Division B—Surface Transportation Investment Act
Title II—Rail
Subtitle D—Rail Safety


- Requires the Secretary of Transportation (Secretary), not later than three years after the date of enactment, to evaluate the requirements of the railway-highway crossings program (23 U.S.C. § 130) to determine whether the program provides:
  - sufficient flexibility to address current and emerging grade-crossing safety issues;
  - sufficient incentives and resources to states and local agencies to make changes at grade crossings that are most effective at reducing deaths and injuries; and
  - appropriate tools and resources to support states in using data driven programs to determine the most cost-effective use of funds.

- Requires the Secretary, not later than four years after the date of enactment, to submit a report to Congress on the program, including any recommended statutory changes to improve its effectiveness.

Sec. 22402. Grade Crossing Accident Prediction Model.

- Requires the Administrator of the Federal Railroad Administration (FRA), not later than two years after the date of enactment, to update the grade-crossing accident prediction and severity model used by FRA to analyze accident risk at grade crossings and provide training on the use of the updated model.
Sec. 22403. Periodic Updates to Highway-Rail Crossing Reports and Plans.

- Amends chapter 201 of Title 49 (General Authority) to include new 49 U.S.C. § 20167 to require FRA, not later than four years after the date by which States are required to submit State highway-rail grade crossing action plans under section 11401(b) of the FAST Act (P.L. 114-94) and in consultation with the Federal Highway Administration (FHWA), to submit a report to Congress that summarizes the state highway-rail grade crossing action plans, including:
  - an analysis and evaluation of each state grade-crossing program under 23 U.S.C. § 130, including states’ progress implementing their plans and the specific strategies identified by each state to improve safety at highway-rail grade crossings, including crossings with multiple accidents or incidents;
  - the progress of each state in implementing its state grade crossing action plan;
  - the number of grade-crossing projects undertaken pursuant to 23 U.S.C. § 130, including the distribution of such projects by cost range, road system, nature of treatment, and subsequent accident experience at improved locations;
  - which states are not in compliance with their schedule of projects under 23 U.S.C. § 130(d); and
  - recommendations for future implementation of the grade-crossing program under 23 U.S.C. § 130(d).

Requires FRA, not later than five years after the date of the initial report and in consultation with FHWA, to submit an update to the report to Congress.

- Defines “highway-rail grade crossing” as a location within a state at which:
  - a public highway, road, or street or private roadway crosses one or more railroad tracks, either at grade or grade separated; or
  - a pathway explicitly authorized by a public authority or railroad carrier that is dedicated for the use of nonvehicular traffic, including pedestrians, bicyclists, and others; is not associated with a public highway, road, or street or private roadway; and crosses one or more railroad tracks, either at grade or grade separated.

- Amends 23 U.S.C. § 130(g) (Annual Report) to require states to submit annual reports to FHWA on the progress of implementing the programs authorized under § 130 and the effectiveness of the improvements implemented, including the costs of various treatments employed by the state to implement the grade-crossing program.
Sec. 22404. Blocked Crossing Portal.

▪ Requires FRA to establish a three-year blocked crossing portal to collect information from the public about blocked highway-rail grade crossings. This section requires FRA to use the information to identify frequent and long-duration blocked grade crossings, inform outreach to communities and railroads about blocked crossings, assess the impact of blocked crossings, and produce an annual report on the program. Information received through the portal may not be used to infer or extrapolate the rate or instances of blocked crossings or for any regulatory or enforcement purposes. Nothing in this section invalidates the Secretary’s authority regarding blocked crossings.

▪ Directs FRA, not later than one year after the date of enactment, to submit a report to Congress detailing certain information derived from the portal. The portal requirement sunsets three years after the date of enactment.

Sec. 22405. Data Accessibility.

▪ Requires the Chief Information Officer (CIO) of the U.S. Department of Transportation, not later than 180 days after the date of enactment, to review the website of the FRA Office of Safety Analysis and provide recommendations for improving the website’s usability and accessibility. This section also requires the Secretary, not later than one year after receiving and considering the CIO’s recommendations, to update the website to improve its usability and accessibility.

Sec. 22406. Emergency Lighting.

▪ Requires the Secretary, not later than one year after the date of enactment, to initiate a rulemaking to require all rail carriers providing intercity or commuter rail passenger transportation to develop and implement periodic inspection plans to ensure that passenger equipment offered for revenue service complies with existing emergency lighting regulations (49 C.F.R. part 238), including ensuring that rail cars have adequate emergency lighting available if power is lost for passengers, crewmembers, and first responders to safely move throughout the rail car and evacuate safely.

