”; National Fire Protection Association 2016; National Fire Protection Association 2024; US Department of Labor 2024; Varone 2024; and interview with Donald Pannell, fire management consultant, and David Moore, police management consultant, University of Tennessee Municipal Technical Advisory Service, May 7, 2024.

Figure 6. School Buses Must Comply with State and Federal Standards to Provide for Student Safety

States can adopt the national recommendations called National School Transportation Specifications and Procedures (NSTSP) developed by the National Congress on School Transportation every five years, and Tennessee closely follows NSTSP. The state requires school buses that have been in operation for 15 years or less to be inspected annually, and after 15 years, the Commissioner of Safety must approve their operation each year. All school buses must be retired when they reach 200,000 miles or 18 years of service.

Source: National Congress on School Transportation “Information on the 2025 NCST and Submitting Change Requests”; Rules of the State Board of Education, Chapter 0520-01-05 Pupil Transportation; and interviews with Chad Duncan, state specifications manager, IC Bus, Navistar, July 2, 2024; and staff with Tennessee Department of Safety and Homeland Security, July 10, 2024.

Tennessee governments already follow many practices used across the nation to facilitate vehicle procurement.

The state central procurement office is making some changes to address procurement and delivery issues. For example, in early 2025, the office put new contracts into place with terms and conditions to allow state and local government agencies to adjust the prices on purchase orders for class 6, 7, and 8 vehicles, which include some medium- and all heavy-duty vehicles.³⁴ This is allowed only when manufacturers increase prices. Previously, government agencies could not adjust prices on purchase orders but had to start the process again with a new purchase order, which took more time. The change will help agencies act quickly when manufacturers increase prices and not miss opportunities to buy vehicles—if government agencies take too long to adjust their purchase orders, dealers are likely to sell to someone else at the higher price. The central procurement office also recently added a contract for a generic heavy cab chassis that can be used to customize all class 6, 7, and 8 trucks with any bed configuration from a flatbed to a dump truck or anything in between using the option clause in the contract. Several years ago, it began allowing up to three dealers per brand for each contract to create competition and provide more purchasing options.

State and local governments can maintain fleet readiness and consistent operations amid rising costs, production delays, and supply chain disruptions by adopting strategies focused on planning and flexibility. Government agencies are employing innovative strategies such as long-term vehicle maintenance and replacement plans, leveraging technology like fleet management software, and adopting contingency options like leasing or renting vehicles. Flexibility is also essential, such as focusing on availability over brand loyalty, exploring alternative vehicle types, and consolidating fleets to best use resources. Figure 7 provides an example of a creative solution implemented by a private company in Tennessee.

Figure 7. Innovation in Ambulance Design

In the face of supply chain challenges, some organizations have turned to unconventional solutions to meet operational demands. For example, Puckett EMS, a private EMS company based in Chattanooga (Priority is the parent company), began buying and remodeling transit vans into ambulances to address procurement delays and rising costs in the interfacility transport—patient transport between medical facilities—and 911 markets. This shift, driven by constraints in chassis availability and the lack of businesses offering remount services for traditional box ambulances, allowed the company to expand its fleet more cost-effectively while still meeting safety standards.

Source: Interview with Joe Dunn, vice president of operations, Puckett EMS, November 20, 2024.

³⁴ Interview with Michael Neely, category specialist, Central Procurement Office, and Bob Williams, assistant commissioner, Vehicle and Asset Management, Tennessee Department of General Services, August 6, 2024; and email received from Michael Neely, category specialist, Central Procurement Office, Tennessee Department of General Services, March 10, 2025.

Various grant programs such as the EPA Clean School Bus Program, American Rescue Plan Act (ARP), and Community Development Block Grant (CDBG),³⁵ are helping agencies offset costs and invest in electric and low-emission vehicles. Whether the current federal administration will continue or roll back these initiatives is uncertain. Appendix C describes several funding opportunities for government vehicles. By combining detailed planning with flexible approaches, governments at all levels are better equipped to navigate procurement challenges, reduce costs, and operate their fleets to deliver services despite external pressures.

Establish Vehicle Maintenance and Replacement Plans

Planning for vehicle maintenance and replacement is essential for addressing the challenges posed by extended procurement lead times. A regular maintenance schedule helps extend the life of vehicles, and technology can be used to plan and stay on schedule. For example, Williamson County's vehicles have global positioning systems (GPS) to track what is happening with each vehicle and when they need maintenance.³⁶

Custom-built vehicles complicate replacement timelines because of the specialized designs required to meet unique operational needs.³⁷ For instance, fire trucks often involve custom chassis and specialized equipment that extend delivery times significantly compared to stock vehicles. Madison County's Fire Department exemplifies this planning approach by ordering fire trucks before they need them—up to four years in advance—to maintain an operational fleet, a timeline necessitated by long delivery times for specialized vehicles such as rescue and ladder trucks.³⁸ These long wait times make it nearly impossible for agencies to adhere to traditional annual budgeting cycles without a forward-looking plan.

Madison County's efforts align with recommendations from the National Association of State Procurement Officials (NASPO)³⁹—a national industry organization—and the industry news publication *Fire Apparatus and Emergency Equipment*, which emphasizes creating systematic maintenance and replacement plans to maintain fleet readiness and mitigate risks.⁴⁰ Other states, like Iowa, have similarly adopted phased

Planning for vehicle maintenance and replacement is a strategy for addressing the challenges posed by extended procurement lead times.

³⁵ US Environmental Protection Agency 2024a; Tennessee Comptroller of the Treasury "American Rescue Plan Act Guidance for Local Governments"; and Tennessee Department of Economic and Community Development "Community Development Block Grant."

³⁶ Interview with Rogers Anderson, mayor, Williamson County, November 27, 2024.

³⁷ Interviews with Michael Neely, category specialist, Central Procurement Office, Tennessee Department of General Services, April 23, 2024; and Brandon Vanatta, assets and fuel manager, and Steve Emfinger, administrative service manager, Department of General Services, Metropolitan Government Nashville and Davidson County, June 26, 2024.

³⁸ Interview with Matt Gay, assistant chief, Madison County Fire Department, June 21, 2024.

³⁹ Interview with Telice Gillom, research and innovation team, procurement content manager, National Association of State Procurement Officials, June 24, 2024.

⁴⁰ Brown 2013.

