



2020 ISO Report

Community Risk Reduction

Supplement to Section 1000 of the ISO Fire Protection Rating Schedule

2016-2019

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Uses of this Data

In unincorporated areas of Harris County, most fire protection services are provided by Emergency Service Districts (ESD). The HCFMO is the Authority Having Jurisdiction (AHJ) for fire inspection, fire/arson investigation, and specialized emergency response activities. As such, fire departments in unincorporated areas may not provide these specialized services.

The Insurance Services Office, Inc. (ISO[®]), publishes a proprietary Fire Suppression Rating Schedule[®] (the FPRS). According to the ISO¹, the purpose of the FPRS is "to outline the criteria for evaluating the fire prevention and fire suppression capabilities of individual communities — or fire protection areas", with the goal of developing a Public Protection **Classification**[®] (PPC) for property insurance rating.

In Texas, an integral part of determining a community's FPRS since 2004 has been the "Texas Addendum". This ISO supplement provided additional credit for fire prevention and investigation activities, use of compressed air foam (CAFS), and fire department training conducted by the State Firemen's and Fire Marshal's Association (SFFMA), Texas A & M University Engineering Extension Service (TEEX) and the Texas Commission on Fire Protection (TCFP).

Since 2005, the Harris County Fire Marshal's Office (HCFMO) has published an annual report, the *ISO Questionnaire — Texas Exceptions*, to document the county's fire prevention and fire investigation activities. This purpose of this report was to provide the information necessary for communities in unincorporated Harris County to receive full allowable FPRS and PPC credit.

Beginning January 2015, the Texas Department of Insurance and ISO revised the Texas Exceptions to the FPRS to include only the credit of CAFS and fire department training. All other items were incorporated into the body of the FPRS in Section 1000, Community Risk Reduction.

Because of these changes, HCFMO has changed the title, format, and content of this report beginning with the 2016 Report, Community Risk Reduction — Supplement to Section 1000 of the ISO Fire Protection Rating Schedule. This new report includes information about HCFMO programs for:

- adoption and enforcement of fire prevention codes,
- public fire safety education, and
- fire investigation

In accordance with ISO requirements, all calculations are rounded to two decimal places.

It is our intent that this information should be used to complement community risk reduction efforts conducted by each local fire department. Given that HCFMO provides these services throughout the unincorporated areas, any local fire department or ESD may use this information as part of their ISO documentation.

Collectively, this information could improve a community's PPC[™] rating by as much as 5 points, and result in a more favorable ISO rating. As such, this information could have a direct and favorable economic impact on property owner insurance premiums.

Beyond the economic incentive, these efforts benefit the citizens of Harris County through community outreach and public safety. Accurate and complete information about the county's fire prevention and investigation efforts can provide a fire department with a valuable reference to address local fire safety concerns, allocate limited resources, justify budget needs, review the need for personnel training, and focus the direction of the department's fire education/prevention programs. This information may be used by state lawmakers and community leaders to help address fire safety concerns and new legislation issues.

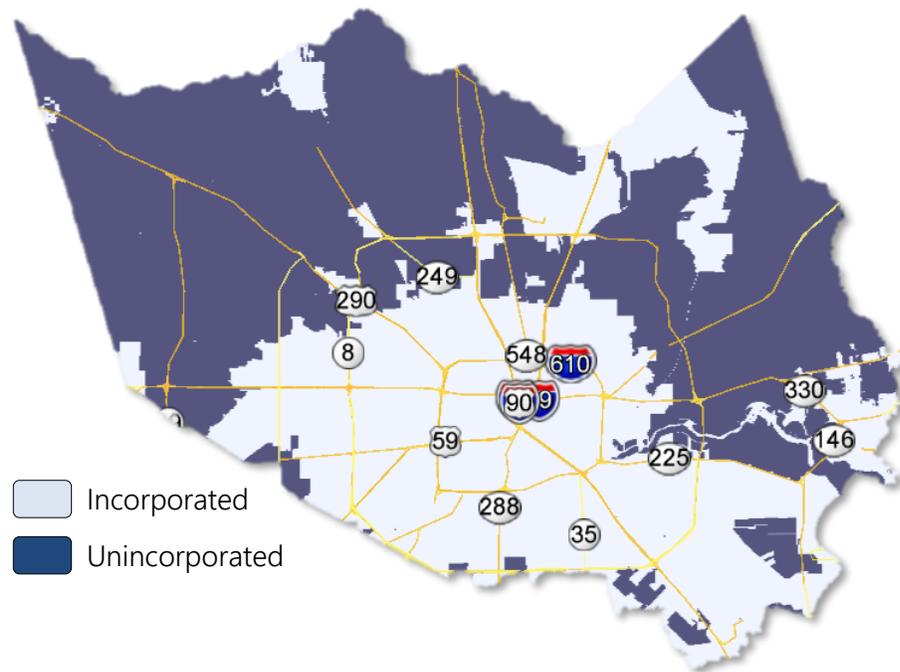
Disclaimer: To the best of our knowledge, the information contained in this document is accurate. Harris County FMO and its employees assume no responsibility for errors or omissions.

