GENERAL SUMMARY.

CITY IN GENERAL.

Population about 116,850. Large amount of manufacturing. Extensive waterfront and important summer seaport. City very hilly, except near tide water. Many grades very steep; some close to the congested value district practically impassable for fire apparatus. Streets generally narrow; mostly paved; generally in fair to good condition. High winds frequent; winter temperatures severe and heavy snowfall frequent. Loss per fire and per capita high; number of fires moderate.

FIRE-FIGHTING FACILITIES.

Water Supply.—Owned and operated by the municipality. Supervision of works under Business Manager, assisted by a Civil Engineer; both connected with the water department for a number of years. An ample supply is conveyed to the city by gravity from Lake St. Charles, through three adjacent pipe lines to the distribution system, which is in two services; supply lines moderately unreliable and not sufficiently in duplicate. Consumption high. Pressures in "Lower Town" range from moderate to heavy; in "Upper Town" from light to moderate. Main arteries to principal mercantile and congested value district inadequate; fire supply dependent upon the operation of valves separating services and other closed valves in the district, all subject to delay; elsewhere arterial system only fair and gridiron poor in some parts, with considerable amounts of small and old pipe, some of which has questionable joints. Valves fairly well spaced; not regularly inspected. Hydrants fairly well spaced; many too small; regularly inspected; in good condition.

Fire Department.—A full paid force; not under civil service regulations; officers experienced and Chief progressive. Financial support fair. No age limit for retirement. Companies sufficient in number and fairly well distributed, but, under the two-platoon system, undermanned. Discipline fair. Two of the three engines in service very old and of inadequate capacity; crews not sufficiently skilful. Some hose wagons light and too small. Chemical and ladder protection good. Heavy stream appliances inadequate. Hose supply adequate and in good condition; no 3-inch hose. Minor equipment good, but standard salvage and some modern appliances lacking. Special appliances for handling streams do not include turret pipes on hose wagons. Fire stations mainly satisfactory and a repair shop maintained. Horses satisfactory and used for fire purposes only; veterinary hospital lacking. Response to alarms good, but hills at times are a handicap. Fire methods good, except for lack of salvage work. Building inspections of value. Records good.

Fire Alarm System.—Combined automatic and manual system, fairly well maintained, but with apparatus largely of obsolete type and inadequate for the city. Headquarters in a non-fireproof building; operating room contains much woodwork. Department telephone facilities inadequate. Boxes of unsatisfactory type. Distribution generally good in important districts, elsewhere fair to poor. No red lights used to indicate locations and no signs (in English and French languages) giving instructions for proper method of transmitting alarm. Circuits all overhead; wiring fair; numerous grounds; box leads poorly installed; circuits to and apparatus at stations deficient; box circuits overloaded. Batteries of satisfactory type, in good condition and well mounted. System as a whole has many unreliable features.

Fire Department Auxiliaries.—Police department efficient from a fire protection standpoint. The Quebec Railway, Light, Heat and Power Company render good assistance at fires; other public service corporations receive no alarms and render aid only when called upon. Telephone service widely distributed; frequently used for transmitting fire alarms. Sprinkler equipments and standpipes few and little private protection. Outside aid of little value.

Summary.—Water supply available generally in sufficient quantities, and in some parts of the system at pressures adequate for direct hydrant hose streams; somewhat unreliable as demonstrated by too frequent breakage to 40-inch and 30-inch supply mains. Fire department weak numerically, and engine capacity inadequate. Fire alarm system seriously unreliable, and should be superseded largely by a new system in fireproof headquarters.

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