



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

July 3, 2007

H.R. 2095 **Federal Railroad Safety Improvement Act of 2007**

*As ordered reported by the House Committee on Transportation and Infrastructure
on June 14, 2007*

SUMMARY

H.R. 2095 would authorize appropriations over the 2008-2011 period for operations of the Federal Railroad Administration (FRA) within the Department of Transportation (DOT) and would reorganize that agency and change its name to the Federal Rail Safety Administration (FRSA).

CBO estimates that the bill would authorize the appropriation of \$1.2 billion over the 2008-2012 period. Those amounts include funds for operating FRSA, building a rail facility in Pueblo, Colorado, grants to increase safety throughout the rail system, and implementing National Transportation Safety Board (NTSB) programs to assist the families of passengers who are in rail accidents. Under the bill, FRSA would promulgate and enforce rules and regulations, increase the number of track inspectors, administer grants for projects related to railroad safety, complete studies and reports regarding railroad safety and technology, and create model legislation for state and local governments related to the safety of areas where railroad tracks and highways meet (grade crossings). Assuming appropriation of the amounts authorized and estimated to be necessary, CBO estimates that implementing the bill would cost \$176 million in 2008, \$1.1 billion over the 2008-2012 period, and about \$80 million after 2012.

Enacting H.R. 2095 could increase direct spending, but CBO estimates that any increases in direct spending would be insignificant. CBO estimates that additional penalties of \$6 million a year, \$30 million over the 2008-2012 period, and \$60 million over the 2008-2017 period would be collected under the bill. Penalty collections are classified as revenues in the budget.

H.R. 2095 contains several intergovernmental and private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA). The bill's mandates include requirements for railroads to comply with hours of service restrictions, certification requirements, safety procedures, and reporting requirements, as well as preemptions of certain state laws. Due

to the small number of public entities involved, CBO estimates that compliance costs for those entities would not exceed the annual threshold established in UMRA for intergovernmental mandates (\$66 million in 2007, adjusted annually for inflation). Because the costs to comply with the safety systems that would be required by the bill are substantial, CBO estimates that the aggregate cost to private entities of the mandates in the bill would exceed the annual threshold in UMRA for private-sector mandates (\$131 million in 2007, adjusted annually for inflation).

Other provisions of the bill would authorize grants for which state, local, and private-sector entities would be eligible. Any costs those entities might incur would result from participating in the grant programs and would be incurred voluntarily.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of H.R. 2095 is shown in Table 1. The costs of this legislation fall within budget function 400 (transportation).

BASIS OF ESTIMATE

For this estimate, CBO assumes that H.R. 2095 will be enacted near the end of fiscal year 2007, that the authorized and necessary amounts will be appropriated each year, and that outlays will follow the historical rate of spending for similar programs.

Spending Subject to Appropriation

H.R. 2095 would reauthorize the programs of the FRA through 2011, reorganize the agency and rename it the Federal Rail Safety Administration, and place certain new requirements on the agency. The current authorization for FRA expired at the end of fiscal year 1998 (although the agency received appropriations in the intervening years). The legislation would specifically authorize the appropriation of about \$1.2 billion over the next four years for FRSA programs, including some grants to improve the safety of rail operations. In addition, title 7 would require the NTSB to provide assistance to the families of passengers involved in rail accidents that result in a loss of life. CBO estimates that provision would cost \$1 million, annually.

