OFFICE OF THE STATE AUDITOR

DIANA DIZOGLIO

Official Audit Report – Issued July 1, 2026

Pioneer Valley Transit Authority

For the period July 1, 2022 through June 30, 2024

State House Room 230 ■ Boston, MA 02133 ■ auditor@massauditor.gov ■ www.mass.gov/auditor

OFFICE OF THE STATE AUDITOR

DIANA DIZOGLIO

July 1, 2026

Sandra Sheehan, Administrator
Pioneer Valley Transit Authority
55 Frank B. Murray Street
Springfield, MA 01103

Dear Administrator Sheehan:

I am pleased to provide to you the results of the enclosed performance audit of the Pioneer Valley Transit Authority. As is typically the case, this report details the audit objectives, scope, methodology, findings, and recommendations for the audit period, July 1, 2022 through June 30, 2024. As you know, my audit team discussed the contents of this report with agency managers. This report reflects those comments.

I appreciate you and all your efforts at the Pioneer Valley Transit Authority. The cooperation and assistance provided to my staff during the audit went a long way toward a smooth process. Thank you for encouraging and making available your team. I am available to discuss this audit if you or your team has any questions.

Best regards,

Diana DiZoglio
Auditor of the Commonwealth

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LIST OF ABBREVIATIONS

BEB	battery electric bus
CFR	Code of Federal Regulations
EAM	enterprise asset management
FTA	Federal Transit Administration
PVTA	Pioneer Valley Transit Authority
RTA	regional transit authority
SATCo/VATCo	Springfield Area Transit Company and Valley Area Transit Company
UMTS	University of Massachusetts Transit Services

EXECUTIVE SUMMARY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has performed an audit of certain activities of the Pioneer Valley Transit Authority (PVTA) for the period July 1, 2022 through June 30, 2024.

In this performance audit, we examined the following:

- To what extent did PVTA establish and implement policies and procedures to identify and mitigate potential causes of electrical fires in its battery electric buses (BEBs) in accordance with Sections 673.25(b)(1)(2)(i), (c)(1), and (d)(1) of Title 49 of the Code of Federal Regulations; Section IV of the "PVTA Agency Safety Plan"; and Appendix B of the Springfield Area Transit Company and Valley Area Transit Company's (SATCo/VATCo's) "Electrical Safety Plan"?
- Did PVTA ensure that its two contracted operating companies performed preventative maintenance on its BEBs in accordance with Section B of SATCo/VATCo's "Vehicle Maintenance Plan" and Section 1 of the University of Massachusetts Transit Services' "Vehicle Maintenance Plan"?

Below is a summary of our findings, the effects of those findings, and our recommendations, with hyperlinks to each page listed.

Finding 1 **Page 17**	PVTA should identify and mitigate potential safety hazards related to its BEBs to prevent future damage to vehicles and/or serious injury to employees and members of the public.
Effect	If PVTA does not identify causes of potential battery and electrical fires and does not put measures in place to mitigate the occurrence of fires, then PVTA assumes a higher risk of adverse situations, including prolonged fires, damage to vehicles and facilities, service disruptions, and injury to employees and members of the public.
Recommendations **Page 18**	1. PVTA should update the "PVTA Agency Safety Plan" to incorporate risks and strategies for hazard mitigation for BEBs, specifically for battery and electrical fires. 2. PVTA should implement controls to identify and mitigate potential causes of electrical fires in its fleet of BEBs. 3. PVTA must ensure that its contracted operating companies assess the risks related to BEBs in order to comply with Section IV of the "PVTA Agency Safety Plan."
Finding 2 **Page 24**	PVTA should ensure that qualified maintenance employees complete electrical safety training before performing preventative maintenance services on BEBs to reduce the risk of injury and/or inadvertent damage to BEBs.
Effect	If PVTA cannot demonstrate that qualified maintenance employees complete required training on BEB maintenance, then there is a higher risk that PVTA may not detect initial warning signs of electrical and other hazards, leading to vehicle damage and potential injuries to employees and members of the public. Maintenance employees who have not completed the required training may face a higher risk of injury when maintaining BEBs and, without completing CPR, first aid, and bloodborne pathogen training, may not be able to assist others who have been injured.

Recommendations **Page 25**	1. PVTA should establish monitoring controls over its training program to ensure that qualified maintenance employees who work on BEBs receive required electrical safety training including CPR, first aid, and bloodborne pathogen training. 2. PVTA should ensure that qualified maintenance employees complete the electrical safety training required by SATCo/VATCo's "Electrical Safety Plan."
Finding 3 **Page 27**	PVTA should ensure that preventative maintenance is always performed on BEBs at required intervals to reduce the risk of severe injuries to employees and members of the public, as well as potential damage to the BEBs.
Effect	If PVTA cannot demonstrate that preventative maintenance is conducted in accordance with its contracted operating companies' vehicle maintenance plans, then PVTA assumes a higher risk of damage to the electrical components of its BEBs. This could lead to traffic accidents—and avoidable damage to or loss of vehicles—and may result in severe injuries to employees and members of the public.
Recommendation **Page 28**	PVTA should establish monitoring controls over its preventative maintenance process to ensure that preventative maintenance services are conducted at 6,000 miles, or within the allowable range of 600 miles above or below the mileage schedule.

Post-audit Action

On March 7, 2025, a BEB began smoking inside the PVTA maintenance garage in Springfield, which was nearly empty. PVTA detected this, and the Springfield Fire Department responded by soaking the BEB with water for nearly six hours. PVTA's Safety Committee updated its safety procedures on March 11, 2025 to charge BEBs only during hours when employees occupy the facility, to reduce the maximum charging capacity of all BEBs to 75%, and to garage all BEBs outdoors.

OVERVIEW OF AUDITED ENTITY

Massachusetts Regional Transit Authorities

Chapter 161B of the Massachusetts General Laws established regional transit authorities (RTAs), which provide public transportation services for communities outside the Massachusetts Bay Transportation Authority's fixed-route[1] bus service area. This law defines the roles and responsibilities of these authorities and the municipalities in which they operate. Each RTA has an advisory board made up of the top elected official (e.g., selectperson or mayor) from each municipality in which it operates, one representative of the disabled commuter population,[2] and one representative of the local rider community. The advisory boards appoint administrators, establish bylaws, and approve budgets and changes to RTA services.

Section 53 of Chapter 6C of the General Laws makes the Rail and Transit Division of the Massachusetts Department of Transportation "responsible for overseeing, coordinating and planning all transit and rail matters throughout the commonwealth," including intercity buses, the Massachusetts Bay Transportation Authority, and RTAs.

