

safety improvements. A breakdown in the smooth operation of a highway manifests itself in accidents. Thus, a system or procedure which identifies and locates accidents is at the same time a pulse-taker of highway operational efficiency.

As a corollary to the spot improvement program, I mention the TOPICS program, which has the purpose of making existing streets and highways in urban areas more useful by increasing their traffic carrying ability, reducing congestion, and improving their safety. To achieve these objectives, the program involves the application of modern traffic engineering and operational techniques to a selected network of the major traffic-carrying streets in the urban areas. While many improvements of this type are primarily generated by the need to move traffic efficiently, they add up in fact to a kind of spot improvement safety program for the urban areas, and in that context can be considered part of the Bureau's and the State's overall highway safety effort.

The present annual toll of traffic deaths and injuries on our highways presents a grim picture. But before we become overawed by grimness in assessing the situation which exists, we should interpret and place in proper perspective the statistical information available to us. To be realistic about it, there are factors involved in the problem which can never be cured by any amount of highway improvement.

This is not to say that we shouldn't try to improve on the other factors. But, in trying, we must recognize that there is probably an irreducible minimum of traffic accidents and deaths and we should proceed by all means at our disposal to reach that minimum. Included in that minimum most certainly are an unknown number of deaths from natural causes. Furthermore, it is useless to talk seriously about reducing fatalities until we are also willing as a society to take serious steps to eliminate the socially accepted mixture of alcohol and driving because a majority of the annual victims result from this cause rather than any deficiency in highway design or construction.

It is quite obvious that the accident problem must be attacked on many fronts and your subcommittee has correctly selected as one of these fronts the design of the roadway and the location of its roadside appurtenances.

While the manner of handling these appurtenances is an important area for consideration, it must be kept in proper perspective. It should be recognized that accidents and fatalities involving features such as those which have been so amply and frequently presented to the subcommittee are far less in number than those which have been prevented by appropriate standard design which has not been discussed. Likewise the total number of accidents of the kind covered extensively in the hearings constitutes only a small fraction of all highway fatalities, in connection with the Interstate System. Any fatality is too many, and we must work diligently to avoid all of them. In so doing, however, we must always keep at the forefront of our emphasis these items which produce the largest measure of benefit for the effort and dollars which are available to us.

Actually, the total of all fatal accidents of the general type being discussed in these hearings constituted a very small percentage of the total fatalities last year—a figure about equal to those occurring between railroad and highway vehicles—or the number of fatalities