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UNITED STATES GENERAL ACCOUNTING OFFICE WASHINGTON, D.C. 20548

JAN 28 1971

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Dear Mr. Turner:

The General Accounting Office has reviewed the Federal Highway Administration's (FHWA) research program of experimental emergency communication systems to assist stranded or disabled motorists and improve safety on Federal-aid highways, which includes the Interstate System. The program provides for the installation, at selected locations on these highways, of various types of communication systems which will allow stranded motorists to communicate a need for service.

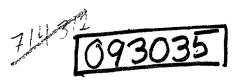
The objective of the program is to test and compare the uses and benefits of the various systems and subsequently establish criteria to assist States in the selection, evaluation, and approval of future emergency communication systems. FHWA anticipates that such criteria would apply to type, design, construction, and operation of the systems.

FHWA's policy calls for the Government to bear at least 90 percent of the coses for a State to construct and install emergency communication systems on the Interstate System and at least 50 percent of the costs to evaluate them. As of August 1970, FHWA had sponsored five such systems under its research program at a total Government cost of about \$1.1 million of which \$1.0 million was for construction and installation and \$.1 million for evaluation studies.

We selected for review three systems installed on sections of the Interstate System located in Maryland, Michigan, and Texas. Maryland and Texas installed non-voice push button type call-box systems. Michigan installed a telephone system. Our review was directed primarily towards ascertaining whether the objectives of the program were being achieved. We previously reported to the Regional Federal Highway Administrator, Region 2, by letter dated January 9, 1970, on the extent of Federal participation in the cost of constructing the emergency communicarion system on the Capital Beltway (I-495) in Maryland.

FHWA instructions in effect at the initiation of the research program in 1965 required that the three States perform an evaluation study to determine the effectiveness of the sponsored systems. We noted, however, that FHWA had not issued specific guidelines for obtaining the information needed to make such a determination.

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Our review showed that sufficient data was not collected for the evaluation studies to determine the effectiveness of the three systems. FHWA recognized that additional data was needed and, on March 26, 1970, issued an instructional memorandum including guidelines to be used in performing future research studies.

The guidelines require the systematic accumulation and analysis of more comprehensive data than had been required by earlier instructions. We believe the new guidelines should permit more meaningful evaluation studies of future emergency communication systems. However, we believe FHWA should also consider re-evaluating the three existing federally sponsored emergency communication systems on the basis of the requirements of the new guidelines. Such an approach could reduce the scope for future experimental systems in order to develop the data required to establish criteria for the guidance of the States in determining their emergency communication system needs.

We appreciate the cooperation and courtesies extended to us by both FHWA and State highway officials during our review. We would appreciate your advice as to any consideration which may be given to developing more meaningful evaluation data on the three systems reviewed.

Sincerely yours,

Richard W. Kelley Assistant Director

Mr. Francis C. Turner Administrator, Federal Highway Administration Department of Transportation

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