Sec. 22407. Comprehensive Rail Safety Review of Amtrak.

▪ Requires the Secretary, not later than one year after the date of enactment, to conduct a focused review of, and report to Congress on, Amtrak’s safety-related processes and procedures, compliance with safety regulations and requirements, and overall safety culture. This section also requires Amtrak to create and annually update a plan to address the findings and recommendations of the comprehensive safety assessment and submit the plan and updates to Congress.
Sec. 22408. Completion of Hours of Service and Fatigue Studies.

▪ Directs FRA, not later than 90 days after the date of enactment, to commence the pilot programs required under 49 U.S.C. § 21109(e)(1)(A) and (B) (Regulatory Authority) to analyze practices that could reduce fatigue for train and other railroad employees. This section also requires FRA to consult with both the railroad carriers and representatives of labor organizations representing impacted employees when designing and conducting the pilot programs.

▪ Requires the Secretary to submit a report to Congress if the pilot programs have not commenced on the date that is one year and 120 days after the date of enactment.

Sec. 22409. Positive Train Control Study.

▪ Requires the Government Accountability Office to conduct a study to determine the annual costs to public commuter railroads to operate and maintain positive train control (PTC) systems, and to submit a report to Congress, not later than two years after the date of enactment, that summarizes the study, including the estimated annual PTC operation and maintenance costs for public commuter railroads.

Sec. 22410. Operating Crew Member Training, Qualification, and Certification.

▪ Directs the Secretary, not later than 60 days after the date of enactment, to initiate audits of railroad carriers’ training, qualification, and certification programs for locomotive engineers and conductors. The audits shall:

  o assess whether such programs are in compliance with 49 C.F.R. parts 240 and 242;
  o assess the type and content of training;
  o determine whether the programs provide engineers and conductors the knowledge, skill, and ability to safely operate a locomotive or train;
  o determine whether the programs reflect current operating practices of the railroad carrier;
  o assess the current practice by which railroads utilize simulator training or other technologies to train and qualify engineers and conductors and consider international experience and practice using similar technology; and
  o ensure that engineer and conductor training programs are considered separately, as appropriate, based on the unique requirements and regulations.

▪ Requires the Secretary to schedule the audits of Class I railroads, including Amtrak and other intercity passenger rail providers, at least once every five years, and annually for a select number of other passenger railroads (e.g., commuter railroads) and Class II and Class III railroads.

▪ Requires railroads to update their training, qualification, and certification programs to eliminate any deficiencies identified by the audits.
• Directs the Secretary to consult with the railroad and its employees (including nonprofit employee labor organizations representing the engineers and conductors), in conducting any audit, and those entities must cooperate with the audit. This section also requires the Secretary to notify Congress if any entity is not fully cooperating with an audit.

• Requires the Secretary to determine, triennially, if any updates to 49 C.F.R. parts 240 or 242 are necessary to better prepare locomotive engineers and conductors to safely operate trains, and publish an annual report on the FRA website summarizing the results of its audits and any updates to the regulations. This section requires FRA to exclude any confidential business information of sensitive security information.

Sec. 22411. Transparency and Safety.

• Amends 49 U.S.C. § 20103(d) (Nonemergency Waivers) to revise the Secretary’s authority to issue nonemergency waivers and suspend compliance with rail safety regulations if such waiver or suspension is in the public interest and consistent with railroad safety. The Secretary is required to provide public notice and comment regarding such a waiver or suspension, except for information that is protected by law from public disclosure.

• Directs the Secretary, not later than one year after the date on which a waiver or suspension has been in continuous effect for a six-year period, to review and determine whether a rulemaking consistent with the waiver or suspension is in the public interest and consistent with railroad safety. The Secretary must publish the review and analysis of the waiver if the Secretary decides not to initiate a regulatory update. Last, the Secretary may initiate a rulemaking to incorporate relevant aspects of a waiver or suspension under 49 C.F.R. § 211, subpart E.

Sec. 22412. Research and Development.

• Amends 49 U.S.C. § 20108 (Research, Development, Testing and Training) to provide the Secretary with authority to construct or repair the buildings and facilities of the FRA Transportation Technology Center in Pueblo, Colorado. This section also authorizes the Secretary to collect fees and rents from facility users to offset appropriated amounts for the cost of providing facilities or research, development, testing, training, or other services.

Sec. 22413. Rail Research and Development Center of Excellence.

