

PRINCIPLES AND PRACTICES IN CONNECTION WITH
CLASSIFICATION RATING SYSTEMS FOR LIABILITY
INSURANCE AS APPLIED TO PRIVATE
PASSENGER AUTOMOBILES

BY

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INTRODUCTION

Automobile registrations in the United States now exceed 67,000,000, an increase of 270% in the last three decades. The premium for bodily injury and property damage liability insurance has increased from \$250 million to more than \$3.0 billion during the same period. Passenger cars have accounted for their proportionate share in the phenomenal growth of the automobile industry and that type of vehicle has produced not less than \$2.3 billion of the liability insurance premium. This multi-million dollar volume of business has been the incentive for the automobile liability insurance industry to exercise all of the techniques and knowledge at its command to effect an equitable and marketable distribution of risk by means of classification rating systems.

More than a quarter of a century has passed since a student of the automobile liability insurance business stated that any advantage occurring from improvement in the loss experience should go to *all* policyholders, and conversely, any adverse development should be apportioned among *all* risks. This theory was predicated on the following precept of insurance:

“A group of persons, each of whom realizes that he is subject to the possibility of some loss, the time and amount of which are matters of uncertainty, create, through justly proportioned contributions, a common fund, from which, in the event of such loss happening to any of them, compensation may be made to the loser and the burden thereof distributed over the entire group.”

The philosophy of distributing loss experience among *all* insureds, irrespective of risk hazard, no longer prevails to any extent. It has been rejected in favor of a policy of fair discrimination with respect to rating criteria which are measurable in terms of loss costs. This development can be attributed to evolutionary changes occurring within the insurance industry. These included the rapid increase in the number of companies organized to write automobile liability insurance, the emphasis placed upon the public welfare by the enactment of legislation affecting the use of automobiles, the competitive measures employed by specialty companies for the purpose of attract-

ing the most desirable portion of the business and, experimentation directed toward a more equitable distribution of hazard within the rapidly growing automobile insurance market. Legislation enacted in the several states has also been influential in encouraging fair discrimination among risks and providing appropriate administrative machinery. The All-Industry Casualty and Surety Rate Regulatory Bill which was approved by the National Association of Insurance Commissioners on June 12, 1946, provided in part, under Section 3(a)3 thereof, that "Risks may be grouped by classifications for the establishment of rates and minimum premiums." A similar permissive grant is found in all of the state laws.

The press and other organs of public information have been instrumental in prompting state supervisory officials, legislators and laymen to debate the merits of private passenger automobile classification rating, primarily from the standpoint of its value in automobile accident prevention. Some effort has been made in this sphere by the insurance companies but the experience gained has not been encouraging. There is little doubt, however, that the automobile insurance industry must meet the ever growing demand for more definitive categories by which risks may be grouped in accordance with variation in hazard. The extent to which conservatism in this area may be overshadowed by a policy to increase premium volume, is reflected by the trend in the indications for rate level adjustments on a state by state basis. A period of rising loss costs will promote greater selectivity and redistribution, and result in a shift of the desirable business to a more favorable rating classification, with a relegation of the less desirable group to a more self-supporting position in the classification system. Favorable underwriting results can lead to a redistribution of the indications within classification divisions, but the means by which this may be accomplished are somewhat more flexible than those utilized when the experience is unfavorable.

The production forces of the industry provide a testing ground for measuring the reasonableness of rating elements which might appear to have all of the desirable qualities for a classification rating system. The producers have materially influenced the further refinements which have been accomplished in the realm of classification distribution of private passenger automobiles.

After three decades of experimentation in this field, it is significant that many of the characteristic features of rating systems which are currently in use by a great majority of automobile insurance companies, were also basic to the systems used thirty years ago, demonstrating their conformity with public interest and soundness from a rating viewpoint.

The development of these systems, together with the principles and practices underlying their evolution, form a composite subject worthy of review and analysis. It is the purpose of the discussion which follows to present and examine some of the important aspects of this phase of automobile liability insurance ratemaking.

PRINCIPLES OF CLASSIFICATION RATING

The fundamental objective underlying any private passenger automobile classification rating system is to establish an equitable distribution of insurance costs so that all risks will be charged their proportionate share of the losses incurred by the company. If the various groups into which the insured population is divided develop the same loss ratio, then no class of business, theoretically, is more desirable than another, from a loss standpoint. Basically, a class of business is or becomes undesirable only because of an inadequate return of premium. The amount of additional expense dollars resulting from a grouping of risks within a high rated class may establish that class as the most desirable business.

The standing of a company in the automobile insurance industry and its determination to maintain that position affects immeasurably its willingness to provide a sound and stable market for a wide range of risks embracing those with low as well as high loss potentials. Full recognition must be given to the fact that a competitor, offering lower rates for substantially the same product, will attract the most desirable business to take advantage of the lower cost. Competitors specializing in writing a class of low hazard business may reject higher loss cost applicants who find a more ready market among the writers of a general class of business. If such competitive lower rate offerings are supported by measurable elements or conditions such as reduced acquisition or other expense costs, extreme care in selection of type of business, restricted territorial solicitation or a rigid renewal policy, those offerings can be sustained and the higher cost companies are obliged to write a disproportionate share of the less desirable business.

In a market involving broad groupings of hazards, with a sufficient volume of business in each group to provide ample writings, a proper loss ratio incurred on a "disproportionate share" would be just as acceptable as on a "proportionate share". Such a market, however, does not remain static. The forces of competition operate to narrow the groupings, with the result that in the interest of public relations, a subsidy—ratewise—is created to compensate for that percentage of the total which develops the highest loss experience.

The more a classification system is refined, the greater must be the reliance placed upon the production forces to assign risks to their proper categories. If the refinement is insufficient, the producer may be placed at a competitive disadvantage. Contraction in the premium volume of a class of exposure which the company has characterized in broad terms may indicate the need to subdivide the elements to create a more attractive classification. The nature and extent of the refinement is limited by the number of measurable elements usable as criteria, the ability of the company to secure proper rating information applicable to those elements, and the effect the system will have in meeting similar methods of a competitive nature. The elements selected may be based upon estimated performances or results in

factual circumstances or determinable conditions, or upon a combination of both. Certification of classification rating information by the insured or by the producer on behalf of the insured is an accepted administrative practice. The system may operate prospectively or retrospectively.

While established ratemaking procedures for automobile liability insurance include the selection of state and territorial rate levels to reflect conditions anticipated during the period the rates will be in force, such rate levels can be unbalanced by superimposing thereon a weighted classification system. When the selected distribution and classification differentials produce such a result, a correction factor may be used to balance the classification rates to the selected level. Classification systems which, as respect premiums, purport to penalize the accident-prone risk or give credit to the accident-free risk, are all subject to rate level balance adjustment. The penalty charges increase the collectible premium and the credits reduce the volume. If the classification system is in balance, the charges and credits will produce the result to which the selected rate level is keyed.

