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## FOREWORD

During the past few years, there have been considerable discussion and concern about the downsizing of the automobile in relation to highway safety. A number of people have expressed the belief that an increase in the number of smaller vehicles will have significant impacts on safety. After some consideration, the Group 3 Council of the Transportation Research Board decided that it was appropriate to organize a forum for presentations on this subject.

The Mini and Microautomobile Forum was scheduled and held during the 61st Annual Meeting of TRB in Washington, DC, on January 19, 1982. The objective was to address the merit of smaller automobiles and the expected increase in their number and to identify related problems that should be considered by the transportation community. It was expected that the TRB Annual Meeting would provide a diverse audience -- representatives from transportation, education, business, research, and government as well as other interested parties -- to generate the needed participation.

The sessions were well-attended. The presentations by the speakers gave a total overview of the smaller-vehicle problem and provided some perspective on what to expect in the next few years. This Circular presents an edited text of the speakers' presentations along the pertinent discussion on each subject.

To summarize the Forum, it appears that a market does exist for smaller vehicles either as a second vehicle or where vehicle use is limited. Among younger drivers, there is some demand for the smaller vehicle as a first car because of both lower initial cost and lower operating costs. It is projected that the smaller vehicle would account for only 6-9 percent of total passenger car sales. This sales percentage probably would not

cause a major increase in total highway safety statistics because certain limits would normally be imposed on the use of smaller vehicles by their purchasers. However, the presence of these smaller vehicles on the nation's roadway systems will still cause a number of problems.

The smaller vehicle always loses in any competition for space with larger vehicles. The result is increased fatalities and injuries for small-vehicle passengers. But it is possible to incorporate certain safety features in the vehicle design to ameliorate the size disparity between smaller and larger vehicles. In addition, although roadway design geometrics generally accommodate vehicle downsizing, some roadside appurtenances will have to be modified to provide passenger protection in small-vehicle collisions.

Questions arise as to who is responsible for incorporating safety features for this type of vehicle: Should the government retrofit all roadside appurtenances at taxpayers' expense? Should the manufacturer make the car buyer pay the cost of incorporating minimum safety standards in the vehicle? It was noted that the courts are assigning more responsibility to the manufacturer under product liability, thus modifying the prospect of fatalities.

Finally, there is a compatibility requirement that needs to be addressed by the transportation community -- i.e., assigning responsibility for safety among the driver, the vehicle, and the highway.

It is hoped that these presentations from the Forum will generate some discussion and resolution of the noted problems.

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