

GAO Highlights

Highlights of [GAO-24-106329](#), a report to congressional committees

Why GAO Did This Study

Across the country, commuter rail brings people to work, school, medical appointments, and recreational activities. Commuter railroads are among the railroads required to implement PTC.

The Infrastructure Investment and Jobs Act includes a provision for GAO to examine commuter rail PTC O&M costs. This report describes (1) the challenges commuter rail agencies reported facing in determining their annual PTC O&M costs for fiscal years 2020–2025, and the extent to which they were able to estimate these costs; and (2) what commuter rail agencies estimated as their PTC O&M costs.

To obtain information on commuter rail agencies' PTC O&M costs, GAO surveyed all 29 public commuter rail agencies required to implement PTC, and 26 responded. Survey questions related to the challenges agencies face trying to estimate PTC costs as well as questions about agencies' existing PTC cost estimates. GAO checked survey responses for reporting errors and conducted follow-up with commuter rail agencies based on their survey responses. GAO developed descriptive statistics for the ranges of costs and compared the costs to the size of the agency and to its total O&M costs.

View [GAO-24-106329](#). For more information, contact Elizabeth Repko at (202) 512-2834 or repkoe@gao.gov.

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COMMUTER RAIL

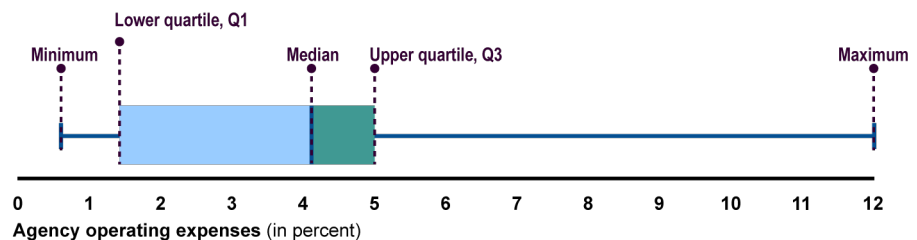
Agencies' Estimates of Operations and Maintenance Costs for Positive Train Control

What GAO Found

Commuter railroads incur costs to implement and operate positive train control (PTC)—a system which can prevent collisions and other types of accidents. However, they are not required to report those costs separately from other operations and maintenance (O&M) costs. Most of the 26 commuter rail agencies that responded to GAO's survey reported that it was challenging to identify prior years' PTC O&M costs, because they are integrated into other O&M costs. Agencies reported that isolating PTC O&M costs is complicated, because (1) PTC technology is overlaid on existing systems and (2) employees' PTC O&M-related tasks are not tracked separately from other tasks, among other reasons. For example, 25 of the 26 commuter rail agencies reported their PTC systems were overlaid on other systems; 12 of these also reported that this made it extremely or very challenging to estimate PTC-specific O&M costs. Moreover, some commuter rail agencies said it can be challenging to project their future PTC O&M costs due to uncertainties such as the timing—and therefore cost—of certain software or hardware upgrades. Despite these challenges, 17 of the 26 agencies were able to provide GAO complete estimates or projections for fiscal years 2022 through 2025 by, for example, reviewing invoices for materials or discussing costs with their Information Technology specialists.

Of the 17 agencies that provided complete estimates, a majority spent 5 percent or less of their total operating costs on PTC O&M in fiscal year 2022. These 17 estimates ranged from less than 1 percent to 12 percent, with a median of about 4 percent (see fig.). In addition, the majority (15 of 17) projected that their PTC O&M costs would increase between fiscal years 2023 and 2025.

Distribution of Estimated Commuter Rail Positive Train Control Operations and Maintenance Costs as Percentage of Total Operating Costs for Fiscal Year 2022



Source: GAO analysis of Federal Transit Administration and survey data. | GAO-24-106329

To understand the relationship between PTC O&M costs and agency size, GAO analyzed ridership and route miles in PTC operation and found that these factors were moderately to strongly associated with fiscal year 2022 PTC O&M costs. Specifically, commuter rail agencies with higher ridership or more route miles in PTC operation tended to have higher PTC O&M costs. However, GAO cannot make conclusions about whether these factors influenced PTC O&M costs, because this study did not control for other factors such as PTC type.