

FTA Safety Advisory 26-01

Office of Transit Safety and Oversight

Subject: Overhead Catenary System (OCS) and Pantograph Reliability – Recommended Actions to Address Emerging Safety Risks in Rail Transit.

Purpose: The Federal Transit Administration (FTA) is issuing Safety Advisory 26-01 to recommend that State Safety Oversight Agencies (SSOAs) direct Rail Transit Agencies (RTAs) within their jurisdiction to use the RTA's Safety Management System (SMS) to identify hazards related to Overhead Catenary System (OCS) and pantograph failures, conduct safety risk assessments, identify safety risk mitigations as necessary, and monitor the effectiveness of those mitigations.

Background: Recent OCS/pantograph-related events have highlighted emerging systemic risks across rail transit systems. On November 4, 2025, FTA issued a formal letter to all SSOAs, warning that deferred maintenance on aging infrastructure was causing serious weaknesses in OCS safety and reliability. The letter emphasized that these structural failures have led to energized wires contacting passenger vehicles, pantograph entanglements, and downed live wires—resulting in injuries, emergency evacuations, and severe service disruptions. FTA has analyzed these events together because they share common causes and potential solutions.[1]

Building upon those warnings, FTA's analysis of ten subsequent events from December 2025 through March 2026 shows recurring patterns rather than isolated failures. These include:

- Pantograph failures that begin with undetected early wear or small warning signs (e.g., sparks, noises, or uneven contact), allowing trains to continue in service until the failure becomes severe.
- OCS hardware failures (e.g., rust, corrosion, temperature-related sagging, loose fasteners, or failed insulators).
- External interference at stations and grade crossings (e.g., stuck gate arms or debris).
- Routine inspections that appeared satisfactory right before the event, showing that current checks often miss hidden or subtle defects.

Recommended Actions: FTA encourages SSOAs to direct the RTAs under their jurisdiction to:

- Review and analyze safety performance data related to OCS and pantograph events to identify related hazards.
- Conduct a safety risk assessment using the Safety Risk Management process in the RTA's Agency Safety Plan.
- Based on the safety risk assessment, identify new mitigations or modify existing ones as necessary to reduce the associated safety risk.
- Monitor the implemented mitigations as part of the RTA's Safety Assurance process, including monitoring mitigation effectiveness.

FTA recommends that SSOAs obtain any documentation related to the recommended actions from their RTAs and submit it to the State Safety Oversight Reporting (SSOR) system **within 180 days** from the issuance of this Safety Advisory.

Resources: FTA can provide additional data analysis and resources to help SSOAs and RTAs monitor performance, identify hazards, assess risk, and implement effective mitigations.

Contact: Please direct questions or comments regarding this Safety Advisory to Isaiah Garcia, Senior Accident Investigator, Office of Transit Safety and Oversight, FTA, 1200 New Jersey Avenue, SE, Washington, DC 20590, or Isaiah.Garcia@dot.gov

[1] These events were analyzed as part of the 2-hour notification requirements from Rail Transit Agencies (RTAs) to the Transit Operations Center (TOC). FTA investigators logged, analyzed, and conducted follow-up on each event (December 2025–March 2026).