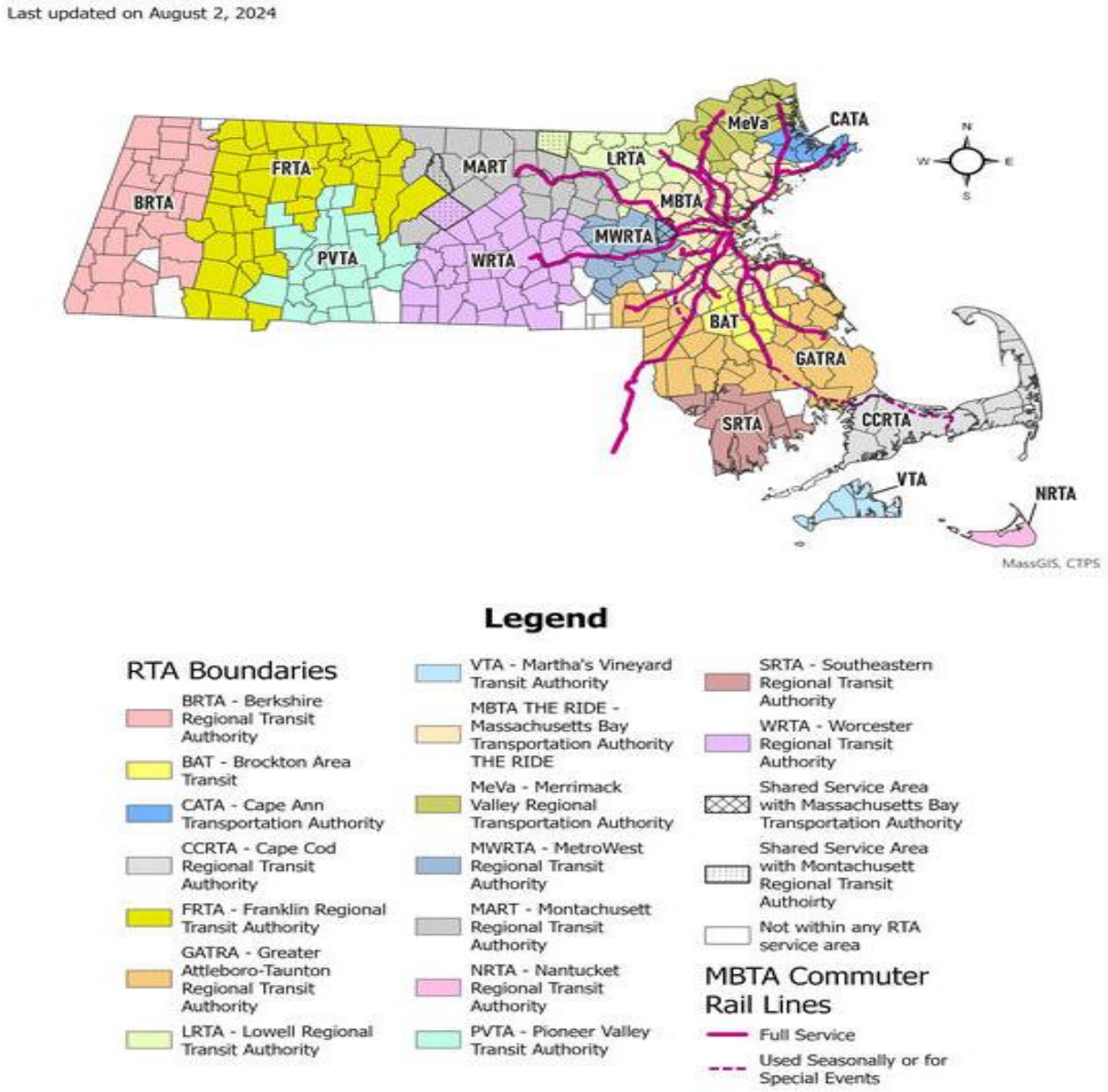
Currently, there is a network of 15 RTAs operating in the Commonwealth, in addition to the transit services provided by the Massachusetts Bay Transportation Authority. These RTAs serve a total of 280 cities and towns outside the greater Boston area. RTAs are funded through a combination of state appropriations, federal grants, local governments, transit fares, and other sources. Although RTAs manage their own operations, they are prohibited by Section 25 of Chapter 161B of the General Laws from directly operating transit services and must therefore contract with a third-party operating company for these services.

State appropriations for the 15 RTAs for fiscal years 2023 and 2024 were $96,500,000 and $96,820,000, respectively.

The map below displays the Massachusetts Bay Transportation Authority's service area, along with the service zones of each RTA within the cities and towns they serve, as of August 2, 2024.

1. Fixed-route transportation services have established routes, schedules, and stops.
2. According to Section 5 of Chapter 161B of the General Laws, "This representative shall be mobility impaired, have a family member who is mobility impaired, be a caretaker of a person who is mobility impaired or work for an organization that serves the needs of the physically disabled."

Figure 1. Map of Transit Authorities in Massachusetts by RTA Service Area



Source: Massachusetts Department of Transportation—Rail and Transit Division (https://www.mass.gov/info-details/public-transportation-in-massachusetts)

Pioneer Valley Transit Authority

The Pioneer Valley Transit Authority (PVTA) was established in 1974 by Chapter 161B of the General Laws and is overseen by the Rail and Transit Division of the Massachusetts Department of Transportation.

According to PVTA's website, it "is committed to providing the highest quality of convenient and accessible public transportation service that meets the needs of our customers in an efficient, cost-effective manner."

PVTA is the largest RTA in Massachusetts based on geographical size and covers a service area of 627 square miles, consisting of 24 communities.

Table 1. Cities and Towns in PVTA's Service Area

Agawam	Hampden	South Hadley
Amherst	Holyoke	Springfield
Belchertown	Leverett	Sunderland
Chicopee	Longmeadow	Ware
East Longmeadow	Ludlow	West Springfield
Easthampton	Northampton	Westfield
Granby	Palmer	Wilbraham
Hadley	Pelham	Williamsburg

During the audit period, PVTA contracted with two privately operated companies to provide fixed-route transportation services: DGR Management, which operates two subsidiaries for PVTA—Springfield Area Transit Company and Valley Area Transit Company (SATCo/VATCo)—and University of Massachusetts Transit Services (UMTS). SATCo/VATCo serves the greater Springfield and Pioneer Valley communities, while UMTS serves the student population of the University of Massachusetts Amherst and riders in surrounding communities.

PVTA's operations are overseen by an advisory board that hires PVTA's administrator and is responsible for setting fares, establishing service levels, and authorizing real estate acquisitions. PVTA's administrator manages PVTA's day-to-day operations.

As of June 30, 2024, PVTA had 34 employees, SATCo/VATCo had 317 employees, and UMTS had 434 employees.

PVTA Funding Sources

In fiscal years 2023 and 2024, PVTA received revenue from various sources, including fares and federal, state, and local assistance. Table 2 below shows PVTA's total income during fiscal years 2023 and 2024.

