observations. I think with the time we have remaining that I will ask leave that Mr. Prisk might prepare that statement and submit it at this point in the record as exhibit No. 8.

Mr. McCarthy. Without objection, it is so ordered.

(The document referred to follows:)

SUMMARY STATEMENT OF CHARLES W. PRISK, CONSULTANT TO THE SPECIAL SUB-COMMITTEE ON THE FEDERAL-AID HIGHWAY PROGRAM

INTRODUCTION

The newest Interstate highway projects in nine States were inspected during the period from April 3 to May 2, 1967 for the adequacy of their design for safety. These improvements appeared to represent impartially the freeway design just now being opened for public travel on the Interstate highway system. Each section was located in a different geographic region of the United States, corresponding with the regions of the Federal Highway Administration. In four States the projects were entirely rural, in two States entirely urban, and in three States a mixture of urban and rural.

Roadside hazards were given special attention during the field review and a surprising number of these were observed on all nine projects. Because the projects visited are typical, it is not unreasonable to infer that many of the same weaknesses could and undoubtedly do exist throughout the 25,000 miles of the Interstate System that are now in use.

The prerequisite to improvement of this situation is a thorough understanding of the nature of the hazards. In my judgment, they arise not so much from willful violation of official design standards for the Interstate System as the widespread failure to recognize and treat a major freeway accident problem. The problem involves single vehicles that leave the roadway out of control, a type of accident that accounts for about three-fourths of the traffic deaths among users of the Interstate System.

A parallel and related difficulty stems from the insufficient and oft-delayed use of knowledge critical to safety. Much of this is readily available from reliable experience and research resources. In the nine State review, the principal design elements related to roadside hazards were classified in the following categories: Guardrail, median barrier, structures, shoulders, curbs, drainage facilities, signs and sign supports, lighting standards, gores, slopes.

Information was assembled on each of the nine projects for the items listed. During the past four days of this hearing, a review of the roadside conditions has been presented. My testimony has been based on a field visit to each project, conferences with many of the affected public officials, and close study of the design policies and practices applicable in each case.

Only four projects, those in Oklahoma, Georgia, Rhode Island and Montana, had roadway lighting installations and obviously the observations on lighting standards relate mainly to those States. In Missouri, even though the Interstate project inspected had been open for about six months, guardrail work was incomplete, being in place at only a few structures. Hence the comments on Missouri guardrail have application to only a small and perhaps unrepresentative sample of what later will be installed.

The nine projects had been open to traffic for periods ranging from three to eight months. More often than not, considerable work was generally still needed to obtain a facility as safe as had been orginally planned. The missing work was typically classed as "clean up." Included were final alterations to guardrail grading and paving of shoulders, grading and seeding of medians and slopes, closing of construction crossovers in the median, installation of final signing, delineation, and mileposts, and numerous other features directly affecting the safety and quality of service available to users of the Interstate System.

Guardrail

Because guardrail is the roadway element most commonly struck as vehicles run off the roadway of the Interstate Systems, its design and use are of significant importance. Obviously the purpose of the usual guardrail installation is to protect the road user from a consequence more severe than that of striking the guardrail itself. It should be used only where necessary since it is itself a roadside hazard. Practices among the nine States visited vary substantially in this respect.