Whether or not classification rating in any form is an incentive to accident prevention has yet to be demonstrated, as such measures involve a complicated problem arising from the variable of human nature. Judgment, foresight, presence of mind, mechanical aptitude, concentration under all kinds of driving conditions, consideration for others—all involve mental alertness and responsiveness to the lessons of experience which do not form a part of man's inherited faculties. Rules for safe driving, safe walking, laws against carelessness in the use of an automobile with fines and penalties commensurate with the offense, educational programs—should all have an effect in reducing automobile accidents, if implemented properly. Fundamentally, however, there are other methods and means better calculated to reduce accidents. While some psychological benefit may be derived from the use of certain elements in classification rating systems for automobile liability insurance, the occasion for accidents could be considerably reduced by city planning, highway construction based upon the most modern and tested safety techniques, traffic control, elimination of grade crossings, dangerous curves and blind intersections, greater segregation of types of traffic—all centered around a national uniform pattern designed to eliminate the present confusion which results from unilateral planning by the individual states. Classification rating for private passenger automobiles could be synchronized with such measures to emphasize the beneficial results which would accrue to policyholders as the result of safer operating conditions.

BACKGROUND

Following the underwriting and rating practice of classifying private passenger automobiles in accordance with their physical characteristics, i.e., horsepower based upon cylinder bore and number of cylinders, to which was added later, wheel base, weight, list price

and several safety factors, a new concept was introduced in 1921—a discount in rate for restricting coverage to exclude use of the automobile for business purposes, coupled with an additional discount if the coverage were limited to an owner-driver exposure. When experience on this classification became available, it did not substantiate the refinement to any reasonable extent. Such result was attributed to the limited spread of the experience among the various classes and rating territories. Furthermore, restricted use of automobiles was an accepted condition of that period, with few hard surface highways, poor quality of tires and numerous mechanical defects contributing to accidents and operating failures. These conditions were recognized as part of the calculated risk assumed in acquiring ownership of an automobile. The restricted classifications were withdrawn in 1924. The next five years brought about changes in automobile design, speed, production quotas, reduction in automobile prices, improvement and expansion in highways, and an increase in the mileage traveled by a population becoming accustomed to locomotion on wheels. Increasing congestion on highways resulted in an increase in accident frequency. During this period, the premium writings for automobile liability insurance increased 100%. Many companies were organized which specialized in writing automobile liability insurance and their policies were issued with rates based upon classification systems of occupational use or accident record.

In 1929, a large segment of the industry introduced a classification rating basis identified as the "Merit Rating Plan" to provide a rate differential between the careful and the accident-prone driver. A credit of 10% was granted on renewal if the insured had not been involved in an accident during a period of 21 months, ending three months prior to the effective date of the policy. This classification rating system was withdrawn after three years because the credit for an accident-free record was being offered to virtually all risks as the result of a breakdown in the administration of the Plan. A prerequisite to the operation of the Plan was the reliance placed upon the insured's declarations and an exchange of information among insurance carriers. Delays in issuing renewals, additional expense attendant upon handling credit adjustments when an insured changed carriers, and the additional work required of the production forces, were all factors which discouraged a willingness to continue the experiment. The 10% surcharge for certification under the then existing Financial Responsibility statutes served as a basis for the "Demerit Plan", the Merit Rating Plan's short-lived replacement.

Under the "Demerit Plan" the manual rates were subject to surcharges. The manual rates, without surcharge, were applicable in the absence of specific motor vehicle convictions and also where the incurred losses resulting from accidents did not exceed \$50.00. The experience period was 21 months. Surcharges of 10%, 25% and 50% were imposed under circumstances involving convictions or accidents, or both. This "Plan" met with strenuous objection from the production forces and was withdrawn on the same day it was released in

1932. Later that same year, the conviction provisions of this rating basis were incorporated into the Financial Responsibility Laws rules, with the 25% and 50% surcharges applied for specified convictions, and the previous 10% charge for financial responsibility certification made applicable to other offenses.

During the succeeding five years, experimentation in classification rating of private passenger cars followed an irregular pattern. Registrations were approaching 25 million and automobile liability insurance premium writings exceeded a third of a billion dollars. Experimentally, a variety of classification elements were introduced: physical characteristics of the automobile; use of the automobile; occupation of the named insured; accident record of the operators; conviction records; age and number of operators; mileage, either actual or estimated—all directed toward the same common objective, i.e., theoretically, to distribute the collectible premium dollars to reflect differences in loss costs. As a practical matter, the purpose was to arrest the steady shift in volume of business away from the principal writers of this line. In the latter part of 1937, frantic efforts were being made by those carriers to cope with the problem, and in December of that year the public was offered a monetary award for safe driving in the form of a 15% premium refund under the "Safe Driver Reward Plan", a form of merit rating.

Under this "Plan", the insured was rewarded with a premium refund of 15% at the end of the policy term if he had operated for a year without an accident. An innovation in the field of automobile liability insurance, this retrospective rating procedure was designed to circumvent the administrative problems which existed in other types of classification systems. However, the cost of making refunds in small amounts to an estimated 88% of the policyholders imposed a financial burden on carriers as well as on producers. Open accounts for non-canceled checks extended over long periods. The principles established by this system were not observed after it was found to be more economical to grant the "reward", in advance, against the likelihood of the insured being involved in an accident during the policy year. Five years later when the Wartime Emergency Rate Program was launched, this retrospective rating system was terminated. It has not been revived generally, although in an isolated quarter it has found some acceptance.

Not all state regulatory authorities or segments of the industry reacted favorably to the "Safe Driver Reward Plan", and although it was used in 34 jurisdictions where approval of rates was not generally required, none of the rate regulated states adopted it. As a competitive tool, it merely served as a forerunner for another refinement in classifications to reflect business or non-business use, estimated mileage and number of operators.

Opposition by various segments of the industry to the retrospective reward system in the State of New York resulted in the development of a penalty classification plan which was approved for all carriers licensed in the state. The "Preferred Risk Rating Plan", as it was

called, included three classifications. The lowest rated, Class 1, applied to risks which had been involved in not more than one property damage accident during a 21 months period ending three months prior to the effective date of the policy. Class 2, rated 10% higher than Class 1, applied if the accident record for the experience period involved one bodily injury or two property damage accidents. A surcharge of 15% of the Class 1 rate was applied to Class 3 risks. Such risks were designated as those having a more adverse accident record than assigned to Class 2. The three classifications were subject to a requirement that the insured complete a rating information form, and the carriers exchanged information covering the past accident experience of the risk. A penalty premium, equal to twice the difference between the premium at which the policy was written and the proper premium, was imposed if the facts were misrepresented by the policyholder. Considering the exigencies of the times, this classification system was unique because it was introduced with the rate level balanced by an off-set for the collectible surcharges.