Table 2. Sources of Funding for PVTA—Fiscal Years 2023 and 2024

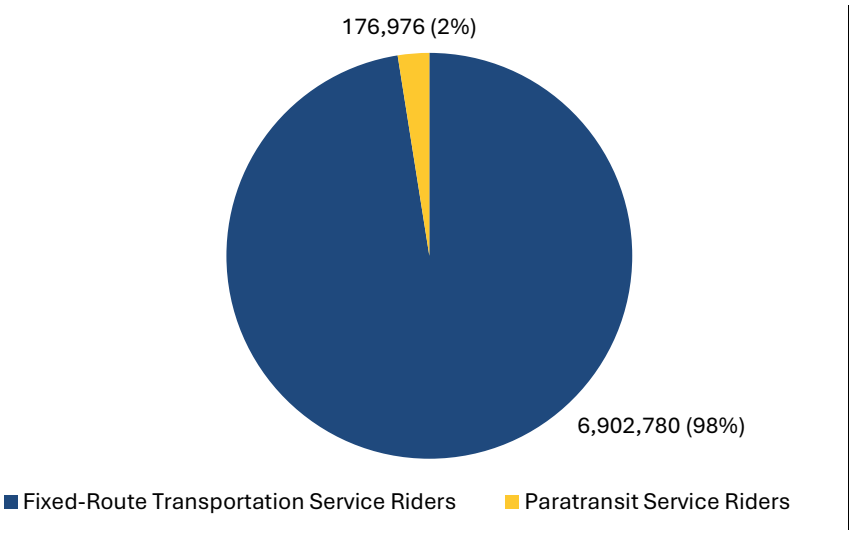
Type of Funding	Fiscal Year 2023	Fiscal Year 2024
Farebox Revenue	$ 6,274,786	$ 5,158,710
State and Local Grants	36,764,577	48,269,884
Federal Grants*	12,362,682	8,387,239
Interest and Other Income	1,310,211	1,245,805
Total	$ 56,712,256	$ 63,061,638

* Federal Grants include all funding in the federal and state assistance line item, as stated in PVTA's financial reports.

PVTA Ridership Information

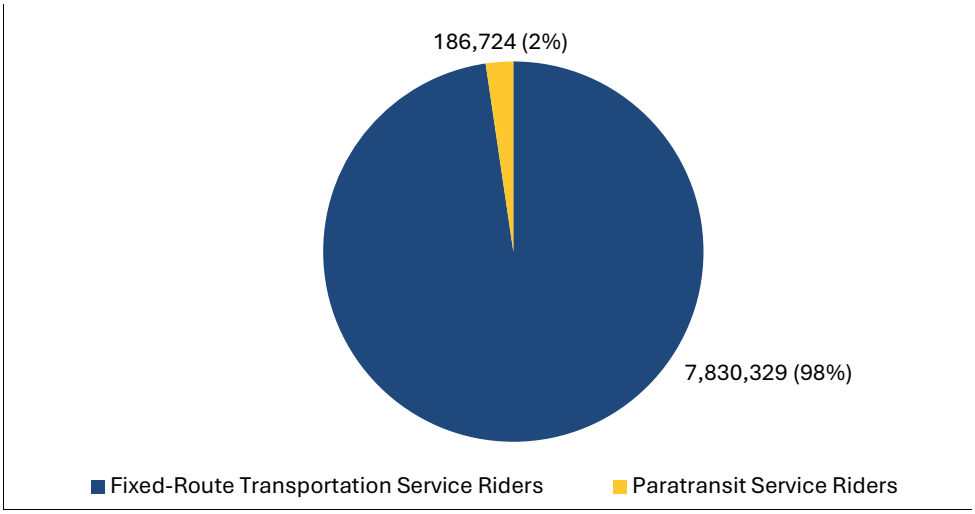
Figure 2 and Figure 3 below summarize PVTA's ridership information for fiscal years 2023 and 2024.

Figure 2. PVTA Total Ridership for Fiscal Year 2023*



* Regarding paratransit services, the Americans with Disabilities Act of 1990 recognized that some individuals' disabilities prevent them from using fixed-route transportation services. Section 37(F) of Title 49 of the Code of Federal Regulations, which covers the transportation and related stipulations of this act, states, "Each public entity operating a fixed route system shall provide paratransit or other special service to individuals with disabilities that is comparable to the level of service provided to individuals without disabilities who use the fixed route system."

Figure 3. PVTA Total Ridership for Fiscal Year 2024



Battery Electric Buses

Before the audit period, PVTA purchased some of its battery electric buses (BEBs) with funds from the federal Congestion Mitigation and Air Quality Improvement Program in an effort to improve local air quality and support traffic relief on roads. PVTA purchased its other BEBs with funds from low- or no-emission grants from the Federal Transit Administration (FTA) under the Urbanized Area Formula Funding program[3] and the Low or No Emission Grant program.[4] As of June 30, 2025, PVTA owned 23 BEBs produced by two manufacturers, Proterra and New Flyer.

Like many other RTAs in the Commonwealth, PVTA set a goal to transition to a fully electric fleet. According to the state Task Force on RTA Performance and Funding's[5] 2019 report, *A Vision for the Future of Massachusetts' Regional Transit Authorities*, "Public transit agencies should be leading the state towards this goal by phasing out diesel and other emitting fuels and committing to fully electric bus fleets by 2035."

3. According to the FTA website, accessed on February 9, 2026, "The Urbanized Area Formula Funding program . . . makes federal resources available to governors and other recipients for transit capital and operating assistance and transportation-related planning in urbanized areas. An urbanized area is an area that has been defined and designated by the U.S. Department of Commerce, Bureau of the Census as an 'Urban Area' with a population of 50,000 or more."
4. According to the FTA website, "The Low or No Emission grant program provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supporting facilities."
5. According to Section 72 of the Acts of 2018, the Task Force on RTA Performance and Funding's mission is to "(i) evaluate how regional transit authorities can best provide and improve transit services that meet identified community needs; (ii) conduct regular service planning, recognizing the diverse service populations and makeup of different geographic regions, that maximizes ridership using available resources; and (iii) ensure that fares, local contributions and other own-source revenues cover an appropriate share of service costs."

Safety Hazard Mitigation

Section 673.25 of Title 49 of the Code of Federal Regulations (CFR) mandates that PVTA, as an RTA, identify potential safety hazards and document a policy describing the process and methods it uses to mitigate identified safety hazards. PVTA must complete a safety hazard assessment, which it documents in a risk assessment matrix,[6] to evaluate the likelihood and severity of all identified hazards. Based on the safety hazard assessment findings, PVTA's contracted operating companies develop hazard mitigation plans, which are documented on PVTA's Hazard Mitigation Action Worksheets.[7] Additionally, according to 49 CFR 673.25,

> *A transit agency must consider, as a source for hazard identification . . . data and information provided by oversight authorities, including but not limited to FTA, the State, or as applicable, the State Safety Oversight Agency having jurisdiction [in this case, the Massachusetts Department of Transportation].*

Electrical Safety Training

To reduce hazards from high-voltage exposure, PVTA's contracted operating companies have electrical safety policies. The SATCo/VATCo "Electrical Safety Plan," which UMTS also follows, outlines the hazards associated with working around high-voltage equipment and vehicles.

The SATCo/VATCo "Electrical Safety Plan" details the training requirements that PVTA has for qualified maintenance employees (whom PVTA calls qualified workers), who are contracted employees working on or near exposed high-voltage electrical components. PVTA provides specified training to these qualified workers to decrease negative outcomes by educating them on accident prevention and how to properly respond if anyone comes into contact with high voltage. This training, which is completed every three years, covers electrical safety standards established by the National Fire Protection Association's 70E (Standard for Electrical Safety in the Workplace)[8] and specialized instructions on BEBs offered by the two manufacturers of PVTA's BEBs. Employees also receive training in CPR, first aid, and bloodborne pathogens that is mandated by SATCo/VATCo's "Electrical Safety Plan," which is completed every two years.

