

# **UNITED STATES DEPARTMENT OF TRANSPORTATION**

## **Federal Transit Administration**

**[Special Directive No. 25-1, Notice No. 1]**

### **Special Directive Under 49 U.S.C. § 5329 and 49 CFR Part 670 to the Southeastern Pennsylvania Transportation Authority to Address Overhead Catenary System Safety & Program Deficiencies**

**AGENCY:** Federal Transit Administration (FTA), U.S. Department of Transportation (DOT).

**SUMMARY:** FTA issues Special Directive (SD) 25-1 to require the Southeastern Pennsylvania Transportation Authority (SEPTA) to take immediate action to address critical safety deficiencies in its overhead catenary system (OCS). FTA is issuing this Special Directive because FTA has determined that a combination of unsafe conditions and practices exists such that there is a substantial risk of death or personal injury.

This Special Directive identifies two findings related to SEPTA's OCS program. FTA is directing SEPTA to take six required actions to address these findings.

**FOR FURTHER INFORMATION CONTACT:** For program matters, Mr. Joseph DeLorenzo, Associate Administrator for Transit Safety and Oversight and Chief Safety Officer, telephone 202-366-1783 or joseph.delorenzo@dot.gov; for legal matters, Mr. Alexander Lipow, Attorney Advisor, FTA, telephone 202- 366-4011 or alexander.lipow@dot.gov.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

FTA administers a national public transportation safety program to advance safe and reliable transit service throughout the United States. FTA conducts safety investigations, assesses transit agency safety management practices, and issues Special Directives when, among other things, it identifies unsafe conditions or practices that present a substantial risk of death or personal injury.

SEPTA is a regional public transportation authority created by the Commonwealth of Pennsylvania that, among other things, operates multiple electrified trolley lines that rely on an OCS and associated infrastructure to provide traction power throughout city and suburban environments in the greater Philadelphia, Pennsylvania area. The condition and performance of the OCS directly affect the safety of passengers, employees, and equipment.

Since late September 2025, SEPTA has experienced a series of serious OCS-related safety events that highlight weaknesses in SEPTA's ability to identify and manage safety risk related to infrastructure condition. On September 25, 2025, a pantograph separation on the Media-Sharon Hill (D1/D2) Line caused OCS components to penetrate a trolley roof, injuring eleven passengers. On October 14, 2025, a dewirement and hardware failure on the Subway-Surface Line stalled four trains, requiring approximately 155 passengers to be evacuated under

emergency conditions. On October 15, 2025, a second pantograph-related event occurred on the D1/D2 Line, again requiring passenger evacuation. On October 22, 2025, a broken OCS clip caused de-energization of the Subway-Surface Line and evacuation of about 300 passengers. On November 4, 2025, a trolley on the T5 Line experienced a trolley pole failure related to the OCS, which resulted in a small fire on the pole rope, requiring four passengers to be evacuated. These events are cause for serious concern about the condition of SEPTA's OCS and the effectiveness of SEPTA's inspection and maintenance activities.

During follow-up reviews and on-site inspections, FTA found that SEPTA's procedures, documentation, and technical practices for maintaining its OCS lack the structure of a formal inspection and maintenance program. Indeed, SEPTA does not have clear, standards-based inspection requirements; does not consistently maintain technical specifications for OCS components; and frequently relies on visual judgment rather than measurable tolerances. Inspection tools are not always calibrated or supported by documented calibration records, and the absence of standardized terminology and quality assurance and quality control (QA/QC) processes hampers defect detection and prioritization efforts.

On October 31, 2025, following these safety events and FTA's initial review of SEPTA's inspection practices, FTA issued a letter requiring SEPTA to conduct an immediate inspection of its entire trolley OCS network, promptly repair critical and major defects, implement interim safety mitigations, and document inspection results using qualified personnel and calibrated tools. The letter also directed SEPTA to begin developing a formal OCS inspection and maintenance program with defined engineering tolerances, inspection frequencies, and acceptance criteria and to begin integrating it into its Safety Management System.

SEPTA submitted its inspection results on November 7, 2025, followed by supplemental explanations on November 14. FTA found notable deficiencies in the submitted material, including inconsistent documentation, subjective defect classifications, missing measurement data, and a lack of calibration records for inspection tools. Further, FTA's investigation into these events identified SEPTA's failure to communicate engineering changes affecting the safety and performance of the interface between trolleys and overhead contact wire to its State Safety Oversight Agency (SSOA), the Pennsylvania Department of Transportation (PennDOT).

