# **MILESTONES IN RAILROAD SAFETY**



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# 1886 Uniform Track Gage

The railroads throughout most of the nation achieved a uniform track gage, which converted hundreds of previously incompatible rail lines into a national rail network.

## 1887 Interstate Commerce Act

Established the Interstate Commerce Commission (ICC), the first Federal regulatory agency to oversee commerce.

### 1893 First Safety Appliance Act

Established the first substantive Federal railroad safety requirements, e.g., (i) that locomotives have power driving-wheel brakes; (ii) that trains have a sufficient number of power-braked cars so that the engineer could control the speed of the train without the use of hand brakes, and (iii) that cars be equipped with automatic couplers, certain handholds, and other safety appliances. The requirements applied only to locomotives and cars actually engaged in moving interstate commerce.

## 1900 First Safety Appliance Act Became Fully Effective

Implementation of the 1893 law was postponed until this year because railroads, hit by hard economic times, could not afford to take out of service those rail cars which lacked the required safety devices.

#### 1903 Second Safety Appliance Act

Made the first Safety Appliance Act applicable to all vehicles operating over highways of interstate commerce, fixed at 50 percent the minimum number of cars in a train required to be equipped with power brakes, and gave the ICC authority to increase this percentage from time to time. The percentage was increased to 75 by order dated November 15, 1905, and to 85 by order dated June 6, 1910.

### 1906 Block Signal Resolution

In an effort to prevent train collisions, Congress directed ICC to "investigate and report on the use of and necessity for block signal systems."

#### 1907 Federal Hours of Service Act

Limited to 16 hours the work shifts of railroad employees involved in train movements. Later amendments in 1974 and 1976 reduced work shifts to 14 hours and 12 hours respectively.

# 1908 Explosives and Combustibles Act (Codified as the Explosives and Other Dangerous Articles Act in 1909)

This legislation authorized the ICC to issue regulations covering the packaging, marking, loading and handling of explosives and other dangerous commodities in transit; it also prescribed criminal penalties for shippers or carriers who violated the ICC regulations.

# 1910 Third Safety Appliance Act

Required additional safety appliances, such as running boards and sill steps, and authorized the ICC to designate the number, dimensions, location, and manner of application of such appliances.

### 1910 Accident Reports Act

Authorized the ICC to investigate "serious" accidents. Required railroads to file monthly accident reports, repealing an earlier law that had required such reports since 1901.

# 1911 ICC Organization and Role

ICC established the Division of Safety Appliances, which became the Bureau of Safety in 1917, at which time the number and function of ICC inspectors were expanded.

#### 1911-

# 1915 Locomotive (or Boiler) Inspection Act

Established safety requirements for locomotive boilers and, as amended in 1915, for the entire locomotive and all its appurtenances, to be enforced by the ICC.

#### 1920-

#### 1937 Signal Inspection Act

Authorized the ICC, after investigation, to require carriers to install upon whole or any part of their lines automatic train-stop, train control, or other signal devices as warranted.

# 1929 Labor Petition to ICC to Expand Power Brake Requirements

Three railroad labor groups jointly filed a petition with the ICC to require all carriers to install automatic train-pipe (train-line brake-pipe) connections. These labor groups included the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen and Engineen, and Order of Railway Conductors.

# 1958 Power or Train Brakes Safety Appliance Act of 1958

Directed the ICC to adopt the Association of American Railroads' rules on the installation, maintenance, and repair of power brakes, allowing changes only after a hearing and "solely for the purpose of achieving safety."

# 1966 Department of Transportation Act

Established the Department of Transportation (DOT) and provided for transfer of safety functions from the ICC to DOT Agencies.

# 1967 ICC Rail Safety Functions Transferred to Federal Railroad Administration (FRA)

# 1970 Federal Railroad Safety Act of 1970 (Safety Act)

Gave the Secretary of Transportation broad authority to issue regulations for all areas of railroad safety and to conduct research and training regarding railroad safety. Granted general enforcement and investigative powers and powers to address emergency situations. Provided for State participation in investigative and surveillance activities.

# 1975 Rail Safety Improvement Act of 1974, including the Hazardous Materials Transportation Act

Required Secretary to submit, by 1976, a study on federal safety initiatives and subject areas not yet acted on and potential for State action (including federal funding). The Hazardous Materials Transportation Act, which was enacted as another title of same statute, provided civil penalty sanctions for the first time for knowing violations of the Hazardous Materials Regulations.

# 1976 Federal Railroad Safety Authorization Act of 1976

Amended the older safety laws to bring penalties into line with the Safety Act (\$2,500 maximum, \$250 minimum). Amended the Hours of Service Act to add sleeping quarters provisions and to cover signal maintainers for first time. Required issuance of rules, as necessary, on blue signal protection and rear end markers.

# 1980 Federal Railroad Safety Authorization Act of 1980

Amended Safety Act to permit issuance of emergency orders to address any "unsafe condition or practice" rather than just a facility or piece of equipment (in response to court ruling invalidating an FRA emergency order). Established criminal penalties for false reporting. Expanded other Federal enforcement powers. Granted standing to rail employees to sue FRA to compel issuance of emergency order where the employee is exposed to imminent physical injury. Prohibited discrimination against employees for filing a safety complaint or refusing to work in the face of a hazardous condition. Expanded state participation program to include older safety laws.

# 1982 Federal Railroad Safety Authorization Act of 1982

Amended penalty provision of Safety Act to clarify that it is a strict liability statute. Clarified FRA's jurisdiction over commuter or other short-haul passenger service.

# 1988 Rail Safety Improvement Act of 1988

Imposed individual liability for violations: civil penalties for willful violations; disqualification for violations showing unfitness for safety-sensitive service. Increased maximum penalties to \$20,000 per violation per day (except for Hours of Service Act, which went to \$1,000). Clarified jurisdiction over high speed rail systems and defined "railroad" to include even nontraditional technologies such as magnetic levitation. Amended older laws to make them applicable to "railroads." Clarified enforceability of subpoenas and orders. Required rulemakings on such subjects as: engineer qualifications, revisions to penalty schedules, automatic train control on the Northeast Corridor, event recorders, bridge worker safety, blue signal protection for camp cars, tampering, and grade crossing signal system safety. Directed the Secretary to establish a Northeast Corridor Safety Committee. Increased protection of employees against safety-related discrimination by expediting grievance procedure and permitting damages as remedy in some situations.

# 1990 Hazardous Materials Transportation Uniform Safety Act of 1990

Expanded state participation to include hazardous materials enforcement. Required training and certification of hazardous materials employees, registration of shippers and carriers of hazardous materials, and various rules and reports on railroad tank cars and transportation of radioactive materials by rail.

# 1992 Rail Safety Enforcement and Review Act

Clarified that certain rulemaking requirements were mandates to issue final rules. Increased minimum penalties to \$500. Clarified applicability of all statutes to "persons" very broadly defined. Imposed numerous rulemaking requirements on various subjects, including: power brakes, track safety, reporting of remedial actions by railroads, locomotive crashworthiness, and locomotive cab working conditions.