6. According to the "PVTA Agency Safety Plan," "The Risk Assessment Matrix (RAM) will assess identified safety concerns. Each Contractor holds its own internal meetings to review and evaluate the risk management process. . . . A RAM is used to assess the potential severity of any hazard."
7. According to the "PVTA Agency Safety Plan," the Hazard Mitigation Action Worksheet is part of "the process by which Contractors and PVTA Administration document plans to decrease the potential for harm from an identified safety hazard."
8. PVTA requires training that meets the National Fire Prevention Association's 70E (Standard for Electrical Safety in the Workplace), but the National Fire Prevention Association does not provide the training.

Preventative Maintenance for BEBs

Part of PVTA's safety hazard mitigation strategy includes preventative maintenance of all its vehicles. FTA's transit asset management policy requires PVTA, as an RTA, to ensure that its vehicles are maintained to meet or exceed their expected longevity of 14 years. In a memorandum of understanding with FTA, PVTA established a transit asset management plan to keep its vehicles operational beyond their expected 14-year lifespan.

According to PVTA's transit asset management plan, every vehicle in the fleet undergoes a preventative maintenance program and thorough safety inspections at predetermined mileage milestones. To monitor the maintenance of PVTA's BEBs, SATCo/VATCo and UMTS use enterprise asset management (EAM) software to track and report on vehicle mileage, fuel[9] and fluid consumption, work order processing, vehicle history, fleet and vehicle information, parts use, and inventory. SATCo/VATCo's and UMTS's EAM software operate independently of one another.

BEBs are subject to a preventative maintenance schedule based on increments of 6,000 miles, and SATCo/VATCo's "Vehicle Maintenance Plan" requires that each inspection be completed within 600 miles[10] below or above each increment of this mileage schedule. During these inspections, underbody lubrication, front suspension, and air filters are replaced. Water filters and power steering filters are also replaced every 12,000 miles. Additionally, SATCo/VATCo and UMTS mechanics inspect the high-voltage electrical components for all BEBs undergoing preventative maintenance. PVTA uses hardcopy checklists for all BEB inspections, and the information from these checklists is entered into the EAM software by maintenance forepersons for SATCo/VATCo and UMTS.

Once a BEB is due for preventative maintenance, an inspector from the Maintenance Department of one of PVTA's contracted operating companies conducts the necessary checks and maintenance procedures outlined on the preventative maintenance checklist. The mechanics on duty identify and record any major issues for repair, and the BEB is removed from service until the issues are addressed.

Preventative maintenance also includes inspecting any defects that BEB drivers encounter daily. This is done on a defect card, which BEB drivers receive and which remains with the vehicle until the BEB driver

9. Each BEB is equipped with a diesel fuel system to operate the heating system.
10. The PVTA contracted operating companies' vehicle maintenance plans require preventative maintenance to be performed on each BEB every 6,000 miles driven, within a tolerable range of 10% above or below.

returns the BEB to its designated garage at the end of each day. If a BEB driver encounters any operational issues during the day, they note these issues on that day's defect card. At the end of BEB drivers' shifts, the maintenance foreperson collects that day's defect cards. If an issue is noted on a defect card, then the maintenance foreperson assesses the issue and, if necessary, removes the BEB from service until the issue has been addressed.

PVTA's contracted operating companies (SATCo/VATCo and UMTS) have the option to run exception reports daily. Exception reports list all buses in the fleet that have been temporarily removed from service or require preventative maintenance based on either mileage or scheduled maintenance dates. The contracted operating companies also create interval reports on a weekly and monthly basis. These interval reports provide an overview of the preventative maintenance activities conducted on all buses, detailing the specific services performed. PVTA officials can use these interval reports to assess compliance with preventative maintenance standards and evaluate the operational safety of PVTA's fleet.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of certain activities of the Pioneer Valley Transit Authority (PVTA) for the period July 1, 2022 through June 30, 2024.

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

Below is a list of our audit objectives, indicating each question we intended our audit to answer; the conclusion we reached regarding each objective; and, if applicable, where each objective is discussed in the audit findings.

Objective	Conclusion
1. To what extent did PVTA establish and implement policies and procedures to identify and mitigate potential causes of electrical fires in its battery electric buses (BEBs) in accordance with Sections 673.25(b)(1)(2)(i), (c)(1), and (d)(1) of Title 49 of the Code of Federal Regulations (CFR); Section IV of the "PVTA Agency Safety Plan"; and Appendix B of the Springfield Area Transit Company and Valley Area Transit Company's (SATCo/VATCo's) "Electrical Safety Plan"?	**To an insufficient extent; see Findings 1 and 2**
2. Did PVTA ensure that its two contracted operating companies performed preventative maintenance on its BEBs in accordance with Section B of SATCo/VATCo's "Vehicle Maintenance Plan" and Section 1 of the University of Massachusetts Transit Services' (UMTS's) "Vehicle Maintenance Plan"?	**No; see Finding 3**

To accomplish our audit objectives, we gained an understanding of the PVTA internal control environment relevant to our objectives by reviewing applicable policies and procedures and by interviewing PVTA employees, PVTA management, and contracted operating company employees. We also evaluated the operating effectiveness of internal controls related to the maintenance foreperson's approval of preventative maintenance inspections of BEBs. In addition, to obtain sufficient, appropriate evidence to address our audit objectives, we performed the procedures described below.

Safety Hazard Mitigation for BEBs

To determine to what extent PVTA established and implemented policies and procedures to identify and mitigate potential causes of electrical fires in its BEBs in accordance with 49 CFR 673.25(b)(1)(2)(i), (c)(1), and (d)(1); Section IV of the "PVTA Agency Safety Plan"; and Appendix B of SATCo/VATCo's "Electrical Safety Plan," we took the following actions:

- We examined the "PVTA Agency Safety Plan" that was in place during the audit period to ensure that PVTA identified potential safety hazards and identified how to mitigate them. We followed up with PVTA on any inconsistencies when it did not identify potential safety hazards for BEBs.
- We reviewed the minutes of all 18 of PVTA's Safety Committee meetings that were held during the audit period to ensure that PVTA identified potential safety hazards related to BEBs in these meetings.
- We also reviewed minutes for the four PVTA Safety Committee meetings that were held between January 5, 2022 and May 4, 2022 (before the audit period) to determine whether PVTA identified potential safety hazards related to BEBs that would require safety risk assessments and hazard mitigation plans during the audit period.
- We requested evidence of all risk assessment matrices completed during the audit period so that we could determine the potential safety hazards associated with BEBs.
- We requested evidence that all Hazard Mitigation Action Worksheets were completed during the audit period so that we could determine whether PVTA identified and mitigated the potential safety hazards associated with BEBs.
- We inspected training attendance logs and completion certificates for all 19 qualified maintenance employees to determine whether they completed the training required for qualified maintenance employees according to SATCo/VATCo's "Electrical Safety Plan." Specifically, we tested whether each contracted employee completed training for CPR, first aid, bloodborne pathogens, the National Fire Protection Association's 70E (Standard for Electrical Safety in the Workplace), Proterra BEBs, and New Flyer BEBs, in accordance with SATCo/VATCo's "Electrical Safety Plan."