Based on the recent safety events, SEPTA's responses, and material SEPTA recently submitted, FTA has determined that unsafe conditions and practices exist such that there is a substantial risk of death or personal injury. FTA is issuing Special Directive 25-1 to ensure SEPTA timely corrects defects, develops a formal OCS inspection and maintenance program, and implements necessary safety controls.

### **Finding 1. SEPTA Has Not Addressed Serious Defects Identified During Its Urgent OCS Inspection (Conducted Between October 31, 2025 and November 7, 2025)**

SEPTA's November 7, 2025 OCS inspection submission, along with the supplemental information provided on November 14, demonstrate serious defects remain within SEPTA's rail transit OCS.

In all, SEPTA identified more than 200 defects across its OCS and associated infrastructure. The agency classified each of these conditions as “non-critical” and committed to their repair within 30 days. These defects include cracked or worn frogs; broken or deteriorated crossings; worn, shaved, or broken clips; deteriorated feeder spans and cables; worn contact wire segments approaching minimum wear limits; damaged or corroded metal crossarms; and various defects involving section insulators, worn shoes, arcing tips, fiber runners, and terminal lugs. Several locations contain multiple defects in close proximity with no immediate action taken.

Due to deficiencies with SEPTA’s OCS inspection and maintenance program, as discussed in Finding 2 below, FTA requires urgent action to address the results of the FTA-mandated inspection. Therefore, FTA requires all defects identified in the November 7, 2025 report to be repaired no later than close of business on December 7, 2025 and for SEPTA to provide verified evidence of completion and adequacy of repair.

### **Finding 2. SEPTA Does Not Have a Formal OCS Inspection and Maintenance Program**

Based on its investigation and review of SEPTA’s submissions, as noted in FTA’s October 31, 2025 letter, FTA finds SEPTA does not have a formal, standards-based inspection and maintenance program for its OCS to ensure the safe condition and performance of OCS assets.

The results of SEPTA’s November 7, 2025 urgent inspection show SEPTA relied heavily on visual assessments and inconsistent inspection methods, rather than measurement-based evaluations, to determine component condition. In a follow-on information request, SEPTA was unable to provide technical specifications or engineering criteria to support its assessments of whether contact wire, frogs, or insulators remained within safe operating limits. SEPTA also lacked calibration records for key inspection equipment, including micrometers, meggers, and tension meters, raising additional concerns regarding the reliability of its defect classifications.

SEPTA’s inspection documentation was incomplete and inconsistent. Several line segments lack wire height or wire wear measurements. SEPTA also indicated inspection methods differed by line, using a catenary maintenance car, bucket truck, or hi-rail platform, but did not demonstrate these approaches ensured full asset coverage or consistent defect identification. Incomplete or missing original field inspection sheets further prevent a full reconstruction of what was inspected and to what standard.

SEPTA’s reliance on a broad array of non-standardized terminology—such as “Requires Attention,” “Needs Attention,” “Bad,” “Worn,” “Good,” and “OK”—without formal definitions, acceptance criteria, or engineering tolerances further limits the reliability of defect severity assessments. Furthermore, SEPTA’s November 14, 2025 explanations revealed several of these terms were applied to components exhibiting cracks, wear, corrosion, or degradation that could affect pantograph-to-wire interaction or increase the risk of dewirement.

FTA’s investigation also found SEPTA does not maintain documented inspection procedures or defined inspection frequencies specifying how OCS inspections are conducted, which components must be inspected, or what measurements are required. SEPTA’s November 14,

2025 submission confirmed inspection practices vary across divisions and rely heavily on subjective judgment rather than written procedures.

As noted in FTA's review of SEPTA's November 7 and 14 submissions, SEPTA lacks engineering tolerances and required measurements for critical OCS components, such as contact wire thickness, wire height, tension values, frogs, crossings, insulators, feeder cables, and structural hardware. Without these tolerances, SEPTA cannot consistently determine whether components remain within safe operating limits. Furthermore, SEPTA does not maintain documented acceptance criteria or return-to-service standards to govern when defects must be repaired, when mitigations are required, or under what conditions electrical service may safely resume after maintenance work.