Governments can use fleet management software to manage their vehicles and enable data-driven decisions that improve efficiency and reduce costs.

replacement strategies, replacing vehicles before repair costs escalate or the vehicles become unreliable.⁴¹ Iowa’s phased approach to snowplow replacement saved \$300,000 in two years by avoiding high repair costs and keeping their fleet functional during critical winter months.⁴² Using strategies such as maintenance schedules and early ordering helps agencies more effectively navigate both cost increases and procurement delays.

Leverage Fleet Management Software and GPS

Fleet management software—commonly called telematics or GPS—is transforming how governments manage their vehicles, enabling data-driven decisions that improve efficiency and reduce costs.⁴³ For example, the City of Franklin uses software to monitor vehicle conditions, track maintenance schedules, and predict replacement needs,⁴⁴ and the City of Gallatin recently implemented GPS tracking across its fleet, reducing unnecessary wear and tear and improving route efficiency.⁴⁵ These tools allow agencies to identify underutilized assets, streamline maintenance, and improve fuel efficiency, ensuring their fleets remain operational despite procurement challenges. Knox County uses software to address broader fleet management concerns.⁴⁶ By establishing parameters for vehicle replacement and maintenance schedules, Knox County has reduced costs and improved overall fleet readiness.

Fleet management systems, such as those used in Fort Wayne, Indiana, provide even greater insights into fleet operations.⁴⁷ By tracking metrics like fuel consumption, idling, and driving behavior, agencies can pinpoint inefficiencies and implement strategies to extend vehicle lifespans. These technological advancements align with recommendations from fleet experts and NASPO for modernizing fleet management through telematics and software tools.⁴⁸ Agencies not yet leveraging these systems can consider their potential to enhance efficiency and reduce costs. For example, Metro Nashville operates a fleet of around 4,000 vehicles, ranging from light-duty cars to specialized heavy-duty vehicles.⁴⁹ To manage this extensive fleet, the city invests in advanced fleet management software to track vehicle replacement cycles, schedule maintenance, and monitor overall fleet performance. This type of technology allows for efficient

⁴¹ Mika 2018.

⁴² Ibid.

⁴³ Bartole 2023.

⁴⁴ Interview with Brian Wilcox, purchasing manager, and Kim Hannon, fleet manager, City of Franklin, August 12, 2024.

⁴⁵ Interview with Paige Brown, mayor, City of Gallatin, October 31, 2024.

⁴⁶ Email from Matt Myers, director of procurement, Knox County, August 6, 2024.

⁴⁷ Brauer 2023.

⁴⁸ Stephens 2024b; and Mike Albert Fleet Solutions “Seven Ways to Reduce Cost with Better Fleet Data.”

⁴⁹ Interview with Brandon Vanatta, assets and fuel manager, and Steve Emfinger, administrative service manager, Metropolitan Nashville Department of General Services, June 26, 2024.

fleet management, but it can come with high costs and might not make economic sense for smaller fleets.⁵⁰

Consider Vehicle Repair Over Replacement

Given the rising costs and delays associated with new vehicle procurement, many government agencies—including Metro Nashville Department of General Services and TDOT—are prioritizing repairs to extend the lifespan of existing fleets.⁵¹ While repair-focused strategies help mitigate immediate fleet shortages, they require careful evaluation to balance repair costs against the long-term sustainability of aging vehicles. Heavy-duty vehicles pose additional challenges because of their complex maintenance needs. Despite these challenges, prioritizing repairs remains a practical short-term solution for governments facing delayed procurement timelines. NASPO highlights integrating data from fleet management software to inform repair-versus-replace decisions and more effectively allocate resources.⁵² This approach helps agencies maximize the utility of their existing vehicles while planning for future replacements by tracking vehicle use and maintenance. A director at TDOT explained that their data-driven approach allowed for several factors to be input and analyzed to determine whether a vehicle should be replaced or repaired.⁵³

Prepare a Contingency Plan for Vehicle Leasing or Renting

Leasing and renting vehicles can help address fleet shortages and delays by temporarily filling gaps. NASPO recommends having a backup leasing plan.⁵⁴ Leasing also offers flexibility in managing procurement delays for medium- and heavy-duty vehicles. Tennessee’s central procurement office provides statewide leasing and renting contracts that local governments can use to access vehicles under pre-negotiated terms. TDOT rents vehicles and is considering leasing vehicles to fill gaps caused by procurement delays, allowing them to maintain essential services while awaiting new vehicle deliveries.⁵⁵ Knox County has recently implemented a leasing program and anticipates seeing cost savings.⁵⁶ However, agencies need to carefully consider the costs and benefits. Rutherford County, for example, has found that leasing costs as much as just purchasing a new vehicle.⁵⁷ The

The National Association of State Procurement Officials recommends having a backup leasing plan to help address fleet shortages and delays by temporarily filling gaps.

⁵⁰ Interview with Kathy Wellik, senior director of client success, Agile Fleet, October 30, 2024.

⁵¹ Interviews with Brandon Vanatta, assets and fuel manager, and Steve Emfinger, administrative service manager, Metropolitan Nashville Department of General Services, June 26, 2024; and Justin Underwood, director, Central Services Division, Tennessee Department of Transportation, July 16, 2024; and email from Nicholas Bradshaw, director of fleet services, City of Knoxville, June 27, 2024.

⁵² Stephens 2024b. See also Hajibabai et al. 2023; and Morrison et al. 2023.

⁵³ Interview with Justin Underwood, director, Central Services Division, Tennessee Department of Transportation, July 16, 2024.

⁵⁴ Interview with Telice Gillom, research and innovation team, procurement content manager, National Association of State Procurement Officials, June 24, 2024.

⁵⁵ Ibid.

⁵⁶ Interview with Matt Myers, director of procurement, Knox County, August 6, 2024.

⁵⁷ Interview with Michael Smith, finance director, Rutherford County, November 14, 2024.

Tennessee state and local governments can benefit from a variety of funding opportunities that can ease the burden of upfront costs, encourage fleet upgrades, and support vehicle procurement.

county finance director said that during the first year there were savings, but by years two and three, the interest expenses had grown significantly, and leasing no longer made economic sense.

Other states also have vehicle leasing programs. For example, Washington state's lease-to-own program shows a cost-effective way to finance equipment purchases like vehicles, helping agencies manage delays without compromising service delivery.⁵⁸ The Washington State Lease/Purchase COP Program streamlines vehicle procurement by providing agencies with low-interest financing, leveraging the state's strong credit rating to reduce costs. It simplifies the process with pooled resources, standardized documentation, and administrative support from the Office of the State Treasurer. These programs demonstrate the potential for leasing and renting to bridge procurement gaps while reducing maintenance costs and ensuring continuous service.