For this objective, we found certain issues during our testing—namely, that PVTA did not ensure that its contracted operating companies established and implemented sufficient policies and procedures to identify and mitigate potential causes of electrical fires in its BEBs in accordance with 49 CFR 673.25(b)(1)(2)(i), (c)(1), and (d)(1) and Section IV of the "PVTA Agency Safety Plan." See Finding 1 for more information.

Additionally, we found that PVTA did not provide safety training to all employees and vendors who performed preventative maintenance on BEBs in accordance with SATCo/VATCo's "Electrical Safety Plan." See Finding 2 for more information.

Preventative Maintenance of BEBs

To determine whether PVTA ensured that its two contracted operating companies performed preventative maintenance on its BEBs in accordance with Section B of SATCo/VATCo's "Vehicle Maintenance Plan" and Section 1 of UMTS's "Vehicle Maintenance Plan," we took the following actions: First, we inspected hardcopy preventative maintenance work orders and checklists for all 76 preventative maintenance procedures performed on BEBs during the audit period. We calculated the difference between the recorded mileage on each BEB's consecutive preventative maintenance checklists to determine whether preventative maintenance was performed within 600 miles above or below the 6,000-mile maintenance schedule. We also examined all preventative maintenance checklists to ensure that the maintenance employee assigned to perform this work completed all required work listed in the preventative maintenance schedule.

For this objective, we found certain issues during testing—namely, that PVTA did not ensure that preventative maintenance procedures were performed on BEBs in accordance with Section B of SATCo/VATCo's "Vehicle Maintenance Plan" and Section 1 of UMTS's "Vehicle Maintenance Plan." See Finding 3 for more information.

Data Reliability Assessment

We sought to gain an understanding of software controls and data management processes to determine the reliability of the BEB preventative maintenance data held by PVTA's contracted operating companies. This information was kept in their enterprise asset management (EAM) software. To do this, we conducted interviews and system walkthroughs with PVTA management and the contracted operating companies' employees who were knowledgeable about the data and responsible for its oversight. We tested selected information system controls (access controls and security management). Through this testing, we found that neither PVTA nor its contracted operating companies had established adequate internal controls over the EAM software, which we discussed with PVTA management.

From SATCo/VATCo's EAM software, we obtained a list of all 64 BEB preventative maintenance checklists from the audit period. We reviewed the parameters that SATCo/VATCo used to generate this list from its EAM software to ensure that the list included only BEB preventative maintenance checklists that were completed during the audit period. We also checked the list for duplicate records and dates outside the audit period. We randomly selected 10 hardcopy preventative maintenance checklists and compared the

information in them—including BEB numbers, mileage, and work order dates—to the corresponding information on the list of preventative maintenance checklists to determine the completeness of the list. We also selected 10 records from the list of preventative maintenance checklists and compared the information in them—including BEB numbers, mileage, and work order dates—to the corresponding information on the hardcopy checklists to determine the accuracy of the list.

From UMTS's EAM software, we obtained a list of all 12 BEB preventative maintenance checklists that were completed during the audit period. We reviewed the parameters that UMTS used to generate this list from its EAM software to ensure that the list included only BEB preventative maintenance checklists that were completed during the audit period. We also checked the list for duplicate records and dates outside the audit period. We randomly selected six hardcopy preventative maintenance checklists and compared the information on them—including BEB numbers, mileage, and work order dates—to the corresponding information on the list of preventative maintenance checklists to determine the completeness of the list. We also selected six records from the list of preventative maintenance checklists and compared the information in them—including BEB numbers, mileage, and work order dates—to the corresponding information on the hardcopy checklists to determine the accuracy of the list.

Based on the results of the data reliability assessment procedures described above, we determined that the information we obtained during our audit was sufficiently reliable for the purposes of our audit.

DETAILED AUDIT FINDINGS WITH AUDITEE'S RESPONSE

1. The Pioneer Valley Transit Authority should identify and mitigate potential safety hazards related to its battery electric buses to prevent future damage to vehicles and/or serious injury to employees and members of the public.

The Pioneer Valley Transit Authority's (PVTA's) "PVTA Agency Safety Plan" did not identify potential safety hazards and ways to mitigate them, specifically electrical fire hazards, within PVTA's fleet of battery electric buses (BEBs). In addition, PVTA could not demonstrate that its contracted operating companies completed Hazard Mitigation Action Worksheets to address the potential safety hazards specific to battery and electrical fires, which differ from fires associated with traditional gasoline or diesel vehicles.

If the "PVTA Agency Safety Plan" does not identify potential safety hazards or how to mitigate them, PVTA may end up storing its BEBs in close proximity to its buses, which could increase the likelihood of fire spreading to PVTA's whole bus fleet. According to the National Fire Protection Association and the Federal Transit Administration (FTA), electrical fires involving batteries can burn for extended periods and can potentially reignite up to 22 hours after the initial incident.

If PVTA does not identify causes of potential battery and electrical fires and does not put measures in place to mitigate the occurrence of fires, then PVTA assumes a higher risk of adverse situations, including prolonged fires, damage to vehicles and facilities, service disruptions, and injury to employees and members of the public.

Authoritative Guidance

Section 673.25 of Title 49 of the Code of Federal Regulations (CFR) states,

> *(b)* ***Hazard identification.***
>
> *(1) A transit agency must establish methods or processes to identify hazards and potential consequences of the hazards.*
>
> *(2) A transit agency must consider, as a source for hazard identification . . . Data and information provided by an oversight authority, including but not limited to FTA, the State, or as applicable, the State Safety Oversight Agency having jurisdiction. . . .*
>
> *(c)* ***Safety risk assessment.***
>
> *(1) A transit agency must establish methods or processes to assess the safety risk associated with identified hazards.*

Section IV of the "PVTA Agency Safety Plan" states, "PVTA will fully use all available data and sources to identify current and potential hazards. These sources are incorporated in any Risk Assessment Matrix (RAM) analysis."

Reasons for Issue

PVTA officials indicated that limited resources and staffing hindered PVTA's capacity to fully recognize and address potential safety hazards related to BEBs. The officials further suggested that the PVTA Safety Committee monitors emerging safety trends to evaluate and manage all safety hazards.

Additionally, PVTA did not demonstrate that it maintained effective controls during the audit period to ensure that its contracted operating companies completed the required risk assessment matrices for BEB-specific hazards.

Recommendations

1. PVTA should update the "PVTA Agency Safety Plan" to incorporate risks and strategies for hazard mitigation for BEBs, specifically for battery and electrical fires.
2. PVTA should implement controls to identify and mitigate potential causes of electrical fires in its fleet of BEBs.
3. PVTA must ensure that its contracted operating companies assess the risks related to BEBs in order to comply with Section IV of the "PVTA Agency Safety Plan."

Auditee's Response

PVTA strongly disagrees with the statements included in this section.

PVTA officials did not make such a statement. As shown below . . . PVTA has resources and staff to recognize and address potential safety hazards related to the BEBs.

The PVTA's Public Transit Agency Safety Plan (PTASP) is a policy document. The intent of the Plan is to establish a venue for safety issues to be discussed and addressed. PVTA has oversight controls in place to ensure contracted operating companies meet all safety requirements including those associated with BEBs specific hazards. The PTASP was not intended to be a document to capture every safety procedure in every department or contractor across the Authority, rather it is a blueprint to guide establishment procedures for each operating company to follow in establishing training and oversight practices.

