

CONGRESSIONAL LETTERS OF REQUEST

UNITED STATES SENATE,  
COMMITTEE ON APPROPRIATIONS,  
Washington, D. C., February 25, 1974.

Hon. EDWARD M. KENNEDY,  
Chairman, Technology Assessment Board,  
House Annex, Washington, D.C.

DEAR MR. CHAIRMAN: On behalf of Senator Robert C. Byrd, Chairman of the Transportation Subcommittee, and Senator Clifford P. Case, the Subcommittee's Ranking Minority Member, I am transmitting the attached technology assessment request to you.

With kindest personal regards, I am  
Sincerely,

JOHN L. McCLELLAN, Chairman.

Enclosure.

UNITED STATES SENATE,  
Washington, D. C., February 6, 1974.

Hon. JOHN L. McCLELLAN,  
Chairman, Senate Appropriations **Committee**, **New Senate** Office Building,  
Washington, D.C.

DEAR MR. CHAIRMAN: We would like to enlist your support for a prompt and thorough study of automation in federally supported urban rail transit projects.

This matter of increasing concern to our Subcommittee arises because several large cities, including Baltimore and Atlanta, are planning automated train systems and are or will be seeking substantial federal funding within the next two years.

At the same time, serious questions have arisen as to whether and to what degree Automated Train Control (ATC) should be used in rail transit.

The recent experience with San Francisco's new rail system, known as BART, has helped focus attention on this problem.

Original plans for BART called for a fully automated system requiring no on-board train operator. This has not worked out because of a series of malfunctions in the ATC system. Costly patch-up work, with substantial federal help, is underway, but complete automation of BART now appears out of the question.

In light of the BART experience we should be alert to see to it that the same expensive mistakes are not made in other federally supported urban rail transit projects involving Automated Train Control.

At present, there is no means of assuring that the mistakes made in the BART project will not be repeated.

A draft study just completed by the Department of Transportation's Transportation Systems Center states that train control "typically receives little priority and emphasis" even though—as the study emphasizes—this choice of system greatly affects revenue, safety, including, we add, the serious matter of crime prevention, and operation and maintenance costs. The DOT study did not purport to deal with cost and cost savings in detail, but it did state that there seemed to be an "intuitive conclusion that an automated system should be more economical than a man-operated system in achieving or surpassing a given level of service or safety."

The Congress and this Committee should not accept an "intuitive" judgment on matters of such cost and complexity.

There are at least two questions that require particular study: (1) to what extent should urban rail transit systems be automated? and (2) how should these projects be planned and executed?

The appropriate body to carry out such an independent, in-depth study for this Committee is Congress' Office of Technology Assessment. Under the provisions of the "Technology Assessment Act of 1972" (P.L. 92-482, Sec. 3(d), (1)), we ask that you transmit to the Chairman of the Technology Assessment Board our request for a study that would:

1. Assess the state of automated train control technology and its application to existing and planned rail transit systems.—What major research is underway and what is its objective? What train control systems are being considered for transit projects now in the planning stage? What are the characteristics of these systems and how are they similar to or different than those of BART and other highly automated systems in use?

2. Assess the testing methods by which the workability of automated train projects is determined.—To what extent are prototypes built and tested? What has been the lesson of BART and other recent projects concerning the necessity for system testing during development? What provisions have been made for the testing of train control systems now being planned?

3. Assess the process by which new rail transit systems or extensions of existing systems are planned and executed; evaluate the adequacy and professionalism of cost, safety, including crime prevention, and other analyses used.—What criteria are used, particularly in determining degree of automation? To what extent are economic tradeoffs (i.e., cost of partially manual vs. fully automated system) explicitly considered? How and to what extent is public oversight maintained throughout the project? What federal requirements, if any, apply to these federally assisted projects?

Your assistance in transmitting this request will be appreciated,

Sincerely,

ROBERT C. BYRD,

Chairman, Transportation Appropriations Subcommittee.

CLIFFORD P. CASE,

Ranking Minority Member,  
Transportation Appropriations Subcommittee.