Leverage Financial Incentives for Vehicles

State and local governments can benefit from a variety of funding opportunities that support vehicle procurement and production. Programs like the EPA Clean School Bus Program, the Volkswagen Clean Air Act Civil Settlement, and federal initiatives, such as the Inflation Reduction Act, provide financial resources for modernizing fleets and acquiring electric, hybrid, and alternative fuel vehicles and associated infrastructure like charging stations.⁵⁹ For instance, the City of Gallatin fire chief said the fire department used ARP funds to purchase new fire trucks, taking advantage of a federal funding process, while Knoxville's Utility Board used rebates to expand its electric fleet.⁶⁰

These financial incentives, including grants, rebates, and tax credits, can ease the burden of upfront costs and encourage fleet upgrades. However, administrative challenges such as eligibility criteria, application preparation, and compliance with reporting requirements can deter participation. For example, Wilson County Schools opted not to apply for certain grants because of concerns over administrative demands like paperwork and reporting, and one school system hired someone to manage grants.⁶¹ Successfully navigating these challenges requires strong project management, effective communication with funding agencies, and systems to track expenditures and performance metrics. Appendix

⁵⁸ Pellicciotti 2024.

⁵⁹ Tennessee Department of Environment and Conservation "Energy in Transportation"; and The White House 2024.

⁶⁰ Knoxville Utility Board "Green Fleet"; Tennessee Clean Fuels "Funding to Replace Older Diesel Vehicles with Cleaner Fuel and Vehicle Options"; and interview with Jeff Beaman, fire chief, City of Gallatin, May 14, 2024.

⁶¹ Interview with Kenny Hardaway, transportation supervisor, Wilson County Schools, June 13, 2024.

C outlines several funding opportunities for purchasing government vehicles.

Use the Flexibility Built into State Purchasing Laws

Tennessee’s existing purchasing laws provide state and local governments with the flexibility to navigate challenges like delivery delays and rising costs while ensuring accountability and transparency in spending public funds. These laws emphasize control, price, openness, and accountability, as noted by the University of Tennessee County Technical Assistance Service. While Tennessee’s purchasing framework is complex, stakeholders agree it is not inherently causing problems for vehicle procurement. Instead, it provides tools for addressing challenges within the existing legal structure.

To make purchases that exceed their bid limit, including vehicles, without undermining fiscal responsibility, state and local governments can use options like competitive bidding, statewide contracts, and purchasing cooperatives.⁶² These mechanisms are available to governments to help them secure competitive pricing and effectively manage taxpayer dollars and procurement processes.⁶³ Tennessee law sets bid thresholds—minimum dollar amounts—for purchases requiring one of these processes. The threshold amount varies depending on the type of government and the specific laws, charters, or policies under which the local government operates. Local governments that have adopted a centralized government and have a full-time purchasing agent, as defined by law, can increase their bid threshold amount to \$50,000, and those that are not centralized can increase it to \$25,000.⁶⁴ Appendix D shows the bid threshold amounts for the specific county purchasing laws, and appendix E provides additional information about purchasing laws in Tennessee.

In addition to having authority under state law to conduct their own competitive bidding,⁶⁵ state and local government agencies can use statewide contracts. The state central procurement office and the state building commission facilitate statewide contracts and price agreements that various entities, including state government agencies, local governments, higher education institutions, and qualifying nonprofits, can use for their purchases.⁶⁶ These contracts leverage the state’s purchasing power to offer favorable pricing and terms, promoting efficient purchasing practices and helping entities access competitively priced goods and services. Examples of vehicle-related statewide contracts include contracts for vehicles,

Tennessee’s purchasing laws emphasize control, price, openness, and accountability while providing state and local governments with flexibility to navigate challenges like delivery delays and rising costs.

⁶² Interview with Bryan Burklin, assistant director, Division of Local Government Audit, Comptroller of the Treasury, July 9, 2024.

⁶³ Ibid.

⁶⁴ Tennessee Code Annotated, Section 12-3-1212; and University of Tennessee County Technical Assistance Service “Sealed Competitive Bids and Public Advertising Threshold.”

⁶⁵ Tennessee Code Annotated, Sections 5-14-108; 5-21-119; and 6-56-301 et seq.

⁶⁶ Tennessee Code Annotated, Sections 12-3-102; 12-3-1201; and 33-2-1001; and Rules of the Department of General Services Central Procurement Office Chapter 0690-03-01-.01.

Tennessee state and local governments are allowed to make cooperative purchases through another public or private entity's contract, reducing the need for individual competitive bids and increasing purchasing power.

vehicle parts, renting and leasing, fleet maintenance and repairs, tires, and gasoline and diesel fuel.⁶⁷

Additionally, cooperative purchasing allows state and local governments and higher education entities to make purchases through another public or private entity's contract, including other local governments, other states, or the federal government.⁶⁸ Purchasing through a statewide contract or cooperative are both examples of "piggy-backing," a term commonly used when one entity leverages another's contract for procurement.⁶⁹ These contracts with other entities have already been negotiated, reducing the need for individual competitive bids and increasing purchasing power, similar to using a statewide contract. The Tennessee Department of General Services lists a few purchasing cooperatives on their website,⁷⁰ and there are many other cooperative purchasing programs in the US and Canada.⁷¹ Cooperatives are primarily used for special purpose vehicles that are not available on statewide contracts.⁷² Interlocal agreements between government entities are a specific type of cooperative purchasing arrangement in which public agencies can cooperate and enter into agreements with each other to better meet needs and provide services in their communities.⁷³

There are restrictions and exceptions that affect vehicle purchases. Although state law prohibits use of cooperative purchasing agreements for light-duty vehicles, it allows them to be used for special purpose vehicles including, but not limited to, school buses, buses with capacity exceeding 22 passengers used to provide public transportation, garbage trucks, fire trucks, or ambulances.⁷⁴ This restriction does not apply to statewide contracts. There are a few other options that can be used for purchasing vehicles that do not require competitive bidding processes while providing cost-effective alternatives and flexibility when urgent or unique needs arise. They include second-hand purchases,⁷⁵ reverse public auctions,⁷⁶ surplus purchases,⁷⁷ emergency purchases,⁷⁸ and sole source procurement.⁷⁹

⁶⁷ Tennessee Department of General Services "Statewide Contract Instruction (SWC)."

⁶⁸ Tennessee Code Annotated, Sections 12-3-512; 12-3-1201; 12-3-1203; and 12-3-1205. See also University of Tennessee County Technical Assistance Service "Cooperative Purchasing."