TABLE 1. ESTIMATED BUDGETARY IMPACT OF H.R. 2095

| | By Fiscal Year, in Millions of Dollars | | | | | |
|---|--|------|------|------|------|------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| SPENDING SUBJECT TO APPROPRIATION | | | | | | |
| Spending under Current Law for the Federal | | | | | | |
| Railroad Administration | | | | | | |
| Authorization Level ^a | 184 | 13 | 16 | 0 | 0 | 0 |
| Estimated Outlays | 188 | 51 | 42 | 11 | 0 | 0 |
| Proposed Changes: | | | | | | |
| Federal Rail Safety Administration Programs | | | | | | |
| Authorization Level | 0 | 230 | 260 | 295 | 335 | 0 |
| Estimated Outlays | 0 | 161 | 217 | 269 | 316 | 93 |
| Pueblo, Colorado Facility | | | | | | |
| Authorization Level | 0 | 18 | 0 | 0 | 0 | 0 |
| Estimated Outlays | 0 | 11 | 4 | 2 | 2 | 0 |
| Grants for Programs to Increase Rail Safety | | | | | | |
| Estimated Authorization Level | 0 | 22 | 22 | 22 | 20 | 0 |
| Estimated Outlays | 0 | 3 | 9 | 15 | 21 | 19 |
| NTSB Assistance after Rail Accidents | | | | | | |
| Estimated Authorization Level | 0 | 1 | 1 | 1 | 1 | 0 |
| Estimated Outlays | 0 | 1 | 1 | 1 | 1 | 0 |
| Total Changes | | | | | | |
| Estimated Authorization Level | 0 | 271 | 283 | 318 | 358 | 0 |
| Estimated Outlays | 0 | 176 | 230 | 286 | 340 | 112 |
| Total Spending Under H.R. 2095 | | | | | | |
| for Rail Safety Programs | | | | | | |
| Estimated Authorization Level | 184 | 284 | 299 | 318 | 358 | 0 |
| Estimated Outlays | 188 | 227 | 272 | 297 | 340 | 112 |
| CHANGES IN REVENUES | | | | | | |
| Estimated Revenues | 0 | 6 | 6 | 6 | 6 | 6 |

a. Certain rail safety programs, but not most, for which the bill authorizes appropriations through fiscal year 2011, were authorized by Public Law 109-59 through fiscal year 2009. The current authorization in fiscal years 2008 and 2009 is in the form of contract authority. The spending of contract authority is controlled by annual limits on obligations set on appropriation acts and is therefore considered discretionary.

Federal Rail Safety Administration (FRSA). The bill would require railroad operators to comply with new safety requirements in the bill. The bill also would require FRSA to establish a chief safety officer, increase track inspectors, and administer new grants. Under the provisions of the bill, FRSA and the Inspector General of DOT would issue studies and reports with respect to rail safety, review and approve plans submitted by railroad operators, create model legislation for states regarding the safety of grade crossings and the prevention of vandalism to railroad safety measures, and establish and enforce regulations regarding the safety and certification requirements in the bill.

The bill would authorize the appropriation of \$230 million in 2008 and \$1.1 billion over the 2008-2012 period for support of those programs. CBO estimates that implementing those provisions would cost \$161 million in 2008 and nearly \$1.1 billion over the 2008-2012 period.

Authorization for Facility in Pueblo, Colorado. The bill would authorize the appropriation of \$18 million to design, develop, and construct the Facility for Underground Rail Station and Tunnel at the Transportation Technology Center in Pueblo, Colorado. Assuming appropriation of the authorized amount, CBO estimates that implementing this provision would cost \$11 million in 2008 and \$18 million over the 2008–2012 period.

Grants for Programs to Increase Rail Safety. H.R. 2095 would direct FRSA to administer three new grant programs. Assuming appropriation of the necessary amounts, CBO estimates that grants would cost \$3 million in 2008 and \$67 million over the 2008-2012 period. The grants would support the deployment of certain automated systems to avoid collisions in the event of a mistake by a train operator, and the installation, repair, or improvement of grade crossings (the location where highways and railroad tracks meet), and Operation Lifesaver—a nonprofit organization with the mission to end accidents at grade crossings.

Grants for the Deployment of Train Control Systems. Section 613 would authorize the appropriation of funds to support the deployment of certain automated systems for Class I railroads—there are currently seven such large railroads in the United States—to avoid collisions in the event of a mistake by a train operator. Those large railroads would be required to implement such systems by 2014 under provisions of the bill. Based on information from FRA and industry sources about the need for and cost of such systems, CBO estimates that such grants would cost \$1 million in 2008, \$31 million over the 2008-2012 period, and \$9 million after 2012.

Grants to Support the Improvement of Grade Crossings. Section 615 would authorize the appropriation of funds to support the installation, repair, or improvement of grade crossings. Each grant would be limited to \$250,000. Under current law, FRA manages a similar program that costs between \$10 million and \$15 million per year. CBO expects that the

grants authorized in the bill would likely augment the current program. Based on information from FRA and industry sources about the number of grade-crossing accidents, a significant need exists for improving the safety of grade crossings. CBO estimates that such grants would add \$10 million annually to the current grant program at a cost of \$1 million in 2008, \$31 million over the 2008-2012 period, and \$9 million after 2012.

