

Mr. BROOKS. Thank you Mr. Bridwell. I want to ask you one question. Would you furnish for the record your comments on the example of your traffic and highway safety program, wherein your people apparently feel that the newly adopted standard on the energy absorbing steering shaft might be capable of reducing driver deaths by as much as 70 percent?

Mr. BRIDWELL. Yes, sir; I will be glad to furnish that for the record.

Mr. BROOKS. It will be of particular interest to those of us who drive.

Mr. BRIDWELL. I can understand that.

(The information requested follows:)

For more than a year the National Highway Safety Bureau has been a principal sponsor of very important work at the UCLA Medical School. In this work, teams consisting of surgeons and other physicians, and engineers are doing in-depth investigations of major highway crashes in the Los Angeles area. The workup includes not only extensive photography and other permanent documentation, but also detailed correlation of clinical and autopsy findings with information from the crashed vehicles themselves.

Thus, as the research data accumulate it is increasingly possible to determine, for given impact speeds and directions, the ways in which the crash forces reach the bodies of the occupants, the injuries produced or prevented, and, especially, the influence of changes in design directed at ameliorating the forces of impact.

In the area of the committee's interest, the head of the UCLA Trauma Research Group, Dr. Alan M. Nahum has estimated that the reduction in the incidence of fatal injuries to drivers in front-end crashes of vehicles equipped with the new energy absorbing steering assemblies is in the vicinity of 70 percent. Although a considerable amount of research work still needs to be done, there is already considerable evidence that these devices do in fact represent such a breakthrough. In illustration, the attached figures, from the UCLA work, compare the incidence of fatal, dangerous, and other injuries to drivers in comparable crashes of vehicles with, and without, such energy absorbing devices. As can be seen, the shift away from the more serious results is dramatic indeed.

The principle for these devices, which are still only in their first generation, and which will be greatly improved during the coming months, is to cushion the forward deceleration of the driver, much in the manner of a fire net, and to substitute such performance for the rearward moving and spearlike steering shafts, and their related hardware, that have characterized this aspect of vehicle design and construction in the more than seven decades since the first automobiles appeared on our roads.