• Amends 49 U.S.C. § 20108 (Research, Development, Testing and Training) to establish a Center of Excellence (Center) to advance research and development that improves the safety, efficiency, and reliability of passenger rail (including intercity high-speed passenger rail) and freight rail transportation.

• Authorizes an institution of higher education or consortium of non-profit institutions of higher education to be eligible to receive a grant from the Center. This section provides
that the Secretary shall give preference to applicants with strong past performance related to rail research, education, and workforce development activities; consider the extent to which the applicant would involve public- and private-sector passenger and freight railroad operators; and consider the regional and national impacts of the applicant’s proposal.

- Directs that grants be used for basic and applied research, evaluation, education, workforce development, and training efforts relating to safety, project delivery, efficiency, reliability, resiliency, and sustainability of urban commuter, intercity high-speed, and freight rail, including research on advances in rolling stock, advanced PTC, human factors, inspection technology, and remote sensing.

- Provides a federal share of 50 percent of the cost of establishing and operating the Center and related research activities.

**Sec. 22414. Quarterly Report on Positive Train Control System Performance.**

- Amends 49 U.S.C. § 20157 (Implementation of PTC Systems) to direct each host railroad required to implement PTC to submit a quarterly report on PTC performance to the Secretary, including:
  - the number of PTC system initialization failures, cut outs, and system malfunctions;
  - the number of enforcements by PTC system;
  - the number of train miles governed by PTC system; and
  - a summary of actions the host railroad and its tenant railroads are taking to reduce the frequency and rate of initialization failures, cut outs, and system malfunctions.

Directs each tenant railroad that operates on a host railroad’s PTC-governed main line submit this required information to each applicable host railroad on a continuous basis.

- Directs the Secretary, beginning three years after the date of enactment, to reduce the frequency of reporting to not less than twice per year, unless the Secretary determines that quarterly reporting is in the public interest.

**Sec. 22415. Speed Limit Action Plans.**

- Codifies §11406 (Speed Limit Action Plans) of the FAST Act as new 49 U.S.C. § 20169, requiring each railroad carrier providing intercity or commuter rail passenger transportation to survey its system and identify each main track location where there is a reduction of more than 20 miles per hour from the approach speed to a curve, bridge, or tunnel.

- The codified section also requires railroad carriers, not later than 120 days after the date the survey is complete, to submit to the Secretary a speed limit action plan and for carriers to annually review their action plans to ensure effectiveness. Railroad carriers
must submit a revised speed limit action plan at least 90 days prior to implementing any significant operational or territorial operating changes or beginning new service. The section requires the Secretary, not later than 90 days after the date on which an action plan is submitted, to approve, approve with conditions, or disapprove the action plan. Finally, the codified section retains the Secretary’s authority to exempt from the requirement those segments of track that are governed by PTC.

Sec. 22416. New Passenger Service Pre-Revenue Safety Validation Plan.

- Amends chapter 201 of title 49 (Particular Aspects of Safety) to include a new 49 U.S.C. § 20170, to require any railroad providing new, regularly scheduled, intercity or commuter rail passenger transportation, or an extension or renewal of service that has been discontinued for more than 180 days to develop and submit for review a comprehensive, pre-revenue safety validation plan to the Secretary not later than 60 days before initiating such service. The section requires the plan to include pertinent safety milestones and a minimum period of simulated revenue service to ensure operational readiness and that all safety-sensitive personnel are properly trained and qualified.

- Directs railroads to adopt and comply with the plan and prohibits any amendments to the plan without first notifying the Secretary. Revenue service may not begin until the railroad has completed the requirements of its plan, including the minimum simulated service period.

- Requires the Secretary to promulgate regulations to carry out this section, including:
  - requiring that any identified safety deficiencies be addressed and corrected before the initiation of revenue service; and
  - establishing appropriate deadlines to enable the Secretary to review and approve the pre-revenue service safety validation plan to ensure that service is not unduly delayed.

Sec. 22417. Federal Railroad Administration Accident and Incident Investigations.

- Amends 49 U.S.C. § 20902 (Investigations) to require the Secretary to create a standard process for investigators to use during accident and incident investigations conducted under this section for determining when it is appropriate to:
  - gather information from railroad carriers, contractors, employees, or others;
  - consult with railroad carriers, contractors, employees, or others for technical expertise on the facts of the accident or incident under investigation.

Requires the Secretary to factor in ways to maintain the confidentiality of entities involved in the accident or incident. This subsection shall not apply to any investigation carried out by the National Transportation Safety Board.
Sec. 22418. Civil Penalty Enforcement Authority.