PVTA has recognized BEBs potential safety hazards, not only to the facilities but to the staff as well as to the passengers. PVTA has worked diligently to ensure compliance with regulations and at the same time secure funding to conduct the required studies to identify and to mitigate any risks

associated with the phased transition of BEBs into PVTA transit operations. As such PVTA has taken several approaches to address these hazards included but not limited to the following:

Operations and Maintenance [(O&M)] Facilities

Facility design phase actions were taken to provide for a safe and code-compliant BEB charger installation. A review of each of the transit facilities was done prior to the installation of the initial set of chargers. The operating contractors from each site have been involved in each step of design and planning to ensure all levels of the organization are in sync with PVTA's plan and approach. . . .

Springfield O&M Facility at Cottage Street.

- *Provided a facility-wide electrification design study and code compliance review.*
- *Met with the municipality's Chief Fire Marshall to discuss appropriate fire suppression modification and sprinkler density for BEB areas; the fire department's plan of attack in the case of a BEB fire; and the need for installing smoke vents to the facility.*
- *Met with the Building Department and Electrical Inspector to discuss and confirm sprinkler density design parameters for BEB storage and maintenance areas; discuss emergency shut-offs for the building in case of a bus fire; discuss installation of emergency stops for electric bus dispensers; as well as the design for the incoming new electrical service.*
- *Designed a sprinkler system providing 0.7 [gallons per minute (gpm)/square foot (sf)], utilizing . . . sprinkler heads for Cottage Street BEB storage & maintenance areas—exceeding the current building code minimum for indoor parking, which is 0.20 gpm/sf. Northampton's system is being updated to 0.7 gpms/sf with the 2026–27 FTA Bus & Bus Facilities Grant (design is underway).*
- *Provided additional smoke hatches in the bus storage area, which is above and beyond what is required in the building code.*
- *Ensured that all charging equipment was rated for a wet area.*
- *Interconnected charging system power sources with building fire alarm system. Specified general power de-energization of newly constructed BEB charging areas if sprinkler systems are activated (with the exception of life safety systems and emergency lighting).*
- *Designed proper clearances between stored buses and clear paths for efficient bus exiting from the facility in the case of a bus fire based on designer best practices review.*
- *Provided the Fire Department with the ability to manually disconnect the charging systems power supply from a single coordinated location on site when deployed for a fire alarm as requested.*

PVTA's Cottage St. designer reviewed the above approach with FM Global. Hydraulic calculations were performed side-by-side, comparing PVTA's designer's sprinkler approach to FM Global's recommendations. PVTA's designer's approach exceeded the FM Global guidelines and FM Global is in concurrence with PVTA's sprinkler design.

Northampton O&M Facility . . .

Code Red Consultants [was subcontracted] to do the Code Compliance study to inform the design. The Code Compliance study included a fire flow test to verify that the fire protection/sprinkler systems met [National Fire Protection Association] code requirements. Ensured that all charging equipment was rated for a wet area. Installed e-stops at each dispenser, and a power disconnect at each charger.

A 100% electrification design study was not conducted for Northampton. The Northampton facility parcel is too small to support 100% electrification. However, an electrification design study is currently being done as PVTA explores the expansion/relocation of this operation.

[University of Massachusetts (UMass)] O&M Facility . . .

Code Red Consultants [was subcontracted] to do the Code Compliance study to inform the design. The Code Compliance study included a fire flow test to verify that the fire protection/sprinkler systems met [National Fire Protection Association] code requirements. Ensured that all charging equipment was rated for a wet area. Installed e-stops at each dispenser, and a power disconnect at each charger.

A 100% electrification design study was not conducted for UMass. The UMass facility parcel is too small to support 100% electrification.

Since PVTA was only installing two charging dispensers at each facility (Northampton and UMass) there was no funding for upgrading from the code required 0.20 gpm/sf to the best practice 0.70 level. PVTA immediately programmed a capital improvement project for Northampton to upgrade the sprinkler system with the next charger installation (currently in design as part of the Bus and Bus Facility grant awarded to PVTA in November 2025).

Please note, in addition, the BEB diagnostic and charging systems that come with the buses/chargers also have the ability to manage potential fire risk by continuously monitoring cell and module temperatures, voltage and current, state of charge and charge rate and cooling system performance. When limits are exceeded, the system can reduce charging power, shut down charging entirely, isolate parts of the battery and trigger alarms or fault codes. These systems are currently operational at each site.

Lastly, PVTA is finalizing the solicitation package for a BEB charging management software, a digital solution designed to manage, monitor, and optimize the operations of BEBs charging stations, as part of the core functionalities of the charging management software, it will include, among other functionalities, a monitoring and control module that will enable real-time oversight of charging stations—tracking status, performance, and energy use—to quickly resolve issues and maintain network efficiency.

Operators, Utility Workers and Maintenance Technicians

All employees receive basic electrical safety awareness training covering the topics below at initial hire and annually as refresher training. The goal is to ensure all employees appreciate the hazards

in the workplace, recognize trouble signs, understand basic emergency actions, and do not inadvertently interfere with the safety programs. . . .

In addition . . . as part of the Bus Operator Training Program, bus operators are trained in the procedures to follow in the event there is dashboard warning light on the BEBs and the steps to follow to notify the dispatcher of any issue that might develop during electric vehicle route operations.

Passengers

To mitigate on the road hazards, during the summer of 2023 PVTA visited the fire departments of the PVTA member municipalities to conduct an orientation to the PVTA fleet and to provide the manufacturer's First Responder Literature for all types of vehicles specifically the electric fleet. All training information was placed on a shared link Folder titled PVTA Emergency Response – Bus. This link was provided to the various fire department contacts to distribute to their respective firefighters.

Posters were created that show the identifying decals for diesel, hybrid electric and electric buses. The posters also included high level information from the Emergency Response Guide. The visit included bringing two buses, an electric and diesel. Each firefighter was given a tour of the vehicles identifying the major components, including the electric components and shut down locations.

In addition to the hands-on training provided above, PVTA has provided evacuation and shutdown procedures training to first respondents in the Pioneer Valley Region. Each of the 4-hour training courses were conducted by a manufacturer (New Flyer) employee, including a facility tour, traditional classroom sessions, and practical review with a New Flyer BEB. This training consisted of incident procedures for thermal events for both buses on route as well at a structure; incident response procedures for collisions (front, side and rear); incident response submersion and incident response battery spill.

Emergency evacuation requirements are dictated by FTA, [the National Highway Traffic Safety Administration] and other compliance agencies. Evacuation is about moving all persons out and away from the vehicle, not whether passengers can remain in a bus if a fire occurs. What or how the bus is powered is immaterial. Door, portal or other egress engineering requirements dictate passenger safety requirements; they are universal regardless of the propulsion type. . . .

Regarding the Safety Committee, the finding appears to suggest that as part of the Public Transit Agency Safety Plan (PTASP), the Safety Committee would have direct, day-to-day oversight of specific Battery Electric Bus–related processes and procedures. While all safety matters fall within the purview of the Safety Committee, it is important to clearly distinguish the respective roles and requirements of the Public Transportation Agency Safety Plan (PTASP) and the Safety Committee as established under 49 CFR Part 673.