FTA also finds SEPTA does not maintain calibration procedures or documentation for inspection equipment. Formal calibration records for micrometers, meggers, tension meters, and other tools were not available, preventing SEPTA from demonstrating that measurement tools used during inspections were functioning reliably or within required tolerances.

SEPTA has no monitoring tools or processes to evaluate pantograph-OCS interaction, identify abnormal wear patterns, or assess the effects of weather, operational stress, or environmental conditions on the OCS. The agency also lacks procedures for targeted inspections following storms, safety occurrences, or other significant events.

SEPTA's documentation and recordkeeping practices lack standardization. Inspection materials do not include consistent terminology, traceable location identifiers, required measurements, or supervisory verification, in all cases. SEPTA does not maintain quality assurance processes to confirm accuracy or completeness of inspection records.

FTA finds these deficiencies underscore the need for SEPTA to develop a formal OCS inspection and maintenance program that incorporates all elements identified above to ensure SEPTA's development process and future submissions will be evaluated against a clear and enforceable standard.

#### **DIRECTIVE AND REQUIRED ACTIONS:**

In accordance with 49 U.S.C. § 5329 and 49 CFR Part 670, FTA directs SEPTA to take the following actions:

| <b>Findings</b> |                                                                                                | <b>Tracking #</b> | <b>Required Actions</b>                                                                                                                                                                                                                                                                   |
|-----------------|------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Finding 1       | SEPTA Has Not Addressed Serious Defects Identified During Its Urgent OCS Inspection (Conducted | FTA-25-1-001      | By no later than close of business on December 7, 2025, SEPTA must correct all defects identified in SEPTA's November 7, 2025 urgent inspection report. SEPTA must also submit verification documentation regarding the completeness and adequacy of the repairs to both FTA and PennDOT. |

| Findings  |                                                                     | Tracking #     | Required Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------|---------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | Between October 31, 2025 and November 7, 2025)                      |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Finding 2 | SEPTA Does Not Have a Formal OCS Inspection and Maintenance Program | FTA-25-1-002-1 | <p>SEPTA must immediately establish and execute an enhanced interim OCS inspection program for all trolley lines. SEPTA must continue to execute this interim program until FTA has approved and verified implementation of SEPTA's formal OCS inspection and maintenance program. This enhanced program must include:</p> <ul style="list-style-type: none"> <li>i. Daily visual checks by qualified personnel of active service zones for wire contact, visible sag, or damaged components;</li> <li>ii. Weekly structured inspections using standard checklists to confirm the condition of hangers, insulators, tensioning, and pantograph interfaces;</li> <li>iii. Post-weather inspections following any severe weather, temperature extremes, or high-wind events; and</li> <li>iv. Immediate documentation and reporting of all OCS anomalies, faults, or arcing events to both the SEPTA Safety Department and Rail Operations Control Center, with escalation to senior management.</li> </ul> |
|           |                                                                     | FTA-25-1-002-2 | <p>No later than 5:00 p.m. on December 1, 2025, SEPTA must submit to FTA for review and approval a detailed action plan and implementation schedule for formalizing and fully implementing a risk-based OCS inspection and maintenance program. The plan, which SEPTA must also send to PennDOT, must include:</p> <ul style="list-style-type: none"> <li>i. Documented procedures and schedules for routine inspections of all OCS structural and electrical components;</li> <li>ii. A program for monitoring</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| Findings |  | Tracking #     | Required Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------|--|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |  |                | <p>pantograph-OCS interface performance, including head and carbon-strip condition, alignment geometry, contact force, and wear rates;</p> <p>iii. A documented environmental hazard identification and mitigation process, including thermal sag, vegetation encroachment, debris accumulation, and clearance monitoring;</p> <p>iv. Procedures and drills for rapid isolation and de-energization of traction power during OCS faults or emergencies;</p> <p>v. A preventive and return-to-service inspection program following any safety event, severe weather, or abnormal operating condition;</p> <p>vi. Integration of all elements into SEPTA's SMS, including safety assurance, corrective-action tracking, risk assessment, and performance metrics; and</p> <p>vii. A process for monthly reporting to FTA and PennDOT of OCS inspection results, defect trends, repairs completed, and verification activities.</p> <p>This action plan must specify SEPTA must complete development of the formal OCS inspection and maintenance program (procedures, schedules, monitoring plan) by January 28, 2026. Furthermore, this action plan must clarify that SEPTA will fully implement the program, including the completion of initial inspections under new procedures, the initiation of pantograph-OCS monitoring, and integration into SEPTA's SMS by April 28, 2026.</p> |
|          |  | FTA-25-1-002-3 | By January 28, 2026, as specified in the Action Plan for FTA-25-1-002-2, SEPTA must complete development of the formal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Findings |  | Tracking #     | Required Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------|--|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |  |                | OCS inspection and maintenance program. SEPTA must submit this program to FTA for review and implementation monitoring. SEPTA must also submit this information to PennDOT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|          |  | FTA-25-1-002-4 | By April 28, 2026, SEPTA must fully implement the formal OCS inspection and maintenance program, including conducting inspections under the new procedures, implementing pantograph-OCS monitoring tools, and integrating the program into SEPTA's Safety Management System. FTA retains the right to truncate this timeline if it determines conditions remain unsafe or inspection results warrant accelerated completion.                                                                                                                                                                                                                     |
|          |  | FTA-25-1-002-5 | <p>By December 12, 2025, and no later than the tenth business day and last business day of each month thereafter, SEPTA must submit twice-monthly progress reports to FTA and PennDOT detailing:</p> <ul style="list-style-type: none"> <li>i. Status of immediate inspection and repair activities;</li> <li>ii. Ongoing enhanced inspections and findings;</li> <li>iii. Action plan development progress;</li> <li>iv. Implementation milestones achieved; and</li> <li>v. Defect closure rates and verification outcomes.</li> </ul> <p>FTA will require reporting until it determines in writing that reporting is no longer necessary.</p> |