During the period of approximately three years that the Preferred Risk Rating Plan was in use before it was replaced by the War-time Emergency Rate Program, statistics were compiled which showed that whereas 95.2% of the risks had not more than one property damage accident to mar their record over a year and nine months, 2.7% had one bodily injury or two property damage accidents, and 2.1% were definitely accident repeaters. The administrative detail and expense, the unfavorable public reaction to some claim settlements, the tendency on the part of policyholders to delay reporting accidents, and the opposition registered to carriers' acceptance of liability which was thought by some insureds to be in doubt, were pointed out later to discourage efforts to revive the system after it was withdrawn in 1942.

A new series of classifications, designed to reflect the use of the automobile, was marketed as a companion to the "reward" and "penalty" classifications and was superimposed upon those rating structures in 1939. Some of the rating elements then applied are in current use. Automobiles owned by the insured and used by him in business were rated at manual rates and assigned to Class B. For certification under a Financial Responsibility Law, the Class B rates were surcharged 10%, 25% or 50%, depending upon the offense, and the risk was assigned to Class C. All other private passenger automobiles were divided into two categories, Class A-1 and Class A. Class A-1, with rates 25% less than the Class B manual rates, applied under extremely refined conditions where (1) the number of operators in the same household as the insured did not exceed two, (2) neither of such operators was under 25 years of age, (3) the mileage of the automobile for the previous year was not more than 7500 miles, and (4) the estimated mileage for the policy year did not exceed the same figure. Class A, rated five percentage points higher than Class A-1, embraced those risks which failed to meet those exacting requirements. This means of introducing the "youth-

ful operator" rating element applicable to risks involving operators under 25 years of age, was the forerunner of many classification studies directed at the rising loss costs of a segment of exposure constituting approximately 15% of the private passenger insured risk volume.

Following the withdrawal of the Wartime Emergency Rate Program at the end of World War II, when the nation's motorists took to the highways in unprecedented numbers, the immediate pre-war classifications were restored with some simplification. The lowest rated class, A-1, was made applicable to individually owned, non-business automobiles with no "youthful operator" exposure and with an estimated mileage not over 7500 miles. Class A applied to the balance of the individually owned, non-business cars, and Class B was assigned to those not eligible for Class A or Class A-1. Two years later, in 1948, the Class A group was divided into A-2 and A-3, which was the initial step to determine the extent to which the "youthful operator" risk was being subsidized. The rate for that category, A-3, was set at 5% less than the business use rate. This compared with reductions of 25% and 20% respectively, for the A-1 and A-2 classes. This refinement left unchanged the special classification treatment for farmers and clergymen which had become an integral part of the non-business use classifications.

The next important change was made in 1950 when farmers, as defined, were granted a rate reduction of 15%. Shortly thereafter, the mileage requirement was eliminated by a large segment of the industry, the rate for the preferred non-business use class was reduced in relation to the business class, and the "youthful operator" exposure was rated at 15% above the business class. The revised designations were Classes 1, 2 and 3. This classification rating program was the genesis of the insurance industry's move toward making Class 2 risks self-supporting. By the end of 1952, following the introduction of emergency rate level increases for private passenger automobiles in 1951 and 1952 as a result of the inflationary spiral generated by events in Korea in June 1950, many companies faced a crisis with respect to their private passenger classification rating systems.

On a countrywide basis, approximately 75% of the private passenger automobile business had been written under Class 1, the preferred class; 15% under Class 2, the "youthful operator" class; and 10% under Class 3, the business class. As a result of the cumulative effect of the aforementioned emergency rate increases, the insurance buying public became acutely price conscious; risks of relatively low hazard were seeking a market with carriers using classification systems more refined than the Three Class Plan. The circumstances prompted a course to pursue which encompassed the following considerations:

1. that a substantial volume of business in Class 1 could be distributed to give specific recognition, ratewise, to the most desirable exposure in that class;

2. that the most desirable exposure in Class 1 represented limited use of the automobile through low annual mileage and limited number of operators;
3. that the balance of the exposure in Class 1 could be so divided as to reflect annual mileage, number of operators and use of the automobile in going to or from work;
4. that the Class 2 exposure was still being subsidized on the basis of the indicated Class 2 differential;
5. that the family car risk in Class 2 operated by a "youthful driver" under parental supervision was distinguishable from the risk with an unmarried principal operator or unmarried owner, under 25 years of age;
6. that parenthood among "youthful operators" provided a reasonable basis for classification distinction.

During 1953 the automobile insurance industry focused its attention on private passenger classification refinement. In some quarters, Class 1 was divided into two parts with restrictions on mileage and number of operators weighed against classifications with no such limitations. Class 2 was divided into three groups on the basis of the extent of use by a "youthful operator", the marital status of the operator under 25 years of age, and ownership of the automobile. The most preferred class was rated 45% below the business classification rate, with the balance of the Class 1 exposure continuing at 30% below that rate. The rates for the three subdivisions of Class 2 were 5%, 25% and 50%, respectively, above the business classification rate, which compared with the previous rate of 15% above the business classification rate for all Class 2 exposures.

Another method divided Class 1 into three parts. The first part, 1A, excluded customary use in driving to or from work and was rated 40% less than the business classification rate. The second part, 1B, limited "to and from work" driving to less than ten road miles one way, and made a distinction between urban and rural areas, with the latter rated 30% less than the business classification rate but not more than \$3.00 above the Class 1A rate for bodily injury and property damage combined. "To and from work" driving beyond the ten mile limit was assigned to Class 1C at a rate 15% less than the business classification rate.

Class 2 was also divided into three parts, designated 2A, 2B and 2C. Class 2A the youthful-driver class, rated at 110% of the business classification rate, applied (1) if the operator under 25 years of age was neither the owner nor principal operator, or (2) if the owner or principal operator in the same age group was married and had legal custody of a child. Married owners or principal operators under 25 years of age without legal custody of a child were assigned to Class 2B and rated 125% of the business classification rate. Owners or principal operators under 25 years of age who were not married were rated 150% of the business classification rate. Exceptional rate treat-

ment for farmers and clergymen was continued as a firmly entrenched classification principle.

In the light of practical experience, additional improvements and refinements were introduced quite generally in 1955. A special classification, 2D, was created for family automobiles where the operators under 25 years of age were female and were not the owners or principal operators of the automobile; and for cars owned by married couples where only the wife was under 25 years of age. The rate for this group was reduced substantially. Furthermore, parenthood as a rating element was discontinued and rate recognition was given to driver training courses meeting prescribed requirements. About a year later, the classifications for female owners or operators under 25 years of age were eliminated and the "youthful female" exposure was discontinued as a rating element.

Concurrently, during the latter period, one of the staunchest advocates of average rates—a major carrier specializing in private passenger automobile business—adopted classification rating. Furthermore, the Preferred Risk Rating Plan was restored in modified form in the State of New York. In addition, one of the leading carriers launched a merit and demerit classification experiment on the West Coast.

