

National Transportation Safety Board

Log R-628

Washington, D.C. 20594 Safety Recommendation

Date: August 6, 1991 In reply refer to: R-91-33 through -36

Honorable Brian W. Clymer Administrator Urban Mass Transportation Administration 400 Seventh Street, S.W. Washington, D.C. 20594

The Safety Board has recently completed a safety study, "Oversight of Rail Rapid Transit Safety."¹ In the past, the Safety Board had addressed the issue of oversight of rail rapid transit safety only on the systems on which the Safety Board had conducted accident investigations. The Safety Board had not addressed the broader issue of the adequacy of safety oversight of rail rapid transit systems in general. Based on its recent investigations of accidents that have occurred on the Southeastern Pennsylvania Transportation Authority (SEPTA) and the New York City Transit Authority (NYCTA); its previous (mid-1980s') investigations of accidents on SEPTA, NYCTA, the Chicago Transit Authority, and the Greater Cleveland Regional Transit Authority; and the findings of this study, the Safety Board believes that there is a need to address the issue of safety oversight of the rail rapid transit industry in general. The potential for substantial loss of life through collisions and derailments at high speeds, and through fire and smoke conditions necessitates continual oversight of rail rapid transit safety, especially given the economic difficulties of maintaining these systems as they age and begin or continue to deterjorate.

Information the Safety Board received from State and transit officials indicates that current oversight activities by State agencies vary among States. The State of New York, for example, through its State Public Transportation Safety Board, conducts accident investigations, requires the development of a system safety program plan, regularly reviews the transit system's adherence to this plan, and collects and disseminates accident and injury data. The New York State program appears to be a sound program, although the Safety Board has some concerns regarding the adequacy of resources provided to the New York program. At the other extreme, some States--such as Maryland and Virginia (with respect to the Washington Metropolitan Area Transit Authority) and Illinois, Ohio, New Jersey, and Georgia--exercise no regulatory or oversight activity. The Safety Board believes that the States and localities in which rail rapid transit systems operate have a responsibility to assure that the systems are operated safely.

¹ National Transportation Safety Board. 1991. Oversight of rail rapid transit safety. Safety Study NTSB/SS-91/02. Washington, DC.

Consequently, the Safety Board has urged all States in which rail rapid transit systems operate to develop or revise, as needed, existing programs to assure comprehensive and effective oversight of rail rapid transit safety.

The variations in the existing oversight activities exercised by the States suggest that State and local governments need guidance that describes the elements of an effective oversight program. The provision of such guidelines, in the Safety Board's view, is a proper function of the Urban Mass Transportation Administration (UMTA). UMTA has long advocated that oversight responsibility is best handled by State and local authorities, and the Safety Board believes that UMTA should play a more active role in seeing that this oversight responsibility is met.

To aid it in its development of guidelines, UMTA should document and evaluate the effectiveness of existing State programs. Previous research has been conducted on State oversight activities, but it did not clearly delineate between various modes of transportation. For example, some States were cited for having effective accident investigation and vehicle inspection programs, but it was not clear if these programs applied equally to bus and rail operations. Consequently, in documenting and evaluating State oversight activities, UMTA should address specifically rapid rail operations. Because much of the information for the guidelines is available through existing State programs, the Safety Board believes that UMTA should be able to evaluate existing programs and promulgate guidelines expeditiously. Once these guidelines have been developed, UMTA should work with the State and local governments to revise existing programs to assure that the programs are in conformance with the guidelines.

The Safety Board believes that it is the proper role of UMTA to ensure the implementation of effective safety oversight programs by State and local The Board believes that when oversight is lacking or governments. insufficient, UMTA should use its funding authority to ensure independent safety oversight for UMTA-funded projects and UMTA-assisted systems. For example, UMTA could require that a percentage of the funds it makes available to State and local authorities be used to implement oversight programs and to correct deficiencies noted as a result of these oversight programs. Thus, UMTA should monitor the safety oversight programs implemented by the State and local governments to determine if the elements of a proper program are in place and if the mechanism through which the oversight is being accomplished is appropriate given the nature of the particular transit system. Finally, if UMTA's monitoring of State and local programs indicates that the programs are not being effectively implemented, further financial assistance could be withheld until the State or local authorities take action to implement an effective oversight program.