49 CFR Part 673 establishes a regulatory framework for system-level safety oversight, including the identification of risk-reduction measures in federally mandated focus areas and ensuring that safety concerns raised by frontline employees are communicated to the agency's chief executive*. A Safety Committee established under PTASP is a federally mandated body with specific requirements for joint labor-management representation.*

By design, the PTASP Safety Committee is a joint labor-management committee focused on:

1. *Identifying and recommending risk-based mitigations or strategies to reduce the likelihood and severity of consequences identified through the agency's safety risk assessments.*

2. *Identifying mitigations or strategies that are ineffective, inappropriate, or not implemented as intended; and*

3. *Identifying safety deficiencies to support continuous improvement.*

These issues may be identified directly by Safety Committee members, but they are also informed by ongoing oversight of activities conducted by PVTA staff and individual operators. Because the Safety Committee is composed of an equal number of management and frontline employees—who, due to the nature of their operational responsibilities, may not be readily available on short notice, it is necessary for PVTA staff and operations management to assume responsibility for routine, day-to-day oversight.

In addition, 49 CFR Part 673 requires the Safety Committee to develop a Safety Risk Reduction Program and to establish annual Safety Performance Targets. . . .

Safety Risk Reduction Program: *Large urbanized area providers must include a safety risk reduction program for transit operations to improve safety performance by reducing the number and rates of safety events, injuries, and assaults on transit workers. The safety risk reduction program must, at a minimum:*

- *Address the reduction and mitigation of vehicular and pedestrian safety events involving transit vehicles that include safety risk mitigation;*

- *Address the reduction and mitigation of assaults on transit workers that includes safety risk mitigations;*

- *Include the safety performance targets set by the Safety Committee for the safety risk reduction program performance measures established in the National Public Transportation Safety Plan. These targets must be set—*

  - *Based on a three-year rolling average of the data submitted by the large urbanized area provider to the National Transit Database (NTD);*

  - *For all modes of public transportation; and*

  - *Based on the level of detail the large urbanized area provider is required to report to the NTD. The Safety Committee is not required to set a target for a performance measure until the large urbanized area provider has been required to report three years of data to the NTD corresponding to such performance measure.*

- *When the Safety Committee, as part of the transit agency's safety risk reductions program, identifies and recommends safety risk mitigations based on a safety risk assessment, the transit agency must include or incorporate by reference these mitigations in the [agency safety plan], and the Accountable Executive must implement these mitigations.*

Source: FY2025 Contractor Manual – Public Transportation Agency Safety Plan 22-18

As part of PVTA mandated FTA oversight requirements, PVTA has contractor oversight procedures that include comprehensive safety, operational, and maintenance monitoring activities. Key oversight tasks include regular vehicle inspections, operator training certifications, key performance indicators review and analysis, reporting of customer feedback, reporting of incidents and accidents and, compliance with PVTAs PTASP and Safety Management Systems (SMS).

Early in the transition to an alternative fuel fleet, PVTA worked with staff, contracted operators and consultants to execute the tasks needed to identify and address the risks associated with transitioning the fleet to BEBs. These actions and the resulting activities and reports are mentioned earlier in this memorandum.

Auditor's Reply

We acknowledge the improvements PVTA made to its facilities and the updates it made to the "PVTA Agency Safety Plan" in 2025, including the Safety Risk Reduction Program, aimed at minimizing potential risks. However, it is important to note that these initiatives were not in place during the audit period and in some cases, were not implemented until after a thermal event occurred inside PVTA's garage in March 2025. Additionally, we note that PVTA first purchased BEBs in December 2016.

During our audit exit conference on February 5, 2026, PVTA officials indicated that they would need to hire more people to recognize and address trends related to the identification of safety hazards in BEBs. We believe that an important component of any Safety Risk Reduction Program is hazard identification. Although PVTA has developed policies and procedures regarding hazard identification in its Safety Risk Reduction Program, we requested and were not provided with any evidence that safety hazards related to BEBs were identified by PVTA or its contracted operating companies.

In its response, PVTA indicated that safety hazards could be detected by the Safety Committee or through ongoing oversight activities conducted by its staff members and individual operators. However, during our audit, we requested all risk assessment matrices for the identified BEB electrical safety hazards, but these were not provided. Additionally, we reviewed all Safety Committee meeting minutes from the audit period, and the Safety Committee identified no safety hazards related to BEBs.

While PVTA is working to improve its facilities and the "PVTA Agency Safety Plan," we emphasize the importance of identifying the causes of potential battery and electrical fires and implementing measures to mitigate these risks.

Based on its response, PVTA is taking measures to address our concerns in this area. As part of our post-audit review process, we will follow up on this matter in approximately six months.

2. The Pioneer Valley Transit Authority should ensure that qualified maintenance employees complete electrical safety training before performing preventative maintenance services on battery electric buses to reduce the risk of injury and/or inadvertent damage to battery electric buses.

PVTA could not demonstrate that contracted operating company employees who were considered qualified maintenance employees completed electrical safety training before performing preventative maintenance on BEBs. Specifically, regarding the population of 19 qualified maintenance employees actively employed during the audit period, we found the following:

- Six (32%) out of the 19 qualified maintenance employees did not complete CPR, first aid, and bloodborne pathogen training.
- Eight (42%) out of the 19 qualified maintenance employees did not complete training on the National Fire Protection Association's 70E (Standard for Electrical Safety in the Workplace).
- Two (11%) out of the 19 qualified maintenance employees did not complete vehicle-specific training for Proterra BEBs.
- Three (16%) out of the 19 qualified maintenance employees did not complete vehicle-specific training for New Flyer BEBs.

If PVTA cannot demonstrate that qualified maintenance employees complete required training on BEB maintenance, then there is a higher risk that PVTA may not detect initial warning signs of electrical and other hazards, leading to vehicle damage and potential injuries to employees and members of the public. Maintenance employees who have not completed the required training may face a higher risk of injury when maintaining BEBs and, without completing CPR, first aid, and bloodborne pathogen training, may not be able to assist others who have been injured.

Authoritative Guidance

According to the Springfield Area Transit Company and Valley Area Transit Company's (SATCo/VATCo's) "Electrical Safety Plan,"

> *Qualified workers must have specific training and equipment to work on or near an exposed, energized electrical sources greater than 50 volts.*
>
> *Qualified workers employed by PVTA/SATCo must possess the following training qualifications, as well as training specified by their Department Head based on the task and/or equipment being worked on:*
>
> - *Must have formal [National Fire Protection Association] 70E training within the last 3 years.*

- *Training must be current for all site safety policies. . . .*
- *Must maintain First Aid, CPR, [bloodborne pathogen] Certification . . .*
- *Must have formal training on specified vehicles.*

Reasons for Issue

According to PVTA officials, the employees identified in our finding were not required to take electrical safety training because SATCo/VATCo's "Electrical Safety Plan" only requires electrical safety training when employees work on or are near exposed energized electrical sources that are greater than 50 volts. However, our review of preventative maintenance tasks performed by the 19 employees in our sample found that inspections of high-voltage components (greater than 50 volts) on Proterra and New Flyer BEBs were routine parts of the preventative maintenance schedules that they completed.