DIFFERENTIALS AND DISTRIBUTION

The relationship among the classifications is determined by differentials, using one of the classes as unity. For many years it was customary to use the business class, Class 3, as unity and to establish the other classes above or below 1.00. Indications based upon more than 7.1 million car-years of exposure for policy year 1955 demonstrated that substantial differences existed among the classification loss ratios. The basic limits loss and loss adjustment ratios calculated on a Class 3 rate base indicated the relationship which existed among the classifications to produce the proper premium for each classification. Data for policy years 1954 and 1955 substantiated underwriting conclusions that (a) the youthful male owner or principal operator should be rated at not less than twice the Class 3 rate, (b) the family car with incidental use by a male operator under 25 years of age should be rated at approximately 25% above the Class 3 rate, (c) the elimination of the business use and youthful male operator hazards would establish a rate slightly below the Class 3 rate, and (d) further refinement to distinguish between limited use of the automobile in driving to or from work and no such use, would make the lower hazard ratable at 25% to 35% less than the Class 3 rate; the rate for the "to or from work" exposure would then be not more than five points above the lower group rate.

Differences between rate territories have been subject to classification rate recognition on the basis of a comparison of (1) the indicated differentials for large city territories with (2) the indicated differentials for those territories which are predominantly rural or have no city with a population exceeding 40,000. However, data for policy

years 1954 and 1955 eliminated any territorial distinction, except with respect to (a) the "youthful" male owner and principal operator class and (b) the non-business use class with male operators under 25 years of age excluded and "to and from work" operation restricted to not more than ten miles one way.

A representative volume of experience involving more than 200,000 earned car-years of exposure and a bodily injury and property damage premium at basic limits exceeding \$6.8 million for policy year 1954, indicated that mileage limitation and a limitation on the number of operators, as rating elements in a classification, developed a differential in relation to business use which supported rates 45% below the business classification rate. Furthermore, a marked difference in the indicated differential was shown when either limited mileage or a limited number of operators, or both, were not reflected in the classification. An increase of as much as 25 points in the differential resulted when these restrictive hazard features were removed from the classification.

The low hazard differentials reflecting combinations of adult personal and pleasure use, limited mileage, limited number of operators and no trips to or from work, indicated that these elements may be expected to produce substantially the same results so long as business use and "youthful" operator rating provisions follow a common pattern.

The differentials for the subdivisions of Class 2 apply to the "youthful" operator hazard. The marital status of male drivers under 25 years of age who operate the insured automobile extensively establishes whether the risk is a normal family car exposure or whether it belongs in the highest hazard rate group applicable to "youthful" male owners or principal operators. The indicated differential for the highest hazard rate group in the small city areas was virtually double the indicated differential for the exposure with married male operators under 25 years of age, the latter being substantially the same as that for the normal family car risk. In large city areas, the ratio of the indications was approximately 5 to 3.

The practice of using the business use class, Class 3, as unity, and relating the indications of the other classes to that base, has been discontinued. The greater volume of experience in the lowest hazard class, Class 1A, as compared with the volume in the business use class, offers a more stable and reliable base to determine the classification differentials.

If the selected differentials for a classification plan do not vary from the indications on the basis of credible data, theoretically, each class will be self-supporting. Contrarywise, a limitation placed upon the selection, which results in reducing a differential from the indications, will spread the difference over the other classes. This procedure may be elected in order to avoid extreme changes in classification rates or to temper the changes where other adjustments such as those involving rate level or territorial relativity are being made concurrently.

Distributing the exposure among the selected classifications requires sound judgment as well as reliable statistics. In the absence of such statistics, motor vehicle registration figures, licensed operator records, population data, automobile sales, gasoline consumption and the like, aid in estimating the distribution for the purpose of introducing a classification rating system until more indicative data is available. Progressive refinements may be accomplished by using reliable basic data to support a broad classification distribution and sound judgment may be applied to effect the separation into narrower groupings. There would be little advancement in reapportioning the rate level by classification if all of the improvements were to await the development of complete statistical data as supporting information.

Approximately 80% of the total volume of private passenger automobile exposure is now in the non-business category which excludes the hazard of the male operator under 25 years of age. The balance is divided, with approximately 6% to 9% assigned to business use and the remainder to the "youthful" operator exposure classes.

In the large city areas, 34 out of every 100 private passenger risks do not use their cars regularly for business, do not have a young driver exposure and do not drive to or from work. This number is increased to 39 in the rural districts and small city territories. Driving to and from work is a customary operation for 46 out of every 100 risks in the low hazard classes in the large cities. Their counterpart in the rural areas are fewer in number, with 40 out of every 100 driving to work. From such data it may be deduced that while distribution of the low hazard classes is substantially the same in the large city and rural areas, (approximately 80%), the transportation facilities normally found in large cities have not absorbed the highway commuter traffic. The general migration of the populous to the suburban areas has taxed the highway arteries which are used to connect with public transportation. It would appear that a distinction between large city areas, and rural and small city areas is not particularly significant and that a more realistic analysis would be on the basis of zones constructed to give recognition to the comparable operating conditions in various sections of the country.

In order to avoid a rate level off-balance, the selected differentials should be balanced to the classification distribution. This may be done by applying a correction factor to the differentials to adjust them upward or downward while maintaining the same relationship among the classes. If the distribution and differentials are selected with a view to promoting business in a particular classification at a particular level of rates, a rate level off-balance may be accepted in the furtherance of this purpose. Under such conditions, a change in actual distribution is the objective. Opening a market for low hazard exposures by shifting the weight of the differentials among the classifications may be expected to increase the percentage distribution of such exposures, even though the overall volume remains unchanged. This medium as a competitive rating tool has only temporary advantages however, because it fosters similar implementation by competi-

tors, and gives impetus to the search for further refinement. With more than three quarters of the private passenger exposure in the relatively low hazard classes—classes which rely heavily upon rating elements such as low mileage, non-business use and the absence of “youthful” male operators—this portion of the market is the attraction for lower differentials through added limitation elements on the scope of hazard to be insured.

PROSPECTIVE VS. RETROSPECTIVE APPLICATION

The classification rating system that is applied prospectively relies upon the experience of the past, tempered with sound judgment, to establish the proper rate for the period during which the insurance will be in force. Such a system permits a fixed price quotation by the production forces, is relatively simple to deal with from a statistical and accounting standpoint, and does not necessitate rehandling of the business subsequent to the expiration of the policy. Prospective rating may be readily used to introduce rating elements with values developed from sources outside the insurance carrier's own records. This quality can have considerable appeal from a public relations standpoint, particularly if the classifications are designed as an aid to promoting safety. Such a system may have support in an exchange of information among insurance carriers or depend entirely upon factual data secured elsewhere by the carrier of record. Proper balancing of the prospective system, initially coupled with the necessary administrative machinery to assure reasonable safeguards, will produce results with a high degree of accuracy.