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¹ <http://www.iso.com>

1000: COMMUNITY RISK REDUCTION



In unincorporated areas of Harris County, responsibility for community risk reduction is shared between one of many emergency service providers and the county. Generally speaking, the county provides fire inspection, code enforcement, and fire/arson investigation services through the Harris County Fire Marshal's Office, or HCFMO. HCFMO is the Authority Having Jurisdiction, or AHJ, and also provides a wide range of public education outreach and other informational support services. HCFMO relies on a "customer first" operating philosophy to achieve agency goals, balance community risks from fires or other emergencies, and encourage strong, sustainable economic development.

The Fire Marshal is appointed by Commissioners Court to a term not to exceed two years. HCFMO employees are certified as fire protection personnel by the Texas Commission on Fire Protection ("TCFP") and, where required by law, employees are licensed peace officers by the Texas Commission on Law Enforcement ("TCOLE").

Emergency Services Districts (ESDs) provide fire /rescue and EMS in almost all unincorporated areas, either directly or through contract with an independent service provider. Some small pockets are served by volunteer departments that rely on donations or other funding. In 2016, ESDs collected over \$180 million for fire, EMS, and related services and could collect an additional \$60 million at maximum tax rates. ISO fire protection ratings range from 1 to 8B depending on the service area and ESD. There does not appear to be any compelling reason or support to consider consolidation into a single, county fire department at this time.

1020: CODE ADOPTION AND ENFORCEMENT (PCE)

1021: FIRE PREVENTION CODE REGULATIONS (PCR)

- Harris County has adopted the 2018 Edition of the International Fire Code, with local amendments adopted from the 2013 edition of NFPA 1 for Residential Board and Care occupancies, and other codes and standards referenced in either of those codes.
- Foster group homes and foster homes are subject to the requirements of NFPA 101®, Life Safety® Code, 2015 Edition.
- For buildings in existence prior to January 1, 2005, Harris County uses the State Inspection Standard of NFPA 101, 2015 Edition as the inspection standard in unincorporated areas.

1022: FIRE PREVENTION STAFFING (PS)

- HCFMO had 64 personnel appointed as fire inspectors during this period. Details about specific personnel may be available upon written request from the Harris County Fire Marshal's Office.
- Number of completed fire and life safety inspections for non-residential buildings was:
 - 2019 16,555
 - 2018 15,831
 - 2017 15,236
 - 2016 14,427
 - 2015 10,941

This number includes all inspections performed by certified fire inspectors but assigned to other duties within HCFMO. It does not include any inspections or pre-planning visits performed by local fire departments, the State Fire Marshal's Office, or third-party inspectors under contract to provide services to licensed facility operators.

1023: FIRE PREVENTION CERTIFICATION AND TRAINING (PCT)

- Fire Inspector Certification (PIC)
 - All HCFMO personnel appointed as fire inspectors — full-time and equivalent part-time — are certified by the Texas Commission on Fire Protection in accordance with the criteria of NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plans

Examiner. Details about specific personnel may be available from HCFMO upon written request.

- Fire Inspector Continuing Education (PIE)
 - All HCFMO fire inspectors completed 24 or more hours of continuing education each year; the average was 174 hours per inspector. Details about specific courses or individuals may be available from HCFMO upon written request.

