

These calculations show that fluid pipelines are the safest mode of freight transportation; they had an average rate of only .011 fatalities per billion ton-miles moved during the 6 years studied. Though based upon incomplete data, marine transportation was next with an average fatality rate of .31 deaths per billion ton-miles. For reasons that are stated in the Appendix, this is a conservative (high) estimate of the fatality rate for this method of transportation.

The railroad industry had a very stable fatality rate, fluctuating between 2.4 and 2.6 deaths per billion ton-miles.

Class I and II intercity common and contract motor carriers report their losses to the Bureau of Motor Carrier Safety, which summarizes and publishes the results. Unfortunately, no such compilation of loss data is readily available for private or exempt carriage. For this reason, a fatality rate could be calculated for only the Federally regulated interstate segment of the trucking industry. During the years studied, this segment of the industry generated from 36 to 39 percent of the highway ton-miles.

The Federally regulated interstate trucking industry had the highest rate, with an average of 10.9 deaths per billion ton-miles.

We recognize that there are many factors that influence the choice of mode for a particular freight shipment. These may include the physical characteristics of the commodity, the freight rate or cost structure for a particular mode, the reliability or level of service provided, and other competitive considerations. However, we cannot overlook the fact that the ratio between the most safe and the least safe method of surface freight transportation is approximately 1,000 to one.

As a result of this study, the National Transportation Safety Board recommends that:

1. The Department of Transportation develop and publish, on a regular basis, comparable data on the losses and loss rates associated with all modes of freight transportation. This data should include losses in all forms: death, injury, property damage, and delays due to accidents.

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2. Safety, for both the employees in a segment of the transportation industry and for the general public, be given active consideration during the formulation and implementation of all aspects of national transportation policy.

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

/s/ JOHN H. REED
Chairman

/s/ FRANCIS H. McADAMS
Member

/s/ LOUIS M. THAYER
Member

/s/ ISABEL A. BURGESS
Member

Oscar M. Laurel, Member, was absent, not voting.