Retrospective application of a classification system is not popular, although the rating elements may be not unlike those of a prospective system. The former uses the experience of the policy period to determine the premium for that period, thus in essence establishing the final cost after the product has been consumed. The business must be rehandled after expiration even though the coverage is not renewed and the accounting and statistical operations are increased in connection with a substantial portion of the business written. Although it may be reasoned that such a classification system gives immediate and direct effect to the individual risk's experience, doubt can be cast upon the propriety of experience rating a single car on the basis of its experience for a single year. If a longer period is specified, a question of proper administration arises on the premise that a change of carrier may occur during the experience period.

MERIT AND DEMERIT RATING

An estimate that 20% of all drivers are involved in 80% of all automobile accidents is responsible, in large measure, for the demand which recurs frequently for a form of classification rating that offers a rate reduction for safe driving or penalizes the accident-prone driver. Unquestionably, a system which grants a rate reduction for an accident-free record has considerable appeal psychologically, al-

though there is no basis for concluding that it will solve the problem of the motor vehicle high accident toll. Administrative obstacles inherent in such a rating provision, coupled with the fact that the rate discount, in order to be reasonable and also attractive, is in reality a mere token gesture, discourage any enthusiasm among the insurance carriers for perpetuating this plan.

The imposition of rate penalties for an adverse motor vehicle accident or conviction record has very little public appeal but can be compared with statutory penalties imposed for any law violation. The public is presumed to know the law and for the benefit of the whole, an individual is required to observe it. Similarly, the operation of a motor vehicle is a privilege granted by the state and is not a birth-right. Such a privilege carries with it an obligation to drive safely; and the avoidance of accidents is no more than a fulfillment of that obligation. Penalties, in terms of an increase in the automobile liability insurance premiums, set accident-prone risks apart from their more favored contemporaries.

In accordance with the basic principle of insurance, i.e., spreading the losses of the few on the shoulders of the many, insurance companies should obtain from their motoring policyholders an amount sufficient in the aggregate to cover the collective incurred losses and expenses. If a rate reduction for accident-free experience is granted to some policyholders, the amount of the reduction, in the aggregate, should be charged against the accident-prone risks or should be loaded into the overall rate level. Similarly, surcharged premiums applied in the form of penalties for an adverse experience record should be credited to the overall rate level or used to adjust the differential between the merit and demerit rated business.

A. *Merit Rating*

This form of a classification rating system may be applied prospectively or retrospectively. Prospectively, the premium is reduced if certain conditions with respect to the risk's accident record prior to the issuance of the policy are met. A return of premium at the end of the policy period upon the completion of that period with an accident-free record, is the basis of the retrospective method. Either method presents a problem of public relations stemming from the human inclination to disclaim responsibility for an accident. The determination of "fault" is inherent in liability insurance and when it directly affects the policyholder's insurance costs based on his own involvement, he may protest and pit his judgment against that of his insurance carrier.

Merit rating is actually a form of experience rating. For many years it has been customary to experience rate automobile fleet business by the use of credibility based upon a rating period of several years. A fleet credit of 10% for an accident-free period of three years is not uncommon and has been used by segments of the insurance industry. The credibility to be attributed to a single car would be con-

siderably less than 10% for the same period and if the experience period were to be set at one year to coincide with the term for which automobile liability insurance policies are generally written, the amount would be further reduced. This leads to the conclusion that in order to make a merit rating system attractive to policyholders, the principles of credibility for fleet risks must be discarded and an arbitrary selection must be made. A credit of 5%, or even 10%, carries no particular monetary appeal; so a 15% credit for an accident-free year might be selected to test the propriety of the system.

In order to provide the funds necessary to pay the 15% credit or premium discount to eligible policyholders, an estimate must be made of the number of such policyholders. Looking at this matter from the standpoint of countrywide averages, which will differ from individual state indications, it may be estimated that the accident expectancy of an individual private passenger car risk is one accident in 11 years, thus producing an annual accident frequency of 9%. Therefore, 91% of all private passenger car risks would be subject to the discount of 15%.

Using a nationwide average rate of \$50.00 as approximating the combined bodily injury and property damage liability basic limits charge, it can be demonstrated that the type of merit rating system under discussion virtually requires policyholders to pay their own rewards if the insurance carriers are to receive from all of their risks sufficient funds to pay the total losses and expenses. To allow for the 15% credit to be paid to 91% of the risks, the rate of \$50.00 must be increased by 15.8% to \$57.90. When the 15% credit is applied to this new rate, the result is \$49.22. Since the rate without the merit rating system would be \$50.00, the actual reduction is 1.6% and the accident-free policyholders forego the balance, or 13.4%. A clearer conception of this end result is gathered from noting that if the 15.8% increase in premium is paid by only the 9% who are not accident-free, the total overall premium would be inadequate by 12.22%. It is not to be expected that laymen, making up the policyholders directly affected by this type of classification rating system, have an appreciation of its limited financial incentive, nor do they understand that it is an instrument which is primarily a psychological device.

B. *Demerit Rating*

Unlike its counterpart, demerit rating, to be capable of practical administration, must be applied prospectively. The plan consists of one or more rating conditions which provide for a surcharge in rate for the occurrence of specified incidents during a stipulated rating period prior to the inception of the policy. Recognition may be given to accident frequency, motor vehicle convictions and offenses involving moral turpitude. It may be reasoned that penalty rating as such, from an accident occurrence standpoint, is in reality the imposition of a fine for the very contingency against which the carrier has insured the risk. This may be given some credence if the system fails to take

into account the seriousness of the accident. A flat penalty for all accidents, irrespective of the contributing circumstances and regardless of the character of the damages, might bring about injustices, particularly if the amount of the penalty exceeds the legal liability of the risk.

In addition to the "Preferred Risk Rating Plan" approach previously mentioned, accident-prone risks may be rated to carry the full weight of the loading necessary to compensate for the credits granted to accident-free risks. This can be accomplished by increasing the penalty rate sufficiently to measure the extent to which the large percentage of risks will benefit from a merit rating "award." Using the same data as cited heretofore in relation to merit rating, it will be found that whereas the accident-free risk would be charged a rate of \$42.50, a savings of \$7.50 based upon a credit of 15%, the accident-prone risk would be subject to a rate of \$125.78. This is an increase of 152% for 9% of the business. This example reflects an estimated countrywide average and such an allocation of costs by state and territory would differ from this result.

It may be concluded that both the merit and demerit rating methods virtually resolve into penalty systems. While the demerit approach is undisguised and direct, the merit rating system requires those receiving the credits to pay all but a small fraction of their own awards, thus practically eliminating any difference between the average rate and the "reward" rate.

DRIVER EDUCATION

Private passenger classification rating systems would be incomplete if they failed to provide an incentive to improve the driver education standards of the nation's secondary schools, colleges and universities. With more than 10,000 public high schools offering courses in driver education, and more than 8400 schools offering complete instruction consisting of both classroom and behind-the-wheel training, great strides have been made by the National Education Association—representing all of the state departments of education—in promoting means by which students may be equipped to conduct themselves properly in the use of an automobile.

