

# Items Considered by ISO in the FSRS

The Fire Suppression Rating Schedule (FSRS) measures the major elements of a community's fire-suppression system and develops a numerical grading called a Public Protection Classification (PPCTM). Here's an outline of the items considered in the FSRS and the percentage weighting of each item in the calculation that leads to a PPC rating.

## **Receiving and handling of fire alarms**

Receipt of fire alarms by commercial telephone — ISO compares the number of telephone lines provided with the number of telephone lines needed for emergency and business calls. The number of needed lines depends on the population served by the communication center. ISO also evaluates telephone directory listings. **2%**

Operators — ISO compares the number of fire alarm operators provided with the number of operators needed. The number of needed operators depends on whether the community is meeting its performance standards with existing operators for receiving and dispatching alarms. Alternatively, if performance data is unavailable, the number of needed operators is based upon the number of alarms received. **3%**

Alarm dispatch circuits — All fire departments (except for single-station departments with full-time personnel receiving alarms directly at the station) need adequate means of notifying personnel of fire locations. ISO evaluates the type and arrangement of those facilities. **5%**

*Receiving and handling of fire alarms total: 10%*

## **Fire department**

Pumpers — ISO compares the number of in-service pumpers and the equipment carried with the number of needed pumpers and the equipment identified in the FSRS (or equivalency list). The number of needed pumpers depends on the Basic Fire Flow, the size of the area served, and the method of operation. **10%**

Reserve pumpers — ISO evaluates the adequacy of the pumpers and their components with one (or more in larger communities) pumper out of service. **1%**

Pump capacity — ISO compares the pump capacity of the in-service and reserve pumpers (and pumps on other apparatus) with the Basic Fire Flow. ISO considers a maximum Basic Fire Flow of 3,500 gpm. **5%**

Ladder/service — Communities use ladders, tools, and equipment normally carried on ladder trucks for ladder operations, as well as for forcible entry, utility shut-off, ventilation, salvage, overhaul, and lighting. The number and type of apparatus depend on the height of the buildings, needed fire flow, and the size of the area served. **5%**

Reserve ladder and/or service — ISO compares the adequacy of ladder and service apparatus when one (or more in larger communities) apparatus is out of service. **1%**

Distribution of companies — ISO credits the percentage of the community within specified response distances of pumpers (1-1/2 miles) and ladder/service apparatus (2-1/2 miles). **4%**

Company personnel — ISO credits the personnel available for first alarms of fire. For personnel not normally in the fire station (for example, volunteers), ISO reduces the value of the responding members to reflect the delay due to decision, communication, or assembly. ISO then applies an upper limit for the credit for manning, as it is impractical for a very large number of personnel to operate a piece of apparatus. **15%**

Training — Trained personnel are vital to a competent fire-suppression force. ISO evaluates training facilities and their productivity; training at fire stations; training of fire officers, drivers, and recruits; and building familiarization and prefire planning inspections. **9%**

***Fire department total: 50%***

### **Water supply**

Adequacy of water supply — ISO compares the available water supply at representative community locations with the needed fire flows for those locations. The supply works, the water main capacity, or fire hydrant distribution may limit the available supply. **35%**

Hydrants: size, type, and installation — ISO evaluates the design capacity of fire hydrants. **2%**

Hydrants: inspection and condition — ISO evaluates the frequency of fire hydrant inspection, the completeness of the inspections, and the condition of the hydrants. **3%**

***Water supply total: 40%***

### **Divergence**

Divergence — An inadequate water supply may limit the ability of even the best fire department to suppress fires. Similarly, an inadequate fire department may not be able to make effective use of an abundant water supply. So, if the quality of the fire department and the water supply are different, ISO adjusts the total score downward to reflect the limiting effect of the less adequate item on the better one.