FTA and PennDOT will receive submissions and monitor SEPTA's progress in resolving each finding and required action. FTA will conduct scheduled meetings with SEPTA to review its progress until such time as FTA determines that these meetings are no longer needed or may be conducted with less frequency. FTA also will conduct onsite inspections and assessments to confirm implementation of required actions.

This Special Directive supersedes the October 31, 2025 letter FTA issued to SEPTA. This Special Directive does not supersede or otherwise change other Special Directives that FTA has issued to SEPTA.

## **PETITIONS FOR RELIEF OR RECONSIDERATION**

As set forth in 49 CFR § 670.27(d), SEPTA has 30 calendar days from the date of this Special Directive to petition for reconsideration with the FTA Administrator. The petition must be in writing, signed by SEPTA's Accountable Executive, and must include a brief explanation of why SEPTA believes the Special Directive should not apply or why compliance is not possible, not practicable, unreasonable, or not in the public interest. The petition may include relevant information regarding the factual basis upon which the Special Directive was issued; information in response to any alleged violation or in mitigation thereof; recommended alternative means of compliance for consideration; and any other information SEPTA deems appropriate.

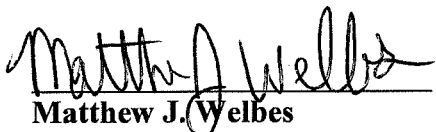
Unless explicitly stayed or modified by the Administrator, this Special Directive remains in effect pending review of any petition.

Within 90 days of receipt of a petition, the Administrator will provide a written response. Relief may be granted only where SEPTA clearly articulates alternative actions that will provide, in the Administrator's judgment, a level of safety equivalent to compliance with this Special Directive, or where SEPTA identifies legal or material facts not in evidence at the time the Special Directive was issued.

## **ENFORCEMENT**

FTA may take enforcement action for any violation of this Special Directive or the terms of any written plan adopted pursuant to this Special Directive in accordance with FTA's authorities under 49 U.S.C. § 5329, including but not limited to (1) directing SEPTA to use Federal financial assistance to correct safety deficiencies; (2) withholding up to 25 percent of financial assistance to SEPTA under 49 U.S.C. § 5307; and (3) issuing restrictions or prohibitions as necessary and appropriate to address unsafe conditions or practices that present a substantial risk of death or personal injury.

Issued on: November 25, 2025

A handwritten signature in black ink, appearing to read "Matthew J. Welbes", is written over a horizontal line.

**Matthew J. Welbes**  
Executive Director  
Federal Transit Administration  
U.S. Department of Transportation