- Amends 49 U.S.C. § 21301(a) (Chapter 201 General Violation) to enhance the Secretary’s existing rail safety civil penalty authority to add a provision allowing it to resolve civil penalty assessments for non-hazardous materials regulation violations administratively, without having to refer the disputes to the Department of Justice for litigation.

Sec. 22419. Advancing Safety and Innovative Technology.

- Amends 49 U.S.C. § 26103 (Safety Regulations) to require the Secretary to promulgate safety regulations necessary for high-speed rail services and, before promulgating any safety regulations, to consult with developers of new high-speed rail technologies to develop a method for evaluating safety performance. This section also authorizes the Secretary to solicit feedback from relevant safety experts or representatives of rail employees who perform work on similar technology or who may be expected to perform work on new technology.

Sec. 22420. Passenger Rail Vehicle Occupant Protection Systems.

- Requires FRA to complete a study of the potential installation and use in new passenger rail rolling stock of passenger rail vehicle occupant protection systems (e.g., occupant restraint systems, air bags, emergency window retention systems) that could materially improve passenger safety.

- Directs FRA to consider minimizing the risk of secondary collisions through the use of vehicle occupant protection systems, including estimating the costs and benefits of the new requirements. This section requires FRA, not later than two years after the date of enactment, to submit a report summarizing the findings of the study to Congress and publish the report on the FRA website.

- Authorizes FRA, following the completion of the study and after considering the costs and benefits of the proposed protection systems, to promulgate a rule that establishes standards for the use of occupant protection systems in new passenger rail rolling stock.

Sec. 22421. Federal Railroad Administration Reporting Requirements.

- Directs FRA, in consultation with the Federal Transit Administration (FTA), to conduct a review of existing FRA reporting and paperwork requirements to determine if any requirements are duplicative or unnecessary.

- Requires FRA to terminate reporting or paperwork requirements that are not statutorily required and are determined to be duplicative or unnecessary. This section requires FRA, not later than one year after the date of enactment, to submit a report to Congress that identifies:
all of the reporting or paperwork requirements that were terminated; and
any statutory reporting or paperwork requirements that are duplicative or unneces
sary and should be repealed.

Requires the Secretary, not later than one year after the date of enactment and annually thereafter for the following four years, to update its accident and incident reporting form (Rail Equipment Accident/Incident Report) to collect, with respect to trains involved in accidents required to be reported to FRA:

- the number of cars and length of the involved trains; and
- the number of crew members who were aboard a controlling locomotive involved in an accident at the time of the accident.

Sec. 22422. National Academies Study on Trains Longer Than 7,500 Feet.

Requires the Secretary to engage the National Academies to conduct a study on the operation of trains longer than 7,500 feet. The section requires the Secretary, not later than two years after the date of enactment, to submit a report to Congress on the findings of the study. To carry out the section, the section sets aside between $1 million and $2 million from amounts appropriated for FRA safety and operations in FY 2021.

Sec. 22423. High-Speed Train Noise Emissions.

Amends 42 U.S.C. § 4916 (Noise Control Act) to authorize the Secretary, in consultation with the Administrator of the Environmental Protection Agency, to prescribe regulations governing railroad-related noise emission standards for trains operating on the general railroad system at speeds exceeding 160 miles per hour, including noise related to magnetic levitation systems and other new technologies. The regulations may:

- consider variances in maximum pass-by noise with respect to the speed of the equipment;
- account for current engineering best practices; and
- encourage the use of noise mitigation techniques if the benefits exceed the costs.

Sec. 22424. Critical Incident Stress Plans.

Requires the Secretary to amend critical incident stress plan regulations at 49 C.F.R. part 272 to include employees of commuter railroads and intercity passenger railroads who directly interact with passengers and ensure that an assault against an employee requiring medical attention is included in the definition of critical incident under the regulations.

Sec. 22426. Railroad Point of Contact for Public Safety Issues.

Requires all railroads to provide contact information for public safety issues, including a
telephone number, to the relevant federal, state, and local oversight agencies and to post the information on a publicly accessible website.

Sec. 22427. Controlled Substances Testing for Mechanical Employees.

- Requires the Secretary, not later than 180 days after the date of enactment, to amend the regulations under 49 C.F.R. part 219 to require all mechanical employees of railroads to be subject to all of the breath and body fluid controlled substances testing, including random testing, reasonable suspicion testing, reasonable cause testing, pre-employment testing, return-to-duty testing, and follow-up testing.