The transit industry has pointed to the safety record of rail rapid transit when the possibility of Federal regulation or oversight of the industry has been discussed. Indeed, Safety Board experience through accident investigations and the available data do suggest that transportation by rail rapid transit is generally safe. Nevertheless, accidents and injuries continue to occur. However, it is difficult to accurately measure the safety of rail rapid transit because of the imprecise data collection and analysis methods that have been used in the past. The disparity between the number of accidents and fatalities/injuries reported during a 2-year period in the Section 15 data and the information reported to SIRAS attests to the need for improvements in the methods for collecting and analyzing safety-related data.²

Although the Safety Board commends UMTA for its efforts to improve the preciseness of data reported under Section 15, the Board is concerned that the new form for safety data, which the Safety Board understands is now being used to collect data annually and which will not be a topic for comment in the Notice of Proposed Rulemaking that is to be issued regarding Section 15 reporting requirements, is not the appropriate vehicle to obtain precise safety data for several reasons. First, the form does not distinguish between passenger injuries and fatalities and employee injuries and fatalities. The Safety Board believes that the pending legislation (S. 1160) that would require passenger injuries and fatalities and employee injuries and fatalities to be reported separately has merit, as the failure to report the data separately in the past may well account for the disparity that existed between Section 15 and SIRAS information. Second, the form provides for the reporting of limited data (the gross number of accidents, injuries, and fatalities); the form does not provide for the reporting of data about the nature of accidents/incidents. An accident/incident reporting form, similar to that used in other modes of transportation, should be developed and should be submitted by the transit systems periodically. Third. rates. based on exposure, should be published for each system in an annual report in order to accurately reflect the level of safety of transportation by rail rapid transit.

In conjunction with this study, the Safety Board received details of the drug and alcohol testing programs implemented by all rapid transit rail Although the Safety Board commends the transit industry for systems. implementing testing programs, the information received also indicates that there are some inconsistencies in the testing being conducted among the systems. Although the inconsistencies within the transit industry cause the Safety Board concern, the Board has expressed its concern to the Secretary, U.S. Department of Transportation, about the broader issue of inconsistencies in testing in all transportation modes. Through Safety Recommendations I-89-4 through -12, issued to the Secretary of Transportation in 1989, the Safety Board will continue to address the uniform implementation of testing programs in all modes of transportation. The Board is urging the Secretary of Transportation to include rail rapid transit in its ongoing efforts to address these safety recommendations and, if necessary, seek the legislative authority to do so. Consequently, Safety Recommendations R-86-34 through -38, issued to UMTA on August 13, 1986, to address testing programs only in

² Section 15 of the Urban Mass Transportation Act of 1964, as amended, provides a reporting system by uniform categories. The Safety Information Reporting and Analysis System (SIRAS) is a voluntary reporting system developed by UMTA in cooperation with the American Public Transit Association and rail transit systems operating in the United States.

the rail rapid transit industry, have been placed in a "Closed--Acceptable Action/Superseded" status.

Therefore, as a result of the safety study, the National Transportation Safety Board recommends that the Urban Mass Transportation Administration:

Document and evaluate the effectiveness of existing State oversight activities of rail rapid transit safety and develop guidelines for use by State and local governments that address the critical elements of an effective oversight program. (Class II, Priority Action) (R-91-33)

Monitor safety oversight programs implemented by the State and local governments to determine that the elements of an effective program are in place, that adequate financial resources are available, and that the mechanism through which the oversight is being accomplished is appropriate given the nature of the particular transit system. (Class III, Longer Term Action) (R-91-34)

Use your funding authority to ensure independent and effective safety oversight for UMTA-funded projects and UMTA-assisted systems. (Class III, Longer Term Action) (R-91-35)

Develop an accident/incident reporting form for rail rapid transit systems that distinguishes between passenger and employee injuries and fatalities and require transit systems to file these reporting forms periodically. Publish this information and exposure rate data for each system annually. Regularly analyze the data to determine trends in accidents and injuries. (Class II, Priority Action) (R-91-36)

Also as a result of the safety study, the Safety Board issued safety recommendations to the Secretary, U.S. Department of Transportation, and to the District of Columbia and all States in which rail rapid transit systems operate.

Chairman KOLSTAD, Vice Chairman COUGHLIN, and Members LAUBER, HART, and HAMMERSCHMIDT concurred in these recommendations.

James D. Kolstad

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By: James L. Kolstad Chairman