Recommendations

1. PVTA should establish monitoring controls over its training program to ensure that qualified maintenance employees who work on BEBs receive required electrical safety training, including CPR, first aid, and bloodborne pathogen training.
2. PVTA should ensure that qualified maintenance employees complete the electrical safety training required by SATCo/VATCo's "Electrical Safety Plan."

Auditee's Response

PVTA disagrees with the statement regarding: "the sample found that inspection of high voltage components on BEBs were routine part of the preventive maintenance completed."

It is important to understand that there are no tasks associated with the scheduled preventive maintenance [(PM)] inspections which expose a technician to energized electrical sources greater than 50 volts. No task in the preventative maintenance schedule of the BEBs creates this condition/hazard thus, the technician conducting the PM inspection is not required to be a qualified electrical worker (QEW) as indicated in the SATCo/VATCo Electrical Safety Plan. The hazards and necessary precautions related to high voltage work were understood by PVTA and its contracted operators when the buses were delivered. PVTA contractors have been maintaining Hybrid-Electric buses for over 15 years. These buses have high voltage systems on board that share many of the same components as a BEB, requiring the same precautions and skills when performing certain maintenance tasks.

The PM inspection procedure is as follows:

1. *Foreman generates the work order and prints the appropriate 6000-mile inspection sheet and assigns it to a technician and a service bay.*

2. *Technician performs the various PM, safety and [Americans with Disabilities Act] compliance inspections listed and annotates any deficiencies on the inspection sheet.*

3. *Mechanic may communicate at various times with the foreman to determine whether defects identified should be corrected immediately or scheduled. For BEBs, defects identified as related to the high voltage, high voltage propulsion, or energy storage systems are scheduled for repair by the foreman. Any Specific work on BEBs, besides the scheduled PM inspection, generate a work order than is assigned to a QEW technician if related to the high voltage, high voltage propulsion, or energy storage systems.*

4. *Once all activities are complete and the mechanic has performed a satisfactory road test, the inspection and work order are returned to the foreman for final review.*

Source: SATCo/VATCo/[University of Massachusetts (UMass)] Maintenance Plans

In November of 2021, New Flyer [provided] Maintenance Orientation training (8hrs) to SATCo, VATCo, and UMASS maintenance teams. The "Maintenance Orientation" training covered basic maintenance needs as well as high voltage safety and awareness providing sufficient knowledge for the visual inspections and routine maintenance associated with BEB PMs. To date, the only work requiring a Qualified Worker is repair maintenance. PVTA follows its Electrical Safety Plan when conducting repair maintenance.

Training is offered to all mechanics to transition them into QEWs as the alternative fuel vehicle program is developed regardless of whomever is eventually designated as the "Qualified Electrical Worker" within the department. However, contract operators cannot force an existing mechanic to train to be a QEW.

Auditor's Reply

We acknowledge PVTA's position that scheduled preventative maintenance inspections do not expose technicians to energized electrical sources greater than 50 volts. However, we respectfully disagree. Preventative maintenance schedules for BEBs include routine inspections of energized high-voltage components such as a 620-volt lithium-ion battery, a 230-volt HVAC unit, and cables and their connections, and technicians must be in close proximity to these components to conduct said inspections. Therefore, we believe that preventative maintenance technicians who are near high-voltage electrical components qualify as "qualified workers," as defined in the "PVTA Agency Safety Plan." We emphasize the importance of PVTA ensuring that qualified maintenance employees complete the required BEB maintenance training, which will help them detect initial warning signs of electrical and other hazards that can lead to vehicle damage and/or potential injuries to employees and members of the public.

As part of our post-audit review process, we will follow up on this matter in approximately six months.

3. The Pioneer Valley Transit Authority should ensure that preventative maintenance is always performed on battery electric buses at required intervals to reduce the risk of severe injuries to employees and members of the public, as well as potential damage to the battery electric buses.

PVTA could not demonstrate that preventative maintenance was always performed at the required intervals of 6,000 miles or within the allowable range of 600 miles above or below the mileage schedule. Specifically, we found that 5 (7%) out of a total of 76 preventative maintenance procedures that were completed during the audit period were not done in accordance with this schedule. We found that PVTA's preventative maintenance procedure completion intervals were up to 6,070 miles behind schedule.

If PVTA cannot demonstrate that preventative maintenance is conducted in accordance with its contracted operating companies' vehicle maintenance plans, then PVTA assumes a higher risk of damage to the electrical components of its BEBs. This could lead to traffic accidents—and avoidable damage to or loss of vehicles—and may result in severe injuries to employees and members of the public.

Authoritative Guidance

According to SATCo/VATCo's "Vehicle Maintenance Plan,"

> *All PVTA vehicles are subject to a comprehensive scheduled preventive maintenance (PM) program and safety inspection at regular mileage intervals. . . .*
>
> ***PVTA Heavy Duty Fixed Bus Route**—These vehicles have a preventative maintenance schedule interval of 6,000 miles with a goal of performing each inspection within +/- 10% of the established interval.*

According to the University of Massachusetts Transit Services' "Vehicle Maintenance Plan," "Preventative maintenance service at 6,000-mile intervals on all PVTA buses . . . completing these inspections every 6,000 miles (within 10%) ensures all components remain fully functional for the life of the vehicles."

Reasons for Issue

According to PVTA officials, FTA set an 80% threshold for PVTA to comply with its contracted operating companies' vehicle maintenance plans during an FTA review of PVTA's operations, and PVTA met that threshold during that FTA review. PVTA officials also indicated that, during the audit period, because there was only one mechanic in the garage, if one or two preventative maintenance services were not completed within the allowable timeframe, then PVTA was not alarmed by the unmet mileage schedule.

Recommendation

PVTA should establish monitoring controls over its preventative maintenance process to ensure that preventative maintenance services are conducted at 6,000 miles, or within the allowable range of 600 miles above or below the mileage schedule.

Auditee's Response

> *PVTA officials did not make the statement: "then, PVTA was not alarmed by the unmet mileage schedule". . . .*
>
> *[Preventative maintenance (PM)] inspections out of the +/- 10% specified interval were due to unforeseen and documented operational challenges. However, at no time were any of the PM inspections conducted outside of the FTA required operational target of 80% PMs on time as documented by FTA during PVTA's FY2025 Triennial Review Final Report (review period 2022-2025).*

Auditor's Reply

We acknowledge PVTA's efforts to ensure that inspections fell within the 80% threshold established by FTA. However, it is important to note that the SATCo/VATCo and University of Massachusetts Transit Services vehicle maintenance plans require that all buses in PVTA's fleet undergo preventative maintenance every 6,000 miles or within the allowable range of 600 miles above or below. PVTA's contractors are held to a higher standard than the one set by FTA, and our audit found that they have not met that higher standard. PVTA established this higher standard and should hold its contractors responsible for meeting it. We note that FTA's 80% target included PVTA's entire fleet within a month, but our audit focused solely on PVTA's BEBs during the audit period, which may have skewed the comparison.

During our audit exit conference on February 5, 2026, PVTA officials indicated that the unmet mileage schedule was not a cause for concern, and that a missed preventative maintenance service was not alarming because PVTA remained within the acceptable 80% threshold. If PVTA has a different perspective than what our team believes was communicated to it, we look forward to reassessing this matter as part of our post-audit review process in approximately six months.