



Freight Rail: Information on Precision-Scheduled Railroading

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Fast Facts

Of the 7 largest U.S. freight railroads, 6 have reported implementing "precision-scheduled railroading" (PSR), a strategy intended to increase efficiency and reduce costs. While there is no one definition of PSR, stakeholders told us this strategy is associated with fewer staff, longer trains, and more.

For example, in 2022, all 7 of these railroads told us they ran longer trains with the goal of increasing efficiency.

Railroad unions and customers identified safety and service concerns from this strategy. The Federal Railroad Administration and Surface Transportation Board are both pursuing ways to monitor and address potential effects.



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Highlights

What GAO Found

Six of the seven largest U.S. freight railroads have reported implementing precision-scheduled railroading (PSR), a strategy intended to increase efficiency and reduce costs. PSR is not defined by a prescribed set of operational changes. However, stakeholders GAO interviewed—including representatives of railroads, employee unions, and shippers—associated the following operational changes with PSR: (1) reductions in staff, (2) longer trains, and (3) reductions in assets such as locomotives. For example, the overall number of staff among the seven largest freight railroads (known as Class I) decreased by about 28 percent from 2011 through 2021. Further, all seven railroads said they have increased the length of trains in recent years.

Freight Rail Train



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Federal Railroad Administration (FRA) officials stated that data from 2011 through 2021 are inconclusive about the extent to which operational changes associated with PSR may have affected rail safety, but have taken steps to address potential risks. Class I railroad representatives generally stated that these operational changes improved or had no effect on railroad safety. In contrast, rail safety inspectors and employee unions identified safety concerns related to reductions in staff and longer trains. In response, FRA has several efforts underway to monitor the effects of such changes. These efforts include analyzing safety data, conducting compliance inspections, and reviewing existing regulations. FRA also has planned efforts to address potential risks, such as employee fatigue and the effects of longer trains. FRA's efforts may offer important insights into additional actions that FRA and railroads could take to address potential safety concerns identified by stakeholders.

Surface Transportation Board (STB) data vary, with periods of improvement and decline. STB officials said that the extent to which PSR-associated changes have affected freight rail service is unclear, but STB has efforts to address service issues. Class I railroad representatives stated that service changes associated with PSR were intended to increase the efficiency and reliability of the railroads. However, freight rail customers GAO interviewed identified concerns such as reduced frequency and reliability of service, and increased fees. For example, rail customers stated that unreliable service can have significant effects, causing production shut downs and higher costs. STB is considering further data collection and has held hearings on service challenges. According to STB officials, these efforts could result in STB decisions establishing new requirements for railroads that may help further address service concerns.

Why GAO Did This Study

The nation's freight railroad network is vital to the functioning of the economy. Several of the largest freight railroads have reported implementing PSR. The first freight railroad began implementing PSR in 1998, followed by others from 2012 through 2019. FRA oversees railroad safety and STB is primarily responsible for the economic regulation of freight rail, with jurisdiction over matters including railroad rates, practices, and services.

GAO was asked to examine the effect of PSR on freight rail safety and service. This report describes (1) stakeholder views on operational changes associated with PSR, and what is known about the extent of those changes, (2) the effects of these operational changes on freight rail safety, and what FRA has done to monitor these effects, and (3) the effects of these operational changes on freight rail service, and what STB has done to monitor these effects.

GAO reviewed data on railroad operations for 2011 through 2021 from the Association of American Railroads and STB. In addition, GAO reviewed FRA and STB documents and data on freight rail safety and service for 2011 through 2022. GAO found these data to be reliable for the purpose of providing contextual information about freight rail operations, safety, and service. GAO interviewed a non-generalizable sample of 28 freight rail industry stakeholders—including representatives of railroads, employee unions, and shippers—selected to achieve a range of perspectives.

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Full Report

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