

## **SECTION IV**

Section IV reports address various issues including research into the causes of accidents, the development of improved statistical techniques and research methods, and the maintenance of a driver record file (a random 1% sample of California drivers) that is used as the database for many ongoing research projects.

The Research & Development Section conducts ongoing research into the causes of accidents, particularly those associated with the human component of the driving task (driver error, aging, faulty perception, risk-taking, etc.). As the etiology of accidents is explored and understood, it becomes possible to develop more effective accident countermeasures and to construct better prediction equations for identifying accident-prone drivers. The Section also conducts a limited amount of research in the development of improved statistical techniques and research methods for analyzing driving record data. As the relative success of various research methods is documented, future designs can be altered to ensure use of the most effective techniques available.

The Department maintains a permanent file of the driver records of a random 1% sample of California drivers. Information on accidents and convictions that would normally be purged after a certain period of time is retained for research purposes; thus the Department has a longitudinal sample of driving behavior which encompasses over 20 years of driving. This driver record file is used as the database for many ongoing projects.