1024: FIRE PREVENTION PROGRAMS (PCP)

- Plan Review (PPR)
 - All construction plans for new nonresidential construction, additions, remodeling, and the like are reviewed for compliance with adopted fire prevention codes.
- Inspections for Certificates of Occupancy (PCO)
 - Inspections are performed for certificates of compliance) in accordance with the Harris County Fire Code.
 - State law does not authorize the County to perform fire prevention inspections of new residential construction unless requested by the property owner. With some exceptions, a residential builder is required to build in accordance with the 2013 Edition of the International Residential Code and is required to inspect to determine compliance with that standard.
- Quality-Assurance Program for Enforcement and Inspection Programs (PQC)
 - HCFMO has a quality assurance program that requires supervisor review and approval of inspection reports, with field visits and review meetings to discuss enforcement concerns and remedies.
- Code Compliance Follow-Up (PCF)
 - HCFMO keeps records of all fire hazards and/or code violations discovered during the inspection process, and conducts follow-up inspections on all violations found.
- Inspections of Private Fire Protection Equipment (PPP)
 - HCFMO performs routine inspections of all private fire protection equipment. The frequency and schedule depends on the type of equipment, adopted codes, applicable NFPA standard, and reports of complaints or impaired systems.
- Fire Prevention Ordinances (PPO)
 - In Texas, county government does not have ordinance-making power, and enforces State law, including Tx. Local Gov't Code Chapter 352. Where allowed, Harris County has

adopted specific orders, rules, or regulations governing fire lanes, fireworks, hazardous material routes, barbecue grills, wildland-urban interface (WUI), or weeds and trash, as follows:

- Fire Lanes. In accordance with Tx. Transportation Code, Chapter 585.
 - Fireworks. In accordance with Tx, Occupations Code, Chapter 2154 and the Harris County Fire Code, Section 5609.
 - Wood Shingle Roofs. In accordance with municipal rules applicable in their respective extra-territorial jurisdiction (ETJ).
 - Hazardous Materials Routes. In accordance with the Harris County Basic Emergency Response Plan and Federal law.
 - Weeds and Trash. In accordance with Tx. Health & Safety Code, Chapter 343.
- Coordination with Fire Department Training and Pre-incident Planning (PTP)
 - HCFMO has adopted an “opt-in” countywide reporting system to share fire prevention and pre-incident planning information.
 - HCFMO is the coordinator for county-wide training programs in partnership with the Harris County Firefighters Association (HCFFA).

1025: CREDIT FOR FIRE PREVENTION CODE AND ENFORCEMENT (CPCE)

HCFMO Self-assessment:

$$\frac{(\text{PCR} + \text{PS} + \text{PCT} + \text{PCP})}{40} * 2.2 = \text{CPCE}$$

$$\frac{(8.6 + 3 + 6 + 17)}{40} * 2.2 = 1.90$$

1030: PUBLIC FIRE SAFETY EDUCATION (FSE)

1031 PUBLIC FIRE SAFETY EDUCATORS QUALIFICATIONS AND TRAINING (FSQT)

- HCFMO had 17 personnel appointed as public fire educators, plus an Outreach Coordinator, in 2015-19. Details about specific personnel may be available upon written request from the Harris County Fire Marshal's Office.
- Fire Safety Education Course (FSEC)
 - All HCFMO personnel assigned to public fire safety education personnel are trained in public education as specified by HCFMO.
 - Three are trained in accordance with the general criteria of NFPA 1035, Standard for Professional Qualifications for Fire and Life Safety Educator, Public Information Officer, and Juvenile Firesetter Intervention Specialist.
 - One holds a Master's degree in Communication.
- Fire Safety Education Continuing Education (FSCE)
 - All public fire safety education personnel participate in continuing education in public fire safety education techniques and processes, and receive at least 10 hours of additional work-related training each year; the average was 180 hours per inspector. Details about specific courses or individuals may be available from HCFMO upon written request.

1032: PUBLIC FIRE SAFETY EDUCATION PROGRAMS (FSP)

- Number of public fire safety education programs completed by HCFMO
 - 2019 199 activities 26,314 attendees
 - 2018 208 activities 39,398 attendees
 - 2017 192 activities 36,421 attendees
 - 2016 183 activities 39,360 attendees
 - 2015 83 activities 18,068 attendees

Note: This number does not include 107 media interviews, 33 media releases, 2,012 social media posts, and 13 other publications

- Residential Fire Safety Program (FSRP)
 - HCFMO relies on local fire departments to conduct residential fire safety surveys and related activities.

- Fire Safety Education in Schools (Private and Public, Early Childhood Education through Grade 12) (FSPS)
 - HCFMO conducts annual school inspections of all public, private, and charter schools in unincorporated areas, including the documentation of one or more fire exit drills each month the campus is in session.
 - HCFMO relies on local fire departments to conduct residential fire safety surveys and related activities.
 - HCFMO relies on each school to present developmentally appropriate classroom instruction on fire safety to all students in early childhood education.
- Juvenile Firesetter Intervention Program (FSPJ)
 - HCFMO provides a recognized “Youth Fire Intervention Program” for all youths identified as involved in fire-play or fire-setting.
 - In 2019, HCFMO processed 72 YFIP referrals. 100% of all youths identified through fire records are referred for intervention and/or counseling services. HCFMO provides educational intervention and interaction with parents or legal guardians. Counseling and other intervention services are provided by private counseling services under contract to the program.
- Fire Safety Education Program for Occupancies Having Large Loss Potential or Hazardous Conditions (FSPL)
 - HCFMO relies on local fire departments to conduct education programs for target hazards and occupancies with large loss potential.

