

2. How successfully can drivers be classified as to degree of driving skill?
  3. How reliably can the future accident record of classified drivers be predicted?
  4. Can elements other than frequency be adequately assessed in classifying drivers, e.g., willful vs. inadvertent violations; fault vs. non-fault accidents; extent of resulting injuries or damage?
- B. Is driver-skill rating properly a supplement or substitute for manual class and territory distinctions?
- C. Importance of other merit rating considerations (may or may not be part of special class or rule which calls for rate adjustment).
1. Size of Car—compact or regular.
  2. Equipment (or lack)—power brakes, safety belts, safety glass, padded dash, depressed-center wheel, windshield cleaner, etc.
  3. Use of Car—transport to work, other business, pleasure only, touring.
  4. Mileage—average in past; anticipated.
  5. Operators—occupation; age; sex; marital status; proportionate use; years licensed; financial responsibility certificate; assigned risk; physical impairments; use of alcohol.
  6. Multiple Cars—number of cars vs. number of operators.
- D. Statistical Data.
1. Presently available—California Driver Study, Canadian merit rating statistics, Swiss sample and others.
  2. Future—What provisions should be made for additional essential information not presently recorded?—(Cause of accident study. An accident table for Automobile Injuries.)
- E. Cross Examination.

You are invited to submit written statements of the “true or false” variety, which are designed to elicit discussion of any doubts, inaccuracies, or deficiencies in the theory of merit rating as thus far developed—to be discussed by volunteers.

## PRACTICAL ASPECTS OF AUTOMOBILE MERIT RATING

(SUMMATION BY WILLIAM S. GILLAM, RESEARCH DIVISION, NATIONAL BUREAU OF CASUALTY UNDERWRITERS)

I think it is very true that in any discussion of either the theoretical or practical aspects of automobile merit rating you tend to get involved in the other aspects. Several people mentioned, after our discussion on the practical aspects, that some of the things that were discussed should have been in the other seminar. Of course, when you're discussing something like merit rating,

you don't want to narrow it down too much. On the other hand, it is a broad subject and, even in the seminar on the practical aspects, we covered a lot of ground and it's somewhat difficult to summarize it.

In any case, we started off our seminar, as the other seminars, with a review of a previously submitted paper, that by Frank Harwayne entitled, "Merit Rating in Private Passenger Automobile Liability Insurance and the California Driver Record Study." The review was presented by John Muetterties.

There is one point in particular upon which I would like to comment that came up in John's review and also in a letter that Frank Harwayne sent to us in reply to John's review. This has to do with the question of when a merit rating plan is in balance. In his review John Muetterties posed the question this way:

When is a merit rating plan in balance?

1. When the expected distribution times the debit or credit rated risks equals the manual level, or
2. a. When a lower than manual level is produced but the losses are lower to the same degree, and  
b. When a higher than manual level is produced but the losses are higher to the same degree.

Frank in his reply indicated that he believes it is fair to say that the first answer conceives of a static balance while the second answer deals with a dynamic balance and that both might be included in the following form: a merit rating plan may be said to be in balance when the sum of the expected losses and the expected expenses may be expected to produce a reasonable profit margin or dividend margin.

This question of when a merit rating plan is in balance, or when it is off-balance, came up for discussion in both sessions of the seminar on the practical aspects of merit rating and there was general agreement with this last statement of Frank Harwayne although the idea was expressed in several different ways.

In this connection I think it would be well to comment that no attempt was made to take a vote on the various questions that came up and it's very difficult for the Chairman to determine the consensus of the group. All we can do is report the consensus of those who spoke up and we have to assume that those who remained silent agreed with the statements that were made.

The Chairman had prepared an outline of subjects for discussion for the guidance of the participants in the seminar. This outline on the practical aspects of automobile merit rating started out by stating that the discussion should proceed on the assumption that the seminar on the theoretical aspects of merit rating had concluded that merit rating for private passenger automobiles was feasible from a theoretical point of view and that the discussion in the seminar on the practical aspects should consider these practical aspects (1) from the point of view of the administration of the plans by companies and producers, and (2) from the point of view of acceptance of the plan by insureds and the public.

Six different subheadings for discussion were set forth: (1) definition of accident, (2) definition of conviction, including the basic question of whether the use of convictions is feasible from a practical point of view in an automobile merit rating plan, (3) length of experience period, (4) administration of the plan, including the use of signed applications and the use of motor vehicle records, (5) political aspects of the plan, including the effect of variations in enforcement of traffic laws, the effect on driving habits and highway safety and the general political aspects of the acceptance of this type of a rating plan, and (6) the effect on loss reporting and loss adjustment.