Grants for Operation Lifesaver. Section 407 would direct FRSA to make additional grants to Operation Lifesaver—a nonprofit organization with the mission to end accidents at places where roadways cross train tracks and on railroad rights-of-way. Under the current authorization for highway programs (Public Law 109-59), Operation Lifesaver receives \$560,000 annually of contract authority (that is subject to annual obligation limitations) through fiscal year 2009. The bill would specifically authorize the appropriation of an additional \$1.5 million annually over the 2008-2011 period for Operation Lifesaver.

NTSB Assistance after Rail Accidents. Title 7 would require the NTSB to provide assistance to the families of passengers who are in rail accidents on Amtrak that result in a major loss of life. The bill also would require DOT to establish a task force that would recommend ways to improve family assistance and to more accurately determine the number of passengers on board a train involved in an accident. Based on information from the NTSB, and assuming appropriation of the necessary amounts, CBO estimates that implementing this provision would cost \$1 million a year.

Direct Spending and Revenues

H.R. 2095 would establish new civil penalties on railroads that fail to comply with reporting requirements regarding grade crossings and increase penalties for general violations of safety laws addressed by the bill. Collections of civil fines are recorded as revenues and deposited in the Treasury. The bill would increase the maximum penalty for violations of the law from \$10,000 to \$25,000 and would raise the maximum penalty for violations that are grossly negligent or that represent a repeating pattern of offenses from \$20,000 to \$100,000. According to the FRA, under current law, such civil fines generate about \$15 million in revenues annually. CBO expects that an increase in the fees would decrease the number of violations, but we expect that the increased penalty would generate additional revenues of \$6 million a year (see Table 2).

TABLE 2. CHANGES IN REVENUES OVER THE 2008–2017 PERIOD UNDER H.R. 2095

| | By Fiscal Year, in Millions of Dollars | | | | | | | | | | | |
|----------------------------|--|------|------|------|------|------|------|------|------|------|-----------|-----------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2008-2012 | 2008-2017 |
| CHANGES IN REVENUES | | | | | | | | | | | | |
| Estimated Revenues | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 30 | 60 |

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

H.R. 2095 contains several intergovernmental and private-sector mandates as defined in UMRA because it would require railroads to comply with hours of service restrictions, certification requirements, safety procedures, and reporting requirements, and would preempt certain state laws. The total cost to comply with those mandates is uncertain and would depend, in part, on regulations that have not yet been established. Due to the small number of public entities involved, however, CBO estimates that the aggregate costs for those entities to comply with the bill’s mandates would not exceed the annual threshold established in UMRA for intergovernmental mandates (\$66 million in 2007, adjusted annually for inflation). Because the costs to comply with the safety systems that would be required by the bill are substantial, CBO estimates that the aggregate cost to private entities of the mandates in the bill would exceed the annual threshold in UMRA for private-sector mandates (\$131 million in 2007, adjusted annually for inflation).

Other provisions of the bill would authorize grants for which state, local, and private-sector entities would be eligible. Any costs those entities might incur arising from participating in the grant programs would be incurred voluntarily.

Mandates that Affect Both the Public and Private Sector

By requiring railroads to comply with hours of service restrictions, certification requirements, safety procedures, reporting requirements, and by preempting certain state laws, H.R. 2095 would impose both intergovernmental and private-sector mandates as defined in UMRA.

Mandate with Costs Exceeding the Threshold. The bill would require the Secretary of Transportation to issue regulations requiring railroads to ensure that rail used in track repairs is free of internal defects and that the railroads meet a specific annual service failure rate. According to government sources, most of the track owned by state and local entities

currently meets those requirements, and CBO estimates that additional costs would be small for public entities. According to industry and government sources, however, most of the track owned by private carriers, especially in rural areas, currently does not meet those requirements, although no data exist on the exact amount of track that would need to be updated. According to industry sources, however, the cost to comply with this mandate would be well over the annual threshold for the private sector.

Mandates with Uncertain Costs. The bill contains several mandates whose costs CBO cannot estimate at this time. Those mandates would:

- Increase restrictions on the number of hours that signalmen and train crews are allowed to work over certain time periods;
- Require railroads to certify train conductors and carmen, establishing minimum training standards for each craft of railroad employees as well as track and railroad equipment inspectors; and
- Require that railroads report information on the status of grade crossings.

CBO cannot estimate the total costs of those mandates because we do not have sufficient information about how railroads would choose to adjust their employees' schedules to comply with the restrictions and because total costs would depend upon future regulatory actions of the Secretary.