⁶⁹ The Institute for Public Procurement "Piggyback (Piggyback Cooperatives)."

⁷⁰ Tennessee Department of General Services "COOP Contract Page."

⁷¹ The Institute for Public Procurement "Cooperative Procurement and Cooperative Purchasing Programs."

⁷² Interview with Michael Neely, category specialist, Central Procurement Office, and Bob Williams, assistant commissioner, Vehicle and Asset Management, Tennessee Department of General Services, August 6, 2024.

⁷³ Tennessee Code Annotated, Sections 12-9-101 et seq.

⁷⁴ Tennessee Code Annotated, Section 12-3-1208.

⁷⁵ Tennessee Code Annotated, Section 12-3-1202.

⁷⁶ Tennessee Code Annotated, Section 12-3-1208.

⁷⁷ Tennessee Code Annotated, Section 5-1-125.

⁷⁸ Tennessee Code Annotated, Section 5-21-119.

⁷⁹ Tennessee Code Annotated, Sections 12-3-504; 5-14-204; and 6-56-304.

Maintain Flexibility with Vehicle and Specification Selection

Agencies are increasingly prioritizing availability and service over brand or model loyalty to expedite procurement timelines. For instance, multiple departments have shifted from one brand of police cruisers to another, adapting to current supply chain constraints.⁸⁰ This pragmatic approach ensures that operational needs are met promptly, reducing delays caused by waiting for specific models or features.

Flexibility in vehicle specifications also extends to things like vehicle color. This strategy preserves specialized equipment for critical situations while decreasing costs. For example, flexibility with vehicle colors can help speed up procurement. Roane County's purchasing agent said that the color of police cruisers they wanted required a set number be ordered before a certain manufacturer would produce them.⁸¹ By focusing on functionality rather than specific brands or specifications, governments can adapt their procurement practices to meet immediate service demands.

Use Alternative Vehicles

Alternative vehicles offer a practical solution for addressing fleet shortages and rising costs. Smaller vehicles like mini-pumpers and rapid-response, or fast-attack, units are being deployed for some emergency calls, reducing dependency on more expensive fire engines.⁸² Mini-pumpers are smaller fire trucks that are more navigable but have less capacity in their water tanks. Similarly, rapid-response units are trucks equipped with medical equipment that can provide care on site. A large portion of calls are for medical reasons and do not require a fire engine on scene, and alternative purpose vehicles and mini-pumpers are less expensive per mile to operate. For example, the City of Gallatin has deployed smaller rapid-response vehicles for non-fire emergencies, reducing wear and tear on larger fire engines.⁸³ Dickson County purchased seven ¾-ton pickup trucks to use as fast-attack or rapid-response vehicles to respond to non-fire calls because they are cheaper to buy and operate.⁸⁴ By integrating these options into their fleets, agencies can enhance efficiency, save money, and address procurement challenges.

Alternative vehicles such as "mini-pumpers" and "rapid-response" vehicles can be deployed for some emergency calls, reducing dependency on more expensive fire engines or ambulances.

⁸⁰ Interviews with Brian Wilcox, purchasing manager, and Kim Hammon, fleet manager, City of Franklin, August 12, 2024; and Debbie Dillion, director of purchasing, Johnson City, September 17, 2024.

⁸¹ Interview with Lynn Farnham, purchasing agent, Roane County, August 13, 2024.

⁸² Interviews with Marc Alley, emergency management and fire consultant, University of Tennessee County Technical Assistance Service, May 14, 2024; Donald Pannell, fire management consultant, and David Moore, police management consultant, University of Tennessee Municipal Technical Advisory Service, May 7, 2024; and Paige Brown, mayor, City of Gallatin, October 31, 2024.

⁸³ Interview with Paige Brown, mayor, City of Gallatin, October 31, 2024.

⁸⁴ Interview with Bob Rial, mayor, Dickson County, November 20, 2024.

Tennessee’s state vehicle fleet is managed by the Departments of General Services and Transportation and serves as an example of a consolidated fleet that reduces redundancy, increases efficiency, and saves money.

Consolidate Vehicle Fleets

Fleet consolidation is the process of reducing redundancies in a fleet and is a common way to increase efficiency and save money. It is also recommended by NASPO.⁸⁵ Tennessee’s state government vehicle fleet, managed by the Department of General Services and TDOT, serves as an example of centralized management as the two agencies manage fleets for all of state government.⁸⁶ This approach allows for improved efficiency by working to meet the needs of the state while also controlling fleet size. Other states, like Arizona, have achieved significant savings by consolidating fleets, such as sedans, minivans, half-ton pickups, and SUVs, saving over \$6 million since 2015 through initiatives like eliminating underused vehicles.⁸⁷ Similarly, by merging the fleet operations of police, fire, public works, and utilities, the city of Springfield, Illinois, successfully reduced redundancy and improved maintenance efficiency. These efforts demonstrate the potential for consolidation to enhance resource management and reduce costs, making it a valuable strategy for Tennessee agencies to consider.

⁸⁵ Stephens 2024b.

⁸⁶ Interviews with Justin Underwood, director, Central Services Division, Tennessee Department of Transportation, July 16, 2024; and Michael Neely, category specialist, Central Procurement Office, Tennessee Department of General Services, and Bob Williams, assistant commissioner, Vehicle and Asset Management, Tennessee Department of General Services, August 6, 2024.

⁸⁷ Halikowski 2021.

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Various Strategies Implemented by Governments

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Various Strategies Implemented by Governments

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Appendix A: Letter from the Commission to the Tennessee Department of Economic and Community Development



226 Anne Dallas Dudley Blvd, Suite 508
Nashville, Tennessee 37243-0760
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June 18, 2025

Stuart C. McWhorter, Commissioner
Department of Economic and Community Development
312 Rosa L. Parks Ave.
Nashville, TN 37243

Dear Commissioner McWhorter:

The Tennessee Advisory Commission on Intergovernmental Relations requests that the department solicit, encourage, and, if necessary, incentivize manufacturers of rolling stock—in particular, fire trucks—to locate production facilities in the state.

The commission recently completed its study of the challenges faced by state and local governments in acquiring vehicles, including fire trucks, salt trucks, and school buses and the potential effect on public service delivery. Both state and local officials confirm that vehicle procurement delays are extensive, and vehicle costs have surged since the beginning of the COVID-19 pandemic in 2020—the challenges are not unique to Tennessee and are largely beyond governments' control. The commission finds there are several strategies that government agencies can implement to mitigate the challenges without action by the General Assembly.

