Our initial reasons for this undertaking were exploration and staff development. We are not satisfied that adequate analytical procedures are being applied to the mass of accident information presently available, nor in fact are we satisfied that fully adequate analytical procedures have even been developed. This, then, has been a special study to develop staff competence in accident data analysis and to explore and devise analytical procedures that will effectively equip us to assist the State highway departments in establishing data analysis activities which we think must be undertaken.

I believe the subcommittee is aware of our activities under Bureau programs, additional to those I have discussed, having a high degree of impact on highway safety. For the record, however, I would like to mention three of these: The Interstate System program, the spot improvement program initiated in 1966, and our new TOPICS pro-

gram.

The National System of Interstate and Defense Highways, as you well know, is being constructed to the highest design standards ever developed for roads in this country or any other country. The danger of headon collisions is substantially reduced by separation of roadways for opposing lanes of traffic. The elimination of all at-grade intersections has completely removed the serious accident potential at crossroads. Private driveway connections are also prohibited, thus further reducing or eliminating this possibility of a collision between vehicles.

At the present time, almost 25,000 miles of the system are open to traffic, providing us sufficient experience with traffic operations under these standards to know that the fatality rate on the Interstate System runs substantially less than a third of that on the older, more

conventional highways.

It must be borne in mind, however, that substantial portions of this system were constructed some years ago and that this construction was based on engineering designs developed even several years earlier. Consequently, some sections of the system were designed without the benefit of important knowledge gained in the intervening years, particularly in the causes of various types of highway accidents on this system. The Bureau has provided recent authority that these older sections of the system can be modified in the light of current knowledge of improved safety procedures. The outlook, therefore, is that the safety record of the Interstate System will be still further improved with the incorporation of additional safety features on the older segments.

On the older highways, the so-called spot improvement program is potentially one of the most important of all developments in the field of highway safety. It has directed the attention of the Bureau and the State highway departments to the possibilities of reducing accidents through particular attention to the removal of specific highway hazards. In terms of money invested, the benefits are expected to be quite large by the careful selection of future safety projects on the basis of both actual accident experience and advanced identification of potential hazards. This will become standard procedure as the States are able to develop their capabilities in this area. The most significant and far-reaching aspect of this program is that the procedures required to carry it forward will result in the comprehensive and continuing surveillance system which is so sorely needed as a basis for further