Mandates with Minimal Costs. Several mandates in the bill would impose minimal additional costs on railroads, in CBO's estimation. Those mandates would:

- Strengthen whistleblower protections for railroad employees, specifically protections against intimidation and harassment;
- Require railroads to post a toll-free number at all grade crossings to report problems, and to warn trains and the appropriate public-safety officials about hazardous conditions;
- Require railroads to remove vegetation that obstructs the view of pedestrians and drivers at grade crossings;
- Require railroads to submit plans to address railroad worker fatigue, the needs of families of accident victims, and accidents at highway-rail grade crossings;

- Require railroads to maintain documentation of activities to inspect and maintain the structural integrity of certain tunnels through which they operate;
- Prohibit any individual or state from interfering in or disrupting the work of the National Transportation Safety Board during a railroad disaster;
- Impose restrictions on the unsolicited communications of attorneys or potential parties to litigation in the event of a railroad accident; and
- Prohibit railroad carriers from interfering with the medical treatment of injured workers.

CBO estimates that the additional costs to comply with those mandates would be small because compliance likely would involve only a small adjustment in current procedures, or because railroads or individuals would be unlikely to engage in the prohibited activities. Additionally, the bill would establish a grant program for state and local governments to address some of those requirements.

Mandates that Affect Only the Private Sector

The bill also would impose additional mandates that affect only private rail carriers. Those mandates include, but are not limited to, requirements for installation of positive train control systems and new switch indicators for tracks; requirements for emergency equipment and training for crewmembers on trains that carry hazardous materials; and requirements related to sleeping quarters for rail employees.

Positive Train Control (PTC) System. The bill would require each Class I railroad carrier, within 12 months after enactment, to develop and submit a plan for implementing a positive train control system by December 31, 2014. The Secretary of Transportation, however, would be authorized to extend the date for implementation by two years under certain conditions. Positive train control systems are intended to reduce collisions in the event of a mistake by a train operator. No railroad carrier would be permitted to begin the implementation of their plan before getting approval from the Secretary of Transportation. According to industry sources, some railroad carriers currently are participating in pilot programs with the purpose of developing PTC systems. The cost to implement such systems is uncertain at this stage of development. Based on information from the Federal Railroad Administration and the Association of American Railroads, CBO estimates that the cost to comply with this mandate would total at least a few billion dollars for the industry. The bill would authorize grants for eligible private-sector entities to assist with the cost of implementing a positive train control system.

Switch-Position Indicators. The bill would require the Secretary to issue regulations requiring railroad carriers to install switch-position indicators on main lines in non-signaled territory, or operate trains at speeds that will allow involved train employees to safely stop the train in advance of a misaligned switch. The former option would require private entities to install those switch-position indicators to alert oncoming trains of a misaligned track. According to industry sources, the latter option would require private entities to operate at speeds up to 50 percent slower than normal. The relative cost of each option would depend on the routes of service. While the cost of this mandate is uncertain, it is likely that compliance costs would be large relative to the UMRA's annual threshold. The bill would authorize grants for eligible private-sector entities to assist with the cost of implementing switch-position monitoring technology.

Emergency Escape Breathing Apparatus. The bill would require railroads to provide an emergency breathing apparatus for each crewmember on freight trains that carry hazardous materials, and to provide crewmembers with training in the use of those devices. According to industry sources, although the average cost of the apparatus and the large number of private entities that would have to comply suggest that the costs could be substantial, the cost of this mandate would be below the annual threshold established in UMRA for private-sector mandates.

Sleeping Quarters. The bill would prohibit railroad carriers from using camp cars as sleeping quarters for its employees one year after the enactment of the bill. Camp cars are mostly used by railroad carriers operating in rural areas where sleeping accommodations are not readily available. To comply with this mandate, private entities would likely have to transport crews working in those areas to proper sleeping accommodations. According to government and industry sources, however, few railroad carriers use camp cars as sleeping quarters. Given the small number of entities that would be affected, CBO estimates that the costs to comply with this mandate would be minimal.

Other Impacts: Grants

The bill would establish a grant program for passenger and freight railroad carriers, and state and local governments, to install train controls, switch-position indicators, and other component technologies. The bill also would establish a grant program for state and local governments to improve emergency grade crossings. Any costs those entities might incur would result from complying with conditions of federal assistance. Participation in any federal contract, including those grants, is considered a voluntary action. Duties arising from participation in such a voluntary federal program are not mandates under UMRA.

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