During discussion of the study at the commission's June 2025 meeting, commission member Representative Williams observed that Tennessee is one of the only states in the southeast that lacks a manufacturer of fire trucks. He and commission member Mayor Frank discussed the possible benefit to local governments and the state of attracting a manufacturer and made a motion that the commission request the department to encourage a manufacturer to locate a production facility in Tennessee. The motion was approved unanimously.

Thank you for your consideration.

Sincerely,



Senator Ken Yager
Chairman

Appendix B: Examples of Cost Increases and Lead Times According to Stakeholders in Tennessee

| Vehicle Type | Agency | Cost Increase | Lead Time | Fleet Size |
|--------------|--|---|---|---|
| ambulance | Dickson County Emergency Medical Service | An ambulance cost approximately \$275,000 in 2022, and in 2024, the same one cost approximately \$306,000. | For ambulances, from order to delivery is 2 to 3 years; for fire trucks it's approximately 18 months. | 16 ambulances and 4 administrative/support vehicles |
| ambulance | West Tennessee Health Care (contracts with Madison, Benton, Chester, Dyer, and McNairy Counties) | About a year after the pandemic, costs jumped, from \$180,000 to \$285,000 in the last couple years. | About a year ago, it took 24 to 30 months for an ambulance; now it is about 12 to 18 months. | 50 ambulances |
| fire engine | City of Cleveland Fire Department | A truck ordered in 2016 was \$630,000; now that truck is \$1 million. In the past, a 3-5% annual increase was normal. | In 2016, the turn-around time was nine months. Delivery time for a truck ordered in July 2024 was estimated to be 35 months. | 15 trucks, including 2 reserve trucks for backup |
| fire engine | Madison County Fire Department | Price is a big problem—it has doubled since 2018, from about \$280,000 to \$580,000 for a fire engine. | Prior to COVID-19, if a new fire apparatus was needed, it could be ordered in the present budget cycle, and the vehicle would arrive within 12 months. Now, it takes 44 to 48 months. | 70 vehicles |
| school bus | Clarksville-Montgomery County School System | Three years ago, a bus could be purchased for \$90,000; now the same bus is approximately \$135,000. Costs have gone up 30% for school buses in the last 12 to 14 months. | Before COVID-19, buses could be ordered in February and delivered by July. For the last few orders, for two of the vendors, it takes a year from order to delivery. | 340 school buses |
| school bus | Wilson County Schools | In 2004, a bus cost roughly \$80,000 but now costs twice that amount. | It now takes about one year from ordering to receiving a full-size bus; it used to take 16 to 18 months. | 191 buses and 65-70 white fleet vehicles |

Source: Interviews with Donny Bear, director, Dickson County Emergency Medical Service, April 25, 2024, and emails received November 4 and December 6, 2024; Joyce Noles, executive director, Medical Center EMS, president, Tennessee Ambulance Service Association, June 17, 2024; Peter VanDusen, deputy chief, City of Cleveland Fire Department, July 24, 2024; and email received November 4, 2024; Matt Gay, assistant chief, Madison County Fire Department, June 21, 2024; Elizabeth Kong, student transportation manager, Transportation Department, Clarksville-Montgomery County School System, August 21, 2024; and Kenny Hardaway, transportation supervisor, Wilson County Schools, June 13, 2024.

Appendix C: Funding Opportunities for Purchasing Government Vehicles

| Opportunity | Description | Key Details | Sources |
|--|---|--|---|
| Various opportunities for fire departments | Grants can help fund projects, purchase equipment, and train personnel | Not an exhaustive list | Tennessee Department of Commerce and Insurance “Grant Opportunities” |
| Community Development Block Grant (CDBG) | Administered by the Department of Economic and Community Development using US Department of Housing and Urban Development funds | Can be used to purchase some vehicles; Roane County has used grant funds for ambulances and a fire truck | Tennessee Department of Economic and Community Development “Community Development Block Grant” |
| Volkswagen Diesel Settlement | Administered by the Tennessee Department of Environment and Conservation | Supports alternate fuel and electric vehicles (EV); project solicitations will be released until eligible project funds are exhausted | Tennessee Department of Environment and Conservation 2024 “Tennessee and the Volkswagen Diesel Settlement” |
| US Environmental Protection Agency Clean School Bus Program | Provides funding for zero-emission (electric) buses and clean buses using alternative fuels | WKRN reported in August 2024 that eight Tennessee counties (Bledsoe, Cheatham, Davidson, Jackson, Maryville, Obion, Wayne, and Henry) received \$12 million to replace diesel buses with electric ones | Tennessee Department of Environment and Conservation “Energy in Transportation”; and US Environmental Protection Agency 2024 “Clean School Bus Program” |
| Congestion Mitigation and Air Quality (CMAQ) Improvement Program | Administered by Tennessee Department of Transportation to improve air quality and reduce congestion | Funds transportation projects and programs that reduce air emissions from cars, trucks, and buses (mobile sources) in air quality non-attainment and maintenance areas, which are the only areas eligible for CMAQ funding | Tennessee Department of Transportation “Congestion Mitigation and Air Quality (CMAQ) Improvement Program” |
| “Reducing Diesel Emissions for a Healthier Tennessee” Rebate Program | Administered by East Tennessee Clean Fuels Coalition with Diesel Emissions Reduction Act (DERA) funding | Available in Tennessee to replace older, class 5-8 diesel vehicles with new diesel vehicles or new alternative fuel vehicles that can run on propane, compressed natural gas, or electricity or that are hybrids | Tennessee Clean Fuels “Funding to Replace Older Diesel Vehicles with Cleaner Fuel and Vehicle Options” |

Overcoming Vehicle Supply Chain Disruptions and Large Cost Increases Involves Various Strategies Implemented by Governments

| Opportunity | Description | Key Details | Sources |
|---|---|--|---|
| Low or No Emission Grant Program | Administered by US Department of Transportation Federal Transit Administration for public transportation vehicles | Available to local and state government entities for the purchase or lease of low or zero emission transit buses, in addition to supporting facilities; Memphis and Knoxville have used these funds | US Department of Energy “Low and Zero Emission Public Transportation Funding” |
| Inflation Reduction Act of 2022 (IRA) tax credits | Credits were expanded so state and local governments can benefit | “Elective pay” or “direct pay” provisions allow tax-exempt and governmental entities to receive a payment equal to the full value of tax credits for building qualifying clean energy projects; Knoxville Utilities Board is the first government entity in Tennessee to apply | The White House “What is Direct Pay (Elective Pay)?” |
| Federal Commitment to Vehicle Production | Administered by the US Department of Energy and includes grants and loans to support EV production and infrastructure | \$12 billion allocated to support manufacturers transitioning from gasoline and diesel-powered vehicles to electric and hybrid models through the Domestic Auto Manufacturing Conversion Grant (available until 2031); \$3 billion also allocated to support EV battery production | US Department of Energy “Domestic Automotive Manufacturing Conversion Grants” |

Note: This list is not intended to be exhaustive. Whether the current federal administration will continue or roll back federal initiatives is uncertain.