1033: CREDIT FOR PUBLIC FIRE SAFETY EDUCATION PROGRAMS (CFSE)

HCFMO Self-assessment:

$$\frac{((FSPR + FSPS + FSPJ + FSPL) + FSQT)}{40} * 2.2 = CFSE$$

$$\frac{((5 + 10 + 5 + 3) + 7.5)}{40} * 2.2 = 1.68$$

1040: FIRE INVESTIGATION (IF)

1041: FIRE INVESTIGATION ORGANIZATION AND STAFFING (IOS)

- Fire Investigation Organization (IO)
 - HCFMO is the office with responsibility to conduct investigations of the origin and cause of fires.
 - Until late 2016, local fire departments were authorized to investigate the origin and cause of all fires if the fire department could determine the fire to be non-incendiary.
 - Beginning in 2017, HCFMO began investigation of all structure and vehicle fires, with consults to local fire departments when appropriate.
- Fire Investigation Staffing (IS)
 - HCFMO has enough fire investigators to investigate all structure fires, with mutual aid assistance as requested from local fire departments, state fire marshal's office, or ATF Task Force.

1042 FIRE INVESTIGATOR CERTIFICATION AND TRAINING (IQT):

- Fire Investigator Certification (IQTC)
 - HCFMO is the office with responsibility to conduct investigations of the origin and cause of fires.
- Fire Investigation Staffing (IS)
 - HCFMO had 65 personnel appointed as fire investigators during this period. Details about specific personnel may be available upon written request from the Harris County Fire Marshal's Office.
 - All personnel assigned to perform investigation of the causes and origins of fires are certified by the Texas Commission on Fire Protection, in accordance with the general criteria of NFPA 1033, Standard for Professional Qualifications for Fire Investigator. Details about specific personnel may be available from HCFMO upon written request.
- Fire Investigator Continuing Education Training (IQTE)
 - All HCFMO fire investigators completed 40 or more hours of continuing education each year; the average was 180 hours per fire investigator. Details about specific courses or individuals may be available from HCFMO upon written request.

1043: USE OF THE NATIONAL FIRE INCIDENT REPORTING SYSTEM (IRS)

- HCFMO used the National Fire Incident Reporting System (NFIRS) for all responses during the three-year period.

1044 CREDIT FOR FIRE INVESTIGATION PROGRAMS (CIP):

HCFMO Self-assessment:

$$\frac{(IOS + IQT + IRS)}{20} * 1.1 = CIP$$

$$\frac{(8 + 6 + 6)}{20} * 1.1 = 1.10$$

1050 CREDIT FOR COMMUNITY RISK REDUCTION (CCRR):

HCFMO Self-assessment:

$$CPCE + CPSE + CIP = CCRR$$

$$1.90 + 1.68 + 1.10 = 4.68$$

1050: CRR CREDIT SUMMARY

1025: CREDIT FOR FIRE PREVENTION CODE AND ENFORCEMENT (CPCE)

$$\frac{(PCR + PS + PCT + PCP)}{40} * 2.2 = CPCE$$

$$\frac{(8.6 + 3 + 6 + 17)}{40} * 2.2 = 1.90$$

1033: CREDIT FOR PUBLIC FIRE SAFETY EDUCATION PROGRAMS (CFSE)

$$\frac{((FSPR + FSPS + FSPJ + FSPL) + FSQT)}{40} * 2.2 = CFSE$$

$$\frac{((5 + 10 + 5 + 3) + 7.5)}{40} * 2.2 = 1.68$$

1044 CREDIT FOR FIRE INVESTIGATION PROGRAMS (CIP):

$$\frac{(IOS + IQT + IRS)}{20} * 1.1 = CIP$$

$$\frac{(8 + 6 + 6)}{20} * 1.1 = 1.10$$

1050 CREDIT FOR COMMUNITY RISK REDUCTION (CCRR):

$$CPCE + CPSE + CIP = CCRR$$

$$1.90 + 1.68 + 1.10 = 4.68$$