Rate discounts keyed to the type of course for which the student is certified, are offered generally by the automobile insurance carriers. With minor exceptions, the standards of the National Education Association of 6 hours of classroom study and 30 hours practice driving instruction are the bases for a discount of 10% in rate if all of the male operators of the automobile under 25 years of age, resident in the same household as the insured, are qualified. Simulated practice driving in a device used as a substitute for actual road experience is acceptable in partial satisfaction of the N.E.A. standards.

Primarily, the rate discount for approved driver education is one of public relations on the part of the insurance industry. What limited data is available neither proves nor disproves the theory that driver

education among "youthful" operators results in reduced loss costs. It could be deduced that the steady upward trend in the classification differential for male owners and principal operators under 25 years of age is not indicative of beneficial results from driver education among their groups. However, it may be too early to draw definite conclusions because the National Education Program is growing in scope and quality.

CLASSIFICATION OF SAFETY DEVICES

Periodically there are outbursts of enthusiasm for a classification rating provision to promote highway safety through the medium of a rate discount granted for the use of mechanical safety devices. In some instances, the sponsors may be motivated by civic interest; in others, the monetary return to the manufacturer resulting from widespread use of his device may be the paramount consideration. While it is readily recognized that automobile insurance is imbued with a public interest, the insurance industry should approach all such propositions with great caution. Acceptance of the principle of safety device discounts by a substantial segment of the automobile liability insurance industry might well generate an overwhelming demand that would have far reaching repercussions. Aside from the weighty problem of administering a classification rate discount for safety devices, the proposition is defective in that undue reliance is placed upon mechanical devices to supplant such accident potential influences as emotional disturbances, defective judgment, delayed reflexes, and lax enforcement of traffic regulations.

Irrespective of the safety features that have been built into the modern automobile—such as blow-out proof tires, power brakes, power steering, recessed door handles, crash-proof dash, safety steering wheel, directional signals, less visual obstruction, and seat belts—the fact remains that other factors have contributed to increase the insurance loss costs. Automobile accident frequency has doubled in the last quarter of a century and the average cost per claim is at an all time high. The current economic loss from traffic accidents is estimated to be approaching five to six billion dollars, and highway congestion is aggravated by an increase in the number of multiple car households. More than 15% of the thirty-six million families that now own automobiles have more than one car. Highway fatalities per one-hundred million vehicle miles driven have shown a marked decline, but the death toll in 1956 of 40,000 persons is a near record. Two-thirds of all persons injured in automobile accidents sustained their injuries while occupants of automobiles. One-sixth of that number were pedestrian cases. Speed has accounted for 50 out of every 100 traffic fatalities, and reckless driving has added 13 more to that tally. Private passenger cars are involved in 85 out of every 100 motor vehicle accidents and 82 of those passenger cars are apparently in good condition just prior to the accident.

There is no evidence that the loss level for automobile liability in-

insurance will be reduced by the adoption of rate discounts for safety devices. The price of the coverage is a by-product of physical and psychological conditions which reflect human characteristics. These attributes should be controlled by education, sound licensing laws, and exercise of proper and efficient police power. If these qualities can be imparted to the operator while engineering improvements are built into the machine, the overall favorable experience of the insurance carriers which should result will be reflected automatically in the rate structure.

CLASSIFICATION OF OPERATORS

Approximately 75 million operators of motor vehicles accumulate a total of 583 billion miles annually, an average of 7800 miles per operator. Each year, on the average, 2.5 million new drivers are added to the license rolls. What might appear at the outset as a vast reservoir of potential exposure units does not present a ready-made yardstick for classification rating purposes. Under a system of providing insurance on the basis of the operator instead of the automobile, the unit of exposure is transferred from the automobile to the operator. If automobile insurance were to be written on the basis of providing coverage for named operators instead of having the insurance follow the automobile, a distinction in classification rate between operator-owners and operator-non-owners would be a prerequisite. This stems from the fact that in more than 30 states, vicarious liability statutes are in effect. These laws, which vary somewhat in form, impute liability to the owner of the automobile even though the car is operated by another person at the time of an accident. Further, the law of agency which sets forth the concept of "principal and agent" precludes the adaptation of an exposure base which would necessitate differentiating between liability arising out of the use of an automobile and liability otherwise imposed. If a rate structure were to be established for operator classifications, provision should be made for distinguishing between (1) single and multiple car households, (2) owners who operate and those who do not, (3) individuals who own and operate only private passenger cars and those who own and operate other types, and (4) risks involving multiple types of automobiles.

The matter of coverage is of considerable importance in a change-over from an automobile classification system to one adapted to suit individuals as operators. In general, the automobile liability insurance industry has designed its policy contracts to cover the legal liability of the insured for bodily injury to any person and damage to property of others arising out of the ownership or use of an automobile. The word "insured" is defined so as to apply to the person named in the policy and includes other parties who may use the automobile with the permission of the owner. Protection is extended to the insured and his spouse for their use of non-owned cars and each member of the family has the benefit of the policy coverage on a severable basis. If each operator were required to be classified separately and be written under a separate policy covering him for his use of any automobile,

the case law that has been accumulated and is now available to insurance carriers, insurance authorities and the courts, would be of little value. New legislation would be required in connection with state Financial Responsibility Laws. Amendments would be required in the Compulsory Automobile Insurance laws in effect in Massachusetts, New York and North Carolina.

It could be expected that operator classifications, substituted for automobile classifications, would result in an increase in the carriers' expenses. The additional number of policies issued, along with the rating, typing, mailing and other handling of that volume could increase the expense. This, added to separate policies for physical damage insurance; an increase in the number of certificates filed with the State Bureaus of Motor Vehicles; an upward trend in the number of suspension and cancelation notices; rising printing costs for forms, endorsements, certificates, etc.; rising billing and collection costs; more extensive statistical and accounting records; and a substantial increase in rate administration costs, make an operators classification rating system less attractive than systems now in use.

From a rate standpoint, a transfer of the unit of exposure from a per car basis to an operator basis would require many families to pay substantially more for the family automobile insurance package although the actual protection afforded would be virtually unchanged. Many individuals would be obliged to pay for insurance they did not need or want.

The disadvantages of an operator classification rating system far outweigh the advantages that might accrue to the insuring public through classifying the hazard on the basis of the operating record of individuals. If a new type of classification system is to replace the one which has been in use for more than 35 years, i.e., relating the exposure to the automobile, such replacement should promise substantial economies and a more equitable fulfillment of the public needs. It has not been established that an operator classification rating system will meet those prerequisites.

