



MUNICIPAL AND FIRE LEGAL DISTRICT PROTECTION FIRE INSURANCE GRADING

SOME FACTS AND FAQ's ABOUT SURVEYING MUNICIPAL AND LEGAL DISTRICT FIRE DEFENSE

This page gives some facts about surveying and grading the fire defenses of the community.

It was prepared for distribution to those who serve the public in each municipality or legal district - the ones elected or appointed to positions of responsibility for safeguarding lives and property against the destructive force of fires.

"WHO SURVEYS MUNICIPAL OR LEGAL DISTRICT FIRE DEFENSES FOR FIRE INSURANCE RATING?"

The Mississippi State Rating Bureau is a non-profit, incorporated fire insurance rating and engineering organization, supported by the member insurance companies who use our services. We are not financed or affiliated with the State, which does, however, extend close supervision over our rate-making activities as provided for by law.

We establish advisory rates which play a part in determining the cost of fire insurance and also provide technical information to our member companies. Our representatives are able to furnish fire protection information which may lead to better construction and improved fire protection with resulting lower fire insurance rates. These services are furnished without charge or obligation to state, municipal, county or legal district officials, architects, contractors, industrial plants and any property owner.

In grading municipal or legal district fire protection we use the Grading Schedule for Municipal Fire Protection filed with and approved by the Mississippi Department of Insurance. This Schedule provides a method for evaluating fire protection facilities and conflagration hazard. Its application results in sound engineering reasons for improvements in the field of water supply and fire department operations.

"AND WHAT IS A MUNICIPAL OR LEGAL DISTRICT SURVEY?"

It is a complete survey of a municipality's or legal district's fire protection and prevention facilities and the physical conditions contributing to the spread of fire. The survey serves as a basis for fire insurance rate making purposes.

"ARE FIRE INSURANCE RATES IN THE COMMUNITY DETERMINED BY THE FIRE LOSS RECORD?"

The answer is "No, not entirely." If rates were based solely on a Community's loss record, they would vary widely from year to year. Rates would be too low when fires were few and excessively high in a year of heavy losses. Fire losses play an important part in determining statewide rate levels but are not the sole factor. Other factors which must be considered include large increases or decreases in written and earned premiums, increases or

decreases in the burning ratio, the occurrence of large losses including conflagrations, economic conditions which affect improvements or deterioration of fire protection and fire defenses in cities or towns, unusual climatic conditions and other unforeseen and unpredictable events.

"WHAT ARE THE VARIOUS FEATURES OF FIRE DEFENSE?"

They are the community's:

Fire Department

Water Supply

Emergency Communications

Community Risk Prevention

Digital Record Keeping

"HOW DOES THE RATING BUREAU EVALUATE THESE FACTORS?"

By surveying each individual city, town and fire protection district in the state.

Our Field Rating Representatives visit the community to study the adequacy and reliability of the factors previously mentioned and to analyze the principal conflagration hazards and areas.

HOW DO WE MAKE A MUNICIPAL OR LEGAL DISTRICT SURVEY?"

We begin with the WATER SYSTEM. Starting at its source of supply we study its ability to furnish normal domestic and industrial demands and maintain a sufficient reserve for fighting fires.

Past consumption and operation records are studied in the light of present and prospective future needs. These figures are then used to evaluate the supply, adequacy and the reliability of all treatment and pumping plants.

We study the size and arrangement of the mains as they affect the adequacy and reliability of the system, including spacing, type and condition of hydrants and valves.

We witness actual fire flow tests at key points throughout the system which are made in order to measure the quantities of water available for fires and to verify pressures. These tests require flowing water at each test location, a few hundred to a few thousand gallons per minute, directly from hydrants.

These flows are sustained from one to two minutes at each location. They are made under the supervision of competent and experienced representatives who take the best precautions to see that the tests are conducted in such a manner as to safeguard the system's piping and equipment as well as public health and safety.

These tests, ranging in number from three to four in the smallest communities and up to twenty-five or more in large cities, require the active participation of the water superintendent and his crew, and, where traffic is heavy, occasionally require the help of police.

