

SCHEDULE RATING IN FIRE INSURANCE

(Summation by Robert L. Hurley, Actuary, Inter-Regional Insurance Conference)

The Program Committee certainly made the chairman's job easy by selecting for the panel two men, both with wide experience in the field, and each a recognized authority in his own right. Our colleague, LeRoy Simon, who writes technical papers and articles with equal facility on fire and casualty subjects, handled the statistical aspects of fire rating problems. As our other expert, the seminar was privileged to have Mr. John Hommes, Manager of the Western Actuarial Bureau and a professionally trained engineer with an outstanding record in the construction and application of schedule rating in the fire field. Mr. Hommes distributed to the group a typical rate survey form and explained the principles involved in schedule rating. The following major aspects of the fire rating problem were scheduled for possible discussion:

1. The Meaning and Scope of Schedule Rating.
2. The Basic Element of the Fire Insurance Risk.
3. Alternative Philosophies of Hazard Measurement.
4. Evaluation of the Contribution of Fire Schedule Rating.
5. The Major Elements in the Schedules for Rating Fire Insurance Risks.
6. Fire Insurance Statistics and their Relation to Rates.
7. Industry-wide Trends affecting Fire Schedule Rating.

Now, based on this seminar, what would one predict for fire rating methods as they will be conducted by the time of the United States bicentennial celebration, a brief 15 years from now? Will there be no essential changes? Or will all that has been previously accomplished be cast aside? And will electronic-thinking machines and men to match evolve a philosophy and technique still hidden from most of us? With no responsibility to take sides in the various proposals made during the seminar, the chairman imagined that he might well be in a good position to sense the direction of seminar's thinking along these lines.

As I followed the discussion, I detected no sign that the seminar thought that schedule rating had run its course and was about to be scrapped. There was, it seemed to me, a real appreciation of the contribution made by schedule rating. This was no hollow tribute for past services but a realization that hazard measurement for fire insurance called for techniques different from those employed in Life, Workmen's Compensation and Auto Liability. The seminar recognized the large number of variables which affect the fire hazard of the individual risk. Admittedly, these factors are so many and so varied as practically to defy customary statistical techniques. They are nonetheless real and pertinent to the risk evaluation of the fire hazard, which inherently requires a physical inspection of the property to be insured.

There was some mention of a few areas of the schedule rating system wherein further exploration might be conducted. In the periodic reviews

that are made of the schedules, consideration might be directed to the elimination of any minor items having only marginal influence on the final risk rate. Moreover, it was proposed that, particularly in view of the creation of package policies, investigations might be made to see if a closer alignment might be devised between the risk classification and protection (i.e. public and private) systems and the risk rates. However, it was my impression that the seminar looked for schedule rating (for the purpose of an individual risk evaluation of the fire hazard) to survive any "wave of the future."

At the same time, the seminar discussion suggested that the next two decades may witness some significant adjustments in present fire schedule rating techniques. Some of the emerging forces stem from the insurance business itself. Others impinge from outside. High in the list of the external forces are:

1. The application of such research techniques as statistical sampling of complete universes.
2. The potentialities of electronic data processing.

From within the industry, we shall have to reckon with:

1. The trend to multi-peril policies.
2. High deductibles, and excess covers.
3. The competitive picture, and the search for objective standards for rates which shall not be excessive, inadequate or unfairly discriminatory.

During the seminars, it was pointed out that Fire loss probabilities are significantly different from those of WC, A & H, and Auto Liability. It may well be that fire loss expectancy for other than trivial losses may be of such a low order of magnitude that a rate classification system based solely on loss statistics may prove not feasible within the normal tolerance for credibility standards.

And yet it is unthinkable that fire rates will be made with no advertence to loss experience. This is not done today. Fire Rating Bureaus have a Rate Level Adjustment formula which has received wide recognition, and is working reasonably well. While fire rates will probably never be made exclusively on a detailed classification of loss statistics, it is quite possible that the present Rate Level Adjustment procedures may be extended to additional areas. One might easily visualize the Rate Level Adjustment procedure being applied to a very limited number of broad groupings of fire risks—possibly not solely on a mere occupancy classification basis. Then the schedule rating evaluation will continue to be used to distribute the indicated average rate levels among the various individual risks within each hazard group.

With such a development, statistical sampling may become an important tool in determining average rate levels for hazard groups and possibly sub-groups. At the same time electronic data processing may well assume an important role in the mechanical handling of the pieces of paper involved. It might well process the results from the application of the schedule rating, but will not likely ever replace the individual risk evaluation of the fire hazard. It will indeed be interesting to see what has happened to fire insurance schedule rating in the world of 1976.