EFFECT ON COVERAGE

The coverage required by State Financial Responsibility Laws has had a direct influence upon the design of policy provisions under private passenger classification rating systems. In order to avoid the imposition of an "absolute" insurance coverage program by the State Motor Vehicle authorities charged with the responsibility of administering those laws, the insurance carriers devised automobile policy provisions which, for all practical purposes, cover the liability of the policyholder under most circumstances. In doing so, it was recognized that classification requirements could not be applied as coverage warranties if the carriers were to be successful in maintaining their position that the policy defenses are in the public interest and a distinction between certified and non-certified protection is equitable. Most policy contracts contain a Financial Responsibility Laws Condition which conforms the policy to the requirements of state statutes upon

certification of the policy by the company. Although that Condition recites a reimbursement provision accruing to the benefit of the company if the certification requires the waiver of valid defenses otherwise applicable to the company, from a practical standpoint, the reimbursement feature has its principal value in the salutary effect it has upon the policyholder.

Classification rating elements which distinguish between hazards of risk contemplate various degrees of liability to be assumed by the insurance carrier. A warranty with respect to coverage would limit the coverage to the operations contemplated by the classification applied to the risk. Any immediate advantages flowing from such a procedure must be weighed against the magnitude of the problem created by deliberate falsification of classification information, by the use of erroneous information furnished unintentionally, or by other misapplication of the classification system. Experience has demonstrated that the small percentage of error with respect to the application of a reasonable classification rating system does not justify putting the voluntary coverage grant in jeopardy by introducing warranties. The relatively insignificant effect their absence may have upon the carriers' assumed liability can be written off as a "calculated" risk.

In some instances, steps can be taken deliberately to confine a risk's hazard to the area contemplated by the classification applied. The instrument for this purpose is an endorsement excluding the hazard which must be eliminated to make the risk a normal insurable exposure. This practice is accepted quite generally as a reasonable method to deal with those risks which contain some elements that are not in the public interest to insure. By removing those elements, the risk is converted to a normal exposure to fit into the classification rating system.

ASSIGNED RISKS AS A CLASS

All 48 states, the District of Columbia and Hawaii have adopted Automobile Assigned Risk Plans to assist applicants in obtaining automobile liability insurance. The annual return from assigned risk business now approximates 60 million dollars of premium, which represents about two and three tenths percent of the total automobile liability premium volume. These figures demonstrate that assigned risks cannot be looked upon merely as by-products of undesirable business. Primarily, because of complaints to insurance supervisory authorities that the levels of rates charged assigned risks are unfairly discriminatory—levels which vary from company to company depending upon the basis their voluntary business is rated—a movement is gaining ground aimed at bringing about uniformity in assigned risk rates among all carriers. The State of Wisconsin has the distinction of being the first to introduce a uniform system of rating assigned risks while continuing non-uniformity on voluntary business. However, the Wisconsin Rate Regulatory Law is unique in that ample authority is provided for imposing this condition. Paralleling this development is the interest in assigned risk rate uniformity evidenced by the Na-

tional Association of Insurance Commissioners which has appointed a special committee to study the matter.

Assigned risk rates generally have been fitted into the pattern of classifications applied to risks written voluntarily. Aside from the separate surcharges specified in the Plans, the business written through the medium of those Plans has been rated in accordance with the same elements which distinguish between the exposure characteristics of solicited business. In some cases, a carrier uses a competitive classification rating system for solicitation and, for assigned risks, applies a higher rated classification system which it appropriates from another rate filer. This tends to unify assigned risk classifications and rate structures, although the purpose of such a practice is to take full advantage of a major competitor's higher rate levels to be applied to undesirable business while still maintaining a reduced rate level to offer the competitive market. By appropriating the higher rated classification system of another and applying that to assigned risk writings only, a carrier may increase its assigned risk premium income by a substantial percentage.

Classifications for assigned risks should be applied uniformly by the insurance carriers and the rates for assigned risks should not depend upon which carrier receives the assignment. The rates should be computed to reflect the combined experience of all subscribers to the Plan in each state and rate levels should be adjusted to avoid a crossing of rates for voluntary business. Assigned risk classifications should be erected and administered in cooperation with the Motor Vehicle authorities. Multiple minor traffic violations, accidents and major convictions are reliable indices upon which to base rate variables. While it may be reasoned that the price to be paid in overcoming the obstacles to the attainment of assigned risk classification and rate uniformity is not warranted as respect such a relatively insignificant portion of the automobile liability insurance volume, the fact remains that the agitation being created by the present method of rating that portion of the business is rapidly magnifying the existing inequalities. It would behoove the automobile insurance industry to initiate a program of corrective measures of its own. These should include introduction of a standard statistical recording and reporting procedure, arrangements for ratemaking facilities, adoption of proper classifications, a standard coverage program and a means for bridging the gap until the appropriate all-industry machinery is put into operation.

POINT SYSTEMS FOR CLASSIFICATION PURPOSES

The Point System has been adopted in a few states to aid the Motor Vehicle Departments to ferret out those drivers who continually violate traffic laws, and demonstrate the need for remedial treatment. If the system is instrumental in returning better and safer drivers to the road, it has served its purpose, as the ultimate goal is not punishment—it is driver improvement. Encouraged by the beneficial results flowing from the Point System made effective in New Jersey on July

1, 1952, the Motor Vehicle Director of that state reported that the system had a tremendous impact "on the safety consciousness of the motoring public." He added that "the Point System is developing into the most effective driver correction measure ever undertaken by this state." It is admitted, however, that too many members of the public are not acquainted with the traffic law violation penalties in the Point System and, to confuse the situation, the few states with such Systems have not seen fit to coordinate their programs.

The Point System is adaptable to a classification system and while only one state, Massachusetts, temporarily aligned its points with the insurance premium to be paid by policyholders, there is a considerable area for experimentation in this field. The eligibility provisions of the Assigned Risk Plans offer a medium for the creation of classifications which can be dove-tailed with Point Systems as a basis for determining whether or not a risk is entitled to be granted insurance under those Plans. Through this means, the onus of denying the use of the highways is removed from the insurance industry and the responsibility is placed where it belongs—with the State Motor Vehicle Commissioner. This would tend to eliminate the adverse public relations in which insurance carriers can become involved when the issuance of a driver's license or owner's registration is contingent upon a carrier issuing a policy.

CLASSIFYING YOUNG DRIVERS

The evolution of separate classifications for private passenger car risks involving an operator or owner under the age of 25 years continues to show a marked upward trend in the loss and loss adjustment ratios. With an estimated 18% of all drivers falling into this category and being involved in 25% to 30% of all motor vehicle accidents, the industry is obliged to seek further rate increases if this class of business is to pay its own way. During the year 1956, drastic steps were taken which set the classification rate for the young male owner and principal operator at double the business classification rate. Current indications support the conclusion that further increases in this rate can be substantiated.

Since the female exposure is no longer included in the young driver classifications, it would be expected that the male portion remaining would show some upward trend from the combination of the two. Not only is this true, but the male portion also develops adversely when compared with earlier data adjusted to eliminate the tempering effect of the female exposure which was included when that earlier data was compiled.

