

R-345

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: February 11, 1981

Forwarded to:  
  
Honorable Andrew L. Lewis  
Secretary  
Department of Transportation  
400 Seventh Street, S. W.  
Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

R-81-1 and -2

On July 29, 1980, the National Transportation Safety Board concluded a 2-day national public hearing on rail rapid transit safety. The hearing was prompted by an increasing concern over safety oversight responsibility for rail rapid transit systems, particularly fire safety issues and emergency evacuation of rail rapid transit passengers from underground or underwater tunnel locations. Twenty-five witnesses from transit industry management and labor, local fire departments, national fire safety organizations, and State and Federal agencies testified at the hearing. 1/

The safety problems identified as a result of this hearing and other Safety Board investigatory work warrant the most serious consideration of the Department of Transportation (DOT). During peak hours, a single rail rapid transit train can carry a "crushload" of 1,500 to 2,000 passengers. Under such conditions, the loss of life in an accident, fire, or other emergency could well be catastrophic. The potential for an accident with enormous risk to passengers, fire and emergency service personnel, and transit employees occurring has been demonstrated by the train fire in the Transbay Tube of the Bay Area Rapid Transit District on January 17, 1979; 2/ the train fire in a tunnel and station of the Southeastern Pennsylvania Transportation Authority on September 6, 1979; and the three separate train fires in the tunnels of the New York City Transit Authority on June 25, 1980, and December 10 and 11, 1980.

The Safety Board believes that the Federal role in funding rail rapid transit systems and encouraging the public to use them implies a concomitant Federal responsibility to the public to see that these systems operate safely. DOT's Urban Mass Transportation Administration (UMTA), through delegation by the Secretary, has been given some safety authority with respect to rail rapid transit under the Urban Mass Transportation Act of 1964, the Urban Mass Transportation Assistance Act of 1970, and the National Mass Transportation Assistance Act of 1974. This authority includes, in part, the power to attach safety conditions to Federal grants, to withhold Federal financial assistance for noncompliance with safety conditions, and to investigate unsafe

1/ For more detailed information, read "Safety Effectiveness Evaluation of Rail Rapid Transit Safety" (NTSB-SEE-81-1).

2/ For more detailed information, read "Railroad Accident Report--Bay Area Rapid Transit District Fire on Train No. 117 and Evacuation of Passengers While in the Transbay Tube, San Francisco, California, January 17, 1979" (NTSB-RAR-79-5).

conditions and require their correction. However, UMTA does not have complete authority and resources to exercise a dynamic and effective safety role. For example, UMTA has indicated that the grant condition authority can be applied only at the time a grant is awarded to a transit system. On March 6, 1978, as the result of a serious accident on the Greater Cleveland Regional Transit Authority, <sup>3/</sup> the Safety Board recommended that DOT insure that the safety of rail rapid transit systems be regulated and enforced by a responsible State or Federal agency. Two years after this recommendation, the Safety Board, as a result of its evaluation, finds that rail rapid transit systems remain virtually self-regulating in terms of safety and without effective external safety oversight.

Rail rapid transit safety could be addressed in a coordinated and comprehensive manner through the establishment of minimum safety standards, compliance enforcement, periodic inspection, investigation of accidents and incidents, and other activities which provide a means of effective safety oversight. However, UMTA's safety authority is defined in far less detail than that of other modal administrations, such as the Federal Railroad Administration and the National Highway Traffic Safety Administration, whose safety regulatory, enforcement, and other powers are granted explicitly by statute.

Moreover, UMTA has not used its existing safety authority effectively. As early as June 1971, <sup>4</sup> the Safety Board recommended that UMTA use its authority to require transit authorities to submit formal safety plans as a condition of Federal financial assistance. UMTA encourages the development of system assurance and reliability plans; however, specific safety plan requirements have not been formalized. In addition, UMTA has never used its authority to attach safety conditions to grants, has not developed procedures for investigations of unsafe conditions, and in the last 5 years has conducted only one investigation of an unsafe condition. In terms of funding, staffing, organization, and its mission, UMTA's safety function has been accorded a relatively low priority within the agency. By default, the largely passive oversight posture adopted by UMTA has left individual rail rapid transit systems to regulate themselves without adequate checks and balances to assure the public a reasonable level of safety.

Therefore, the National Transportation Safety Board recommends that the Secretary of Transportation:

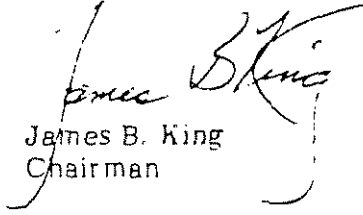
Propose legislation to explicitly authorize the Secretary of Transportation to regulate the safety of rail rapid transit systems which receive Federal financial assistance. Such legislation should include the authority to establish Federal minimum safety standards, to enforce compliance, to conduct inspections, to conduct investigations of accidents and incidents, and such other general powers and duties as are necessary to provide for effective safety oversight. (Class II, Priority Action) (R-81-1)

<sup>3/</sup> For more detailed information, read "Railroad Accident Report--Head-on Collision of Two Greater Cleveland Regional Transit Authority Trains, Cleveland, Ohio, July 8, 1977" (NTSB-RAR-78-8).

<sup>4</sup> For more detailed information, read "Special Study of Rail Rapid Transit Safety" (NTSB-RSS-71-1).

Pending the enactment of legislation conferring direct regulatory authority, require the Urban Mass Transportation Administration to establish Federal guidelines for equipment and operations, to aggressively utilize existing grant programs and investigative authority to promote conformance with Federal guidelines, and to conduct a program of substantially increased safety oversight of Federal assisted rail rapid transit systems. (Class II, Priority Action) (R-81-2)

KING, Chairman. DRIVER, Vice Chairman, McADAMS and BURSLEY, Members, concurred in these recommendations. GOLDMAN, Member, dissented in Safety Recommendation R-81-1 and concurred in Safety Recommendation R-81-2.

By:  James B. King  
Chairman