Source: Duffy 2023; Gessner 2024; and interviews with Lynn Farnham, purchasing agent, Roane County, August 13, 2024; Jeff Beaman, fire chief, City of Gallatin, May 14, 2024; and Alexa Voytek, deputy director of programs, and Mark Finlay, senior energy analyst, Office of Energy Programs, Tennessee Department of Environment and Conservation, October 7, 2024.

Appendix D: Bidding Dollar Thresholds

| Purchasing Law | Formal Bids | Informal Bids | Statute |
|-----------------------------------|--|---|--|
| County Purchasing Law of 1983 | Public advertising & competitive bidding for purchases costing over the maximum applicable amount established in T.C.A. § 12-3-1212 (\$25,000 in counties with non-centralized purchasing). Exceptions include emergency purchases, sole-source purchases, fuel products, and lease or lease purchase agreements costing less than the maximum amount. | Any purchase costing less than the maximum applicable amount established in T.C.A. § 12-3-1212 may be made without competitive bids & public advertisement, but whenever possible be based on three (3) competitive bids. | Formal Bids – § 5-14-204 Informal Bids – § 5-14-205 CLB authorized to lower dollar amount – § 5-14-206 |
| CFMS of 1981 | The finance committee authorizes the dollar limits for competitive bids but not to exceed amount authorized by state law for the highway & education departments or other amounts established by law (up to \$50,000 in counties having centralized purchasing and a full-time purchasing agent pursuant to T.C.A. § 12-3-1212). | Any purchase costing less than the applicable maximum amount established in T.C.A. § 12-3-1212 may be made without competitive bids & public advertisement, but whenever possible be based on three (3) competitive bids. | § 5-21-120(a) |
| | If the amount of the expenditure or sale is estimated to exceed the maximum applicable amount established in T.C.A. § 12-3-1212 (up to \$50,000 in counties with centralized purchasing and a full-time purchasing agent) sealed bids shall be solicited. Several exceptions apply. See T.C.A. § 5-14-108. | All purchases or sales not requiring bid solicitation may be made without competitive bids & public advertisement, but whenever possible be based on three (3) competitive bids. | Formal Bids – § 5-14-108(c)(1) Informal Bids – § 5-14-108(d)(1) |
| County Uniform Highway Law (CUHL) | Public advertising & competitive bidding for purchases of \$25,000 & over except for repair of heavy road building machinery or other heavy equipment or emergencies. | Any purchase costing less than \$25,000 may be made without competitive bids & public advertisement, but whenever possible be based on three (3) competitive bids. | Formal Bids – § 54-7-113 Informal Bids – § 54-7-113 |

Overcoming Vehicle Supply Chain Disruptions and Large Cost Increases Involves Various Strategies Implemented by Governments

| Purchasing Law | Formal Bids | Informal Bids | Statute |
|-----------------------|---|---|---|
| Education | <p>If an LEA chooses not to follow the local governing body's purchasing procedure, all purchases of supplies, furniture, fixtures and materials of every kind estimated to exceed the maximum applicable amount established in T.C.A. § 12-3-1212 (up to \$50,000 for LEAs with centralized purchasing and a full-time purchasing agent) must be made on competitive bids, which must be solicited by advertisement in a newspaper of general circulation in the county. Newspaper advertisement may be waived in the event of emergency.</p> <p>If the LEA chooses not to follow the local governing body's purchasing procedures, the board shall contract, following open bids, for the construction of or additions to school buildings in excess of applicable amounts established in T.C.A. § 12-3-1212.</p> | <p>Purchases costing less than the maximum applicable threshold established in T.C.A. § 12-3-1212 (up to \$50,000 for LEAs with centralized purchasing and a full-time purchasing agent) may be made in the open market without newspaper notice, but must, whenever possible, be based upon at least three (3) competitive bids. T.C.A. 49-2-203(a)(3)(C).</p> | <p>Formal Bids – §§ 49-2-203(a)(3)(B), 49-2-203(a)(3)(B)(iii)</p> <p>Informal Bids – §49-2-203(a)(3)(c)</p> <p>Construction Contracts – §49-2-203(a)(3)(D)</p> |
| Counties over 150,000 | <p>Competitive sealed bids or proposals for non-emergency or non-propriety purchases that exceed the maximum applicable amount established in T.C.A. § 12-3-1212 (up to \$50,000 in counties with centralized purchasing and a full-time purchasing agent). These counties may retain their present competitive bidding conditions or establish different limits by private act or charter provision.</p> | <p>Authorized to make purchases under the maximum applicable amount established in T.C.A. § 12-3-1212 (up to \$50,000 in counties with centralized purchasing and a full-time purchasing agent) without competitive bids.</p> | <p>§ 12-3-1204</p> |

Source: University of Tennessee "Dollar Threshold Chart."

Appendix E: Additional Information about Tennessee’s Purchasing Laws

Tennessee has laws in place that provide flexibility for state and local government purchasing, including vehicle purchases, while responsibly managing taxpayer dollars and navigating challenges like delays or cost increases. Unlike private sector procurement, which is typically more flexible and profit-driven, public purchasing operates within a framework of strict regulations designed to uphold public trust.⁸⁸ According to the University of Tennessee County Technical Assistance Service (CTAS), “Generally, the purchasing laws place an emphasis on control, price, openness, and accountability.”⁸⁹ And according to the University of Tennessee Municipal Technical Advisory Service (MTAS), “Good purchasing methods are important because they allow a municipality to make the best use of its funds by ensuring taxpayers know how their money is being spent, adequately protecting municipal employees from unwarranted criticism, and giving vendors equal opportunity to solicit municipal business.”⁹⁰ By focusing on openness and fairness and adhering to these laws, government entities fulfill their responsibility to be good stewards of taxpayer dollars, balancing efficiency with the public interest and fair treatment of vendors.