Although only 4% of the total private passenger exposure is assigned to the young male owner and principal operator classification, the importance of this class cannot be discounted. An available voluntary market is a public relations asset as well as an obligation to the production forces. A voluntary market cannot long survive in an atmosphere of underwriting resistance founded on rate inadequacies. It is incumbent upon the industry to meet this problem with drastic

rating measures where necessary and, coincidentally, to quicken the pace of its media of public education to stimulate acceptance of this objective by the consumer.

A particular troublesome rating area lies in the treatment accorded students away at school who use their own cars or the family car extensively during vacation periods, on weekends or on holidays. This type of use concentrates the youthful driver hazard into a portion of the policy term and requires application of the appropriate classification to take that into account.

Automobile liability classification rates are determined on a per car-year basis. Regardless of the extent of use of an automobile during the full policy year, the experience on the car when insured for the full period is introduced into the ratemaking process as one car-year. To the extent the experience on a volume of classification exposure reflects normal or abnormal lay-up or use, the automobile liability classification rates contemplate similar conditions. It follows, therefore, that if classification rates for students were made to apply for the time students were home from school and using their own car or the family car, there should be two charges; one for the so-called dormant period when the student is at school, and the other for the period of extensive activity when the student is at home. Taken together, the rates should produce the same premium dollars as is produced by the application of a single classification. It is by tempering the high hazard with the low hazard during a policy year that the carriers can offer an average classification rate overall.

Other youthful driver underwriting and classification rating problems include multiple driver non-stop trips; "drag" racing on public thoroughfares; military personnel exposures; and the availability of larger and more powerful vehicles to youthful drivers who do not fully appreciate the potential for injury or damage which is at their command. It is not likely that classification refinement can measure these conditions separately. However, from a rating point of view, this becomes somewhat academic if the present 4% of the total private passenger exposure is adjusted to the proper rate level.

ADMINISTRATION

The backbone of a classification rating system is the administrative machinery established to assure reasonable application of the rating elements. An equitable refinement of hazards with attendant rate differentials, properly related by carefully prepared rule specifications, cannot sustain a system that is devoid of proper administrative characteristics. Poorly constructed classifications which are implemented by a well designed administrative technique, present a greater possibility of survival than improved classifications defectively administered.

It is fundamental that the source of rating information be as unimpeachable as conditions will permit and those conditions are controlled to a large extent by the enthusiasm displayed by the production forces and their willingness and ability to rationalize the classifi-

cation distinctions. Wholehearted support from the field, or at least an absence of resistance to change, is a required condition. Simplicity with respect to refinements lends itself to greater accuracy, minimizes adverse policyholder relations and opens avenues for economies in clerical functions. Signed applications on new business, attesting to the authenticity of rating information, may be obtained from the policyholder or from the producer. Since the renewal ratio on private passenger automobile business is approximately 85%, the information for renewal purposes can be limited to bring forth only basic essential facts involving changes in hazard since the previous survey. This may be in the form of a blanket statement applying to a producer's monthly renewal business, or the policyholder may be required to furnish information on a stamped addressed postal card form.

The reception given to classification discrimination by the policyholder and his acceptance of the rating elements—particularly those applicable to him—may spell success or failure to the system. Distinctions which are generally acknowledged as recognizing differences in hazard, such as business use vs. non-business use, face a minimum of resistance. Likewise, age groups have developed a line of demarcation for classification purposes and policyholder relations have been enhanced thereby. Such means are conducive to promoting public confidence in the insurance industry as they fit into the general economic pattern and are accepted as reasonable. However, the application of measures designed to give weight to estimates of conditions in the future, or of events to happen or not to happen, can undermine public confidence.

To the extent reasonable classification segments can be properly administered, to that extent the individual classes will eventually become self-supporting. However, the experience on those segments which are not amenable to proper administration will become interwoven with the experience of the others, thus creating a distortion and detraction from the credibility of the data. This treatment tends to broaden the exposure base of the low hazard classes and inflate their loss costs.

An exchange of rating information among insurance carriers in connection with the operation of merit or demerit classification systems is suggested from the results reported under the New York State Preferred Risk Rating Plan restored in 1952 after a lapse of ten years. As mentioned previously, the original Plan had a distribution of 95.2% for not more than one property damage accident, 2.7% for one bodily injury or two property damage accidents, and 2.1% for a more adverse accident record. The comparable results under the 1952 restored Plan are 95.9%, 3.4% and 0.7%, respectively. While the second group was broadened in 1952 to include accidents involving both bodily injury and property damage, it appears that the lack of administrative machinery for exchanging information among insurance carriers, such as was in effect under the original Plan, is respon-

sible in large measure for the substantial reduction in the percentage of accident repeaters.

TEST OF SOUNDNESS

Progress in advancing classification elements involving fair discrimination, with an objective of stability in the rate structure, should be inherent in a private passenger classification rating system. Adequacy of the potential market characterized by the classifications, combined with reasonable facilities for servicing that market, will establish an attractive sales inducement. An equitable relationship among the rates for the classifications, together with an underwriting policy of writing a general class of business, should result in an adequate rate level overall as well as a proper return from each of the divisions of separately rated hazards. The rating elements should be realistic and practicable with sufficient scope to avoid overlapping; their descriptions should be clear and concise and be based upon ascertainable facts that may be readily determined by the production forces or by inspection. The classification structure should take cognizance of comparable competitive systems. The administrative details should be arranged to reduce economic waste and promote good public relations to the utmost extent. Statistical facilities should be provided to produce means to check the accuracy of the studied judgment which enters into the classification and rating bases.

These characteristics in a classification rating system indicate a sound approach to refining the exposure to distribute the total insurance costs equitably among insureds and establish rates applicable thereto which are reasonable, adequate and not unfairly discriminatory.

CONCLUSION

It is noteworthy that although three decades of experience in private passenger classification rating have gone into the development of the industry's existing systems, the same problems encountered in the early stages are still very much in evidence. Basically, there are two factors which influence the pattern. One is competition to produce a volume of desirable business and the other is adherence to the philosophy that the industry has an obligation to the public to provide a classification rating system which will distribute the hazard equitably among the insureds. Those who are advocates of the former and ignore the latter tend to keep the rating structure in a state of flux. A few individual carriers may introduce competitive classification systems that will remain competitive so long as the same devices are not applied by the industry generally. However, the competitive value decreases as the field of application increases and eventually the originators reach the point of diminishing returns. The cycle is then repeated in a new vein with the same result occurring in due course.

The Utopian state toward which the advocates of stability may set

their course continues to recede into the future as these conditions recur. Although considerable progress has been made to produce a private passenger classification system that is equitable to all insureds, competition continues to create refinements designed for selective underwriting. Such refinements must stand the test of universal use and public acceptance. Judging from past activity, many classification rating features previously abandoned will be restored as experimentation continues. This is fertile ground for new developments in the underwriting and rating fields.