

## REVIEWS

### CASUALTY ACTUARIAL SOCIETY

The 1957 Volume of the Proceedings of the Casualty Actuarial Society includes a number of interesting actuarial studies. The following is a brief resumé of these studies.

*Automobile Bodily Injury Liability Rate-Making on a Prospective Basis* by J. EDWARD FAUST, Jr.

The purpose of the study reported in this paper was to find a means for forecasting the pure premium for Automobile Bodily Injury Insurance one year in advance.

With such a statistic it would then be possible to compute rates which would be adequate for the period of time they are to be in effect or at least to serve as a gauge to evaluate the adequacy of a proposed schedule of rates.

It was found that it was better to forecast the average paid claim cost and average paid claim frequency separately and to use the product of these two quantities as the forecast of the average paid pure premium rather than to directly forecast the paid pure premium.

By using data from previous years it was found that there was an extremely high correlation between the Consumer Price Index, published by the Bureau of Labor Statistics in Washington, D.C. for the current year and the average paid claim cost for the next succeeding calendar year.

It was found that the paid claim frequency changed very little from year to year and that a simple straight line function could be used to forecast this quantity under the assumption of a small constant increase each year.

*Principles and Practices in Connection with Classification Rating. Systems for Liability Insurance as Applied to Private Passenger Automobiles* by JOSEPH M. MUIR.

This extensive review of the classification systems for liability insurance on private passenger automobiles covers past, present and possible future methods of classification. The view is expressed that rising loss costs will promote greater selectivity and a more equitable distribution of insurance cost. Theoretically, no class of business is undesirable if it develops an adequate premium return.

Classification of this business has progressed through a number of stages. Initially, physical characteristics of the vehicle were used. These gave way to elements involving use, number of operators, accident and conviction records of operators, occupation of the insured, mileage, age of operator, rate discounts for safe driving, penalties for accident records, marital status of the insured, family responsibility and sex. Some of these rating characteristics in one or more forms are used currently by all segments of the automobile insurance industry. The relationship among the classifications is determined by differentials, and rate territory differences are recognised by a distinction between urban and rural areas.