The state’s purchasing laws are not uniform, and there are differences and options for state, county, and city governments’ authority—there are laws of general application to counties and cities and local option laws. For example, in Tennessee, local option laws allow counties to adopt purchasing regulations, which could include bidding thresholds or procurement methods. This approach gives counties and municipalities the ability to customize their operational frameworks while still adhering to overarching state guidelines. Some laws apply to both counties and cities, while some apply only to the state procurement office giving it specific authority—for example, authority to enter into statewide contracts—that local governments do not have. Purchasing laws in state statute are permissive for local governments, not prohibitive—the statute must also specifically address local governments, not other agencies, giving them express authority to make a certain type of purchase.⁹¹ The laws are complicated, and both CTAS and MTAS have resources to assist, and local governments’ legal counsel can help local governments understand and comply with laws.⁹²

While states, counties, and cities all must follow general purchasing laws, the variation in authority allows counties and cities to select the approach that best suits their needs. Counties and cities can adopt a combination of local option laws, private acts, or charters that determine their purchasing authority. County purchasing authority is defined by a few laws, including the County Purchasing Law of 1957,⁹³ Financial Management System of 1981,⁹⁴ County Purchasing Law of 1983,⁹⁵ County Uniform Highway Law,⁹⁶ and purchasing laws for boards of education.⁹⁷ In counties that have adopted one of the optional general laws to centralize purchasing—either the 1957 or 1981 Act—the county’s purchasing functions are done by a purchasing agent or through a purchasing office for the whole county. Counties that have not adopted one of these laws operate under the 1983 Act and purchasing is decentralized, meaning it is done by different agencies in the county.

⁸⁸ University of Tennessee County Technical Assistance Service “County Purchasing vs Private Sector Purchasing.”

⁸⁹ University of Tennessee County Technical Assistance Service “Legal Framework for Purchasing.”

⁹⁰ University of Tennessee Municipal Technical Advisory Service “Purchasing.”

⁹¹ Interview with Bryan Burklin, assistant director, Division of Local Government Audit, Comptroller of the Treasury, July 9, 2024.

⁹² Ibid.

⁹³ Tennessee Code Annotated, Sections 5-14-101 et seq.

⁹⁴ Tennessee Code Annotated, Sections 5-21-101 et seq.

⁹⁵ Tennessee Code Annotated, Sections 5-14-201 et seq.

⁹⁶ Tennessee Code Annotated, Section 54-7-113.

⁹⁷ Tennessee Code Annotated, Title 49.

These counties would also follow the County Uniform Highway Law and separate purchasing laws for the board of education. Table 2 shows which purchasing laws each county has adopted.

Several general laws govern purchasing for cities, including the Municipal Purchasing Law of 1983,⁹⁸ which “establishes minimum requirements for all cities that do not have very specific charter provisions governing competitive bidding and purchasing.”⁹⁹ Unique purchasing guidelines for cities are often found in their individual charters, private acts, local ordinances, and policies, and therefore, how purchasing is done can vary quite a bit between cities.¹⁰⁰ While Tennessee’s purchasing framework is complex, stakeholders agree it is not inherently causing problems for vehicle procurement. Instead, it provides tools for addressing challenges within the existing legal structure.

Table 2. Purchasing Laws by County

| County | General | Highway | Schools |
|------------|-----------------------------|--|--------------------------------|
| Anderson | 1981 | 1981 | 1981 |
| Bedford | 1981 | 1981 | 1981 |
| Benton | 1939 Priv. Act Ch 541 | 1943 Priv. Act Ch. 250/CUHL | 49-2-203 |
| Bledsoe | 1983 | 1941 Priv. Act Ch. 153/CUHL | 49-2-203 |
| Blount | 1957 | 1957 | 1957 |
| Bradley | 1951 Priv. Act Ch. 313 | 1947 Priv. Act Ch. 354/CUHL | 49-2-203 |
| Campbell | 1981 | 1981 | 1981 |
| Cannon | 1981 | 1981 | 1981 |
| Carroll | 2024 Priv. Act Ch. 57 | 2024 Priv. Act Ch. 57/CUHL | 2024 Priv. Act Ch. 57/49-2-203 |
| Carter | 1981 | 1981 | 1981 |
| Cheatham | 1933 Priv. Act Ch. 250/1983 | 1933 Priv. Act Ch. 250/1945 Priv. Act Ch. 309/CUHL | 49-2-203 |
| Chester | 1983 | 1951 Priv. Act Ch. 68/CUHL | 49-2-203 |
| Claiborne | 1981 | 1981 | 1981 |
| Clay | 1983 | 1951 Priv. Act Ch. 565/CUHL | 49-2-203 |
| Cocke | 1957 | 1957 | 49-2-203 |
| Coffee | 1957 | 1957 | 49-2-203 |
| Crockett | 1983 | 1933 Priv. Act Ch. 26/CUHL | 49-2-203 |
| Cumberland | 1981 | 1981 | 1981 |
| Davidson | Metro Charter | Metro Charter | Metro Charter |
| Decatur | 1983 | CUHL | 49-2-203 |
| DeKalb | 1979 Priv. Act Ch. 63 | 1979 Priv. Act Ch. 63/CUHL | 1979 Priv. Act Ch. 63/49-2-203 |

⁹⁸ Tennessee Code Annotated, Sections 6-56-301 et seq.

⁹⁹ O’Hara, Hodge, and Ashburn 2024.

¹⁰⁰ Interview with Eric Spencer, finance & accounting program manager, University of Tennessee Municipal Technical Advisory Service, June 18, 2024.