As you can well understand, the participants in the seminars didn't stick to this prepared outline very closely; they jumped around from here to there but, by and large, in both seminars most of these points were touched on to one extent or another.

In the first seminar the principal point that was discussed was the cost of administering merit rating plans. The seminar got into this discussion when it was pointed out that any calculations of the off-balance of a merit rating plan should take into account the additional administrative expenses of a plan. This led into a rather extensive discussion of the administrative problems and costs involved; these problems were discussed particularly in terms of the complications in connection with mechanical billing and in terms of the cost in a state that has low average rates and high costs for motor vehicle records.

In defense of the additional expense for administering merit rating plans, it was pointed out that the allowance for company administrative expenses in the rates for National Bureau companies is only 6.5% of the total premium. Even allowing for a very substantial increase in that part of this allowance that goes for the particular type of expenses that would be increased in administering a merit rating plan, the net effect on the total premium should be quite small. And this additional expense should be considered desirable by all concerned if it produces a more refined classification of risks.

On the question of off-balance, it was noted that in California initially the debits had acted as an automatic screen which served to induce risks who would have been assigned debits under the California Safe Driver Insurance Plan to seek a market where they wouldn't be called upon to pay the debits. This resulted, for the companies using the Safe Driver Insurance Plan, in a distribution by sub-classification that was weighted very heavily on the credit side—much more heavily than had been anticipated in the estimated distribution that had been made on the basis of the California Driver Record Study. At first this caused some serious concern. But later it was generally realized that the off-balance of this type of plan cannot be measured by examining only its effect on premiums; it is necessary also to examine the effect on losses. No detailed loss ratio data on a consolidated basis is as yet available but individual company loss ratios indicate no need in California for serious concern about the effect of the plan on the premiums.

In the second seminar two principal aspects were discussed. First was the competitive aspect. Statements were made to the effect that the real purpose of stock agency companies in going into merit rating was to reshuffle the business and get back some of the cream that had gone to the low-rate companies.

The second principal aspect discussed was the effect of such plans in depopulating the assigned risk plan. It was stated that such a plan should, in the long run, provide a freer market for poor risks outside of the restrictions of the assigned risk plans. In particular this should apply to those marginal risks currently going into the assigned risk plans. In the discussion it seemed to be generally agreed that this was something to be hoped for; but even if it did come to pass, there still would be need for assigned risk plans for the really "bad" risks.

In conclusion, I believe that those who participated in the discussion on the practical aspects of automobile merit rating would agree that no startling conclusions were reached but we hope that those who have not worked closely with the development and introduction of these plans learned more about them. There is a wide field for future discussions on a number of the different practical aspects of merit rating plans.

## RATE MAKING AND STATISTICS FOR MULTIPLE PERIL POLICIES

(SUMMATION BY ERNEST T. BERKELEY, ACTUARY, EMPLOYERS' GROUP)

Our seminar was based on a paper that was presented to the Society last fall by Bob Hurley on "Multiple Peril Rating Problems—Some Statistical Considerations" and the discussion at both of the seminars was opened by a review of that paper by Paul Otteson.

Bob Hurley wasn't able to be there, but Paul did an excellent job in setting the stage for our discussion. Both sessions of the seminar were very well attended and I thought there was excellent audience participation. The seminar concentrated on a Homeowners policy on an indivisible premium basis as a prime example of a multiple peril policy. One of the interesting points that came out was that after a show of hands I discovered practically everybody in the room had a Homeowners policy except myself! I'm not quite sure, but I wonder whether that's why I was chosen to moderate the seminar so that I would see the light of day and get one myself.

The paper and the review were in a sense initial surveys of the proper statistics and rate making for multiple peril policies and were of necessity pretty well confined to general considerations and delineation of the problems involved rather than the proposal of definite solutions.

In the seminars, before undertaking a detailed discussion of the points raised in the paper and review, it seemed advisable to set the stage by recalling briefly the history of the Homeowners policy including its origin, coverage, statistics and rate making. The early pattern, I'm sure, is a familiar one to everybody. The removal of the restrictions of the Appleton Rule in 1949 made it possible to combine fire and extended coverage, theft and liability coverages in a single policy which could be written by either a casualty or a fire company. There is no need to recount the enthusiastic reception on the part of the public, the agents and initially at least the companies.