Flow tests may be the most important part of the inspection of a water system. They reveal, as do the pulse and blood pressure to a physician, the condition of the system. We have detected "hardening of the arteries" such as incrustation or other obstructions in the pipe as well as faulty or partially closed valves.

We also check into **FIRE DEPARTMENT** equipment, manpower and activities, covering all features from the qualifications of the chief down to an inventory of every last pike pole and spanner wrench on the apparatus.

To acquaint fire department officers with the scope of our survey, the following is an outline of the major items which are evaluated:

OFFICERS. Number, experience and general qualifications. Methods of appointment and promotion. Tenure of office.

FIRE COMPANY MANPOWER. Type of department - paid or volunteer. Working schedule. Minimum number of personnel on duty or available. Number responding on first alarm. Appointment and promotion. Civil service. Retirement.

FIRE APPARATUS. Number and type. Complete item by item inventory. Nationally recognized Independent Pumper Tests Certificate and Acceptance Test Record. Annual Service tests of pumpers at draft. (Departments are urged to conduct their own annual service tests and maintain records.)

FIRE STATION. Location and suitability to the service. Facilities for repair and maintenance of apparatus, hose and equipment.

FIRE DEPARTMENT METHODS AND OPERATIONS. Regulations and discipline. Drill and training schedule and facilities. Number and type of apparatus sent to alarms. Fire fighting procedure including: company assignments at fires; modern methods, such as use of fog and first-aid fire-fighting appliances; use of protective clothing and devices; employment of powerful and special stream appliances; familiarity with special hazards of properties in the community; procedure at fires in sprinklered buildings; salvage operations; building inspection program; maintenance of records.

CONDITIONS AFFECTING OPERATIONS. Area covered by the department. Condition of streets. Possible causes of delay in responding to fires, including railroad grade crossings, traffic congestion, narrow and one-way streets, parking and overhead power wires.

The method of REPORTING FIRES is studied. Private telephone numbers and/or 911 systems. The communication center as well as number and type of alarm devices are carefully studied. We track the emergency call from the time it is dialed to the time it is repeated to fire personnel.

All fire-signaling apparatus is checked in detail for condition and reliability, and we test at random from 10% to 20% of the street equipment. These are operating tests made under the various conditions which may be encountered in actual use.

We also recommend as a guide to installation and operation of fire alarm systems, the specification published by the National Fire Protection Association. Copies are available from NFPA.

Our grading of the municipality or legal district also include the scope and enforcement of the BUILDING CODE, GAS CODE, ELECTRIC CODE, MECHANICAL CODE, and FIRE PREVENTION CODE. Local ordinances are compared with standard codes and we spend time with fire prevention units and building inspectors in checking on effectiveness of the local codes and their enforcement.

"AFTER THE INSPECTION, HOW ARE THE RESULTS TRANSLATED INTO INSURANCE RATES?"

We compare the conditions found in a community with the standards of the "Insurance Services Office Grading Schedule for Municipal Fire Protection." This yardstick for evaluating public fire protection was originally compiled by the National Board of Fire Underwriters. It defines standards and is a measure of a community's fire defenses.

By evaluating the actual conditions in a community through use of the grading schedule we arrive at a public protection classification. The class designation indicates the rate base to be used on many classes of property including the numerically large dwelling group.

This protection classification also determines the basis rate which is an integral part in the calculation of individual rates on commercial, industrial, residential and public properties.

Although insurance on dwellings and some other types of risks is written at class rates developed from this classification with further distinction only as to classes of construction and occupancy, properties of the commercial and industrial groups and usually rated individually. A rate applying specifically to each such property is determined according to: type of construction; occupancy and use; hazards; and exposures. Since the basis rate used in the computation of property fire insurance rates in a community is based directly on the comparative value of the municipal or legal district protection facilities, the higher the quality of such protection, the lower will be the rates. Buildings equipped with automatic sprinkler systems receive special attention, and because of the superior level of protection, those qualifying are subject to lower rates. All such properties are given periodic individual surveys by our Rating Department

This is a brief outline of rating methods and we shall not attempt to list here specific requirements, schedules or rates. Questions concerning the meaning of the rating classification of your community, dwelling rates, or rates on your commercial or industrial property are better answered in detail upon specific request.