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| County | General | Highway | Schools |
|-----------|---|-----------------------------|---------------------------------|
| Dickson* | 1957 | 1957 | 1951 Priv. Act Ch. 16/49-2-203 |
| Dyer | 1983 | 1929 Priv. Act Ch. 421/CUHL | 49-2-203 |
| Fayette | 1983 | 1974 Priv. Act Ch. 234/CUHL | 49-2-203 |
| Fentress | 1981 | 1981 | 1981 |
| Franklin | 1981 | 1981 | 1981 |
| Gibson | 1983 | 1929 Priv. Act Ch. 111/CUHL | 49-2-203 |
| Giles | 1981 | 1981 | 1981 |
| Grainger | 1983 | 1980 Priv. Act Ch. 232/CUHL | 49-2-203 |
| Greene | 1957 | 1957 | 49-2-203 |
| Grundy | 1983 | 1939 Priv. Act Ch. 435/CUHL | 49-2-203 |
| Hamblen | 1983 | 1949 Priv. Act Ch. 313/CUHL | 49-2-203 |
| Hamilton | 1983 Priv. Act Ch. 90 | 1983 Priv. Act Ch. 90 | 1983 Priv. Act Ch. 90/49-2-203 |
| Hancock | 1983 | 1941 Priv. Act Ch. 149/CUHL | 49-2-203 |
| Hardeman | 1989 Priv. Act Ch. 90 | 1989 Priv. Act Ch. 90/CUHL | 1989 Priv. Act Ch. 90/49-2-203 |
| Hardin | 1983 | 1997 Priv. Act Ch. 62/CUHL | 49-2-203 |
| Hawkins | 1957 Priv. Act Ch. 256 | 1957 Priv. Act Ch. 256/CUHL | 1957 Priv. Act Ch. 256/49-2-203 |
| Haywood | 1983 | 1991 Priv. Act Ch. 24/CUHL | 49-2-203 |
| Henderson | 1981 | 1981 | 1981 |
| Henry | 1983 Priv. Act Ch. 137/1995 Private Act Ch. 10/1983 | CUHL | 49-2-203 |
| Hickman | 1981 | 1981 | 1981 |
| Houston | 1983 | 1945 Priv. Act Ch. 366/CUHL | 49-2-203 |
| Humphreys | 1983 | 1935 Priv. Act Ch. 634/CUHL | 49-2-203 |
| Jackson | 1983 | 1951 Priv. Act Ch. 111/CUHL | 49-2-203 |
| Jefferson | 1981 | 1981 | 1981 |
| Johnson | 1957 | 1957 | 49-2-203 |
| Knox | 1980 Priv. Act Ch. 286 (county charter) | 1980 Priv. Act Ch. 286 | 1980 Priv. Act Ch. 286/49-2-203 |

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| County | General | Highway | Schools |
|------------|-----------------------------|--|---|
| Lake | 1983 | 1980 Priv. Act Ch. 262/CUHL | 49-2-203 |
| Lauderdale | 1983 | 1929 Priv. Act Ch. 304/CUHL | 49-2-203 |
| Lawrence | 1957 | 1957 | 49-2-203 |
| Lewis | 1983 | 1937 Priv. Act Ch. 395/CUHL | 49-2-203 |
| Lincoln | 1981 | 1981 | 1981 |
| Loudon | 1957 | 1957 | 1957 |
| McMinn | 1981 | 1981 | 1981 |
| McNairy | 1990 Priv. Act Ch. 171 | CUHL | 49-2-203 |
| Macon | 1937 Priv. Act Ch. 161/1983 | 1965 Priv. Act Ch. 234/CUHL | 49-2-203 |
| Madison | 1981 | 1981 | 1981 |
| Marion | 1983 | 1933 Priv. Act Ch. 24/CUHL | 49-2-203 |
| Marshall | 1965 Priv. Act Ch. 69/1983 | 1965 Priv. Act Ch. 69/1955 Priv. Act Ch. 238/CUHL | 49-2-203 |
| Maury | 2018 Priv. Act Ch. 47 | 2018 Priv. Act Ch. 47/CUHL | 2018 Priv. Act Ch. 47 |
| Meigs | 2007 Priv. Act Ch. 28 | 2007 Priv. Act Ch. 28/CUHL | 49-2-203 |
| Monroe | 1981 | 1981 | 1981 |
| Montgomery | 1957 | 1957 | 49-2-203 |
| Moore | Metro Charter | Metro Charter | Metro Charter |
| Morgan | 1981 | 1981 | 1981 |
| Obion | 1983 | CUHL | 49-2-203 |
| Overton | 1957 | 1957 | 49-2-203 |
| Perry | 1983 | 1977 Priv. Act Ch. 18/CUHL | 49-2-203 |
| Pickett | 1983 | 1957 Priv. Act Ch. 104/CUHL | 49-2-203 |
| Polk | 1957 | 1957 | 49-2-203 |
| Putnam | 1981 Priv. Act Ch. 63 | 1989 Priv. Act Ch. 122/CUHL | 49-2-203 |
| Rhea | 1981 | 1981 | 1981 |
| Roane | 1957 | 1957 | 1933 Priv. Act Ch. 477/49-2-203 (schools informally use 1957) |
| Robertson | 1981 | 1981 | 1981 |
| Rutherford | 2017 Priv. Act Ch. 17 | 1951 Priv. Act CH. 55/CUHL | 49-2-203 |
| Scott | 1981 | 1981 | 1981 |
| Sequatchie | 1983 | CUHL | 49-2-203 |

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| County | General | Highway | Schools |
|------------|-------------------------|--|---------------------------------|
| Sevier | 1983 | 1969 Priv. Act Ch. 133/CUHL | 49-2-203 |
| Shelby | 1974 Priv. Act Ch. 260 | 1974 Priv. Act Ch. 260 | 1974 Priv. Act Ch. 260/49-2-203 |
| Smith | 1981 | 1981 | 1981 |
| Stewart | 1983 | 1951 Priv. Act Ch. 171/CUHL | 49-2-203 |
| Sullivan | 2020 Priv. Act Ch. 46 | 2020 Priv. Act Ch. 46 | 2020 Priv. Act Ch. 46 |
| Sumner | 2002 Priv. Act. Ch. 113 | 2002 Priv. Act. Ch. 113/CUHL | 2002 Priv. Act Ch. 113 |
| Tipton | 1941 Priv. Act Ch. 518 | 1973 Priv. Act Ch. 114/CUHL | 49-2-203 |
| Trousdale | Metro Charter | Metro Charter | Metro Charter |
| Unicoi | 1983 | 1949 Priv. Act Ch. 678/CUHL | 49-2-203 |
| Union | 1981 | 1981 | 1981 |
| Van Buren | 1983 | 1951 Priv. Act Ch. 460/1986 Priv. Act Ch. 111/CUHL | 49-2-203 |
| Warren | 1981 | 1981 | 1981 |
| Washington | 1957 | 1957 | 49-2-203 |
| Wayne | 1983 | 1941 Priv. Act Ch. 32/CUHL | 49-2-203 |
| Weakley | 1981 | 1981 | 1981 |
| White | 1981 | 1981 | 1981 |
| Williamson | 1957 | 1957 | 49-2-203 |
| Wilson | 1981 | 1981 | 49-2-203 |

*Dickson County - 1951 Privact Act Chapter 16 does not apply to bridges or school buildings.

Source: University of Tennessee County Technical Assistance Service "Legal Framework for Purchasing."