"WHAT HAPPENS WHEN THE CURRENT SURVEY SHOWS A SUBSTANTIAL CHANGE IN PUBLIC PROTECTION SINCE THE PREVIOUS SURVEY?"

If it is found that conditions have changed for the better, and rate reductions are in order, they are made promptly and full credit is given for all improvements.

If, on the other hand, conditions have changed for the worse, and protection no longer measures up to the previously established classification, then the rates are NOT changed immediately. First, we report in detail to the responsible municipal or legal district authorities, showing reasons why such a change in classification should be made, and we outline the improvements in protection needed to maintain the existing rate levels. Depending upon the local interest exhibited, this report is followed by correspondence or personal conferences as indicated by the circumstances. We make every effort to encourage needed improvements before any rate increases are made. Community rates are not raised until the situation has been thoroughly discussed and opportunity has been given to make the needed improvements within a reasonable time. If the needed improvements will not receive prompt attention because of lack of local interest or for physical or financial reasons, we are obligated to adjust the rate level to correspond to the conditions.

"IS THIS INFORMATION MADE AVAILABLE TO MUNICIPAL OR LEGAL DISTRICT OFFICIALS?"

Yes! We prepare full information on the protection of each "protected" community and are glad to discuss our finding, conclusions and recommendations for needed improvements with municipal or legal district officials. This information is intended to assist our member companies in their underwriting and is also available for community officials.

"HOW MUCH DOES THIS MUNICIPAL OR LEGAL DISTRICT SURVEY COST THE COMMUNITY?"

Nothing! Our survey and consulting services are available to your community without charge as a part of the service of your property insurance companies. The total cost of our rating work is spread among the many property insurance companies that are members of our organization. The total cost represents a small fraction of each property insurance premium dollar.

"WHEN ARE THESE SURVEYS MADE?"

There is no set schedule. Growing communities must of necessity be checked more often than those of a stable size. Our surveys generally follow improvement programs in local fire defenses, impairments, such as water shortages, and extensions in service such as new housing developments where hydrant protection has been installed to cover greater areas.

"IF A COMMUNITY IS PLANNING IMPROVEMENTS OR EXTENSIONS TO ITS WATER SYSTEM, OR THE PURCHASE OF NEW FIRE FIGHTING EQUIPMENT, CAN THE RATING BUREAU BE CONSULTED IN ADVANCE ABOUT PROBABLE CHANGES IN BASIC RATE GRADING?"

Emphatically yes! And it is in the community's best interest to do so. Since changes in protection facilities may have an effect on classification it is desirable that community officials be informed in advance as to such possibilities. We are always glad to comment in advance upon plans submitted by water supply engineers.

"WILL THE RATING BUREAU DRAW UP PLANS FOR WATER SUPPLY IMPROVEMENTS OR PROVIDE INDIVIDUAL SPECIFICATIONS FOR FIRE APPARATUS?"

No! Our services are of an advisory nature only. To draw up plans and specifications for a water system would be intrusion upon the rights and responsibilities of local engineers having intimate knowledge of the community and its needs. We do not intrude except with permission, and then only as advisers. The final decisions are for the local

community.

Similarly, we realize that it is the responsibility of the fire chief to prepare specifications for the apparatus he needs. We are available to assist if requested, but again, the final decision rests locally.

ONE FINAL WORD

The aims of the insurance companies are identical to yours, namely, to cut down the number of lives lost in fires and to reduce the huge annual fire losses of the nation. Not only do fires rob a community of its income and productive capacity, but they also determine the ultimate cost of fire insurance. It is in our common interest that the fire defenses of your community be strong, and our reports are aimed at helping you to make them so.

When our representatives visit your community, make full use of their abilities and specialized skills. They are picked personnel, specially trained for this work, they are human and they meet you on a personal level. During the course of their stay in your community they will become genuinely interested in your problems, and will devote as much time as you may need in helping you find solutions.