



Annual Report on Life Safety Inspections

Fiscal Year 2020



State Fire Marshal's Office

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TEXAS DEPARTMENT OF INSURANCE

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December 31, 2020

The Honorable Greg Abbott
The Honorable Dan Patrick
The Honorable Dennis Bonnen

Dear Governor Abbott, Governor Patrick, and Speaker Bonnen:

The Texas Government Code requires the State Fire Marshal's Office to submit an annual report on the State Fire Marshal's inspection findings. Attached is the report for 2020.

TDI has shared the contents of this report with the agencies mentioned in it. After each facility was inspected, SFMO shared the report for that facility with the agency occupying that building, noting all violations and potential dangers.

Please contact me or Libby Elliott, Director of Government Relations, at 512-676-6605, if you have questions or need more information about this report.

Respectfully submitted,

A handwritten signature in blue ink that reads "Orlando P. Hernandez". The signature is written in a cursive style.

Orlando P. Hernandez
State Fire Marshal

cc: Senate Business and Commerce Committee
House Insurance Committee

Executive Summary

The State Fire Marshal's Office (SFMO) conducts life safety inspections of state-owned and state-leased buildings. SFMO also performs fee-based, fireworks retail site, ammonium nitrate facility, and complaint inspections. The requirements for these inspections are listed in Texas Government Code 417.008.

In Fiscal Year 2020, SFMO inspected 279 state-owned and state-leased properties, which included 2,344 buildings of about 53 million square feet. The totals include ammonium nitrate facilities.

In FY20, SFMO also conducted fee-based, fireworks retail site, and complaint inspections for 1,422 buildings of about 7 million square feet.

SFMO has 15 fire inspectors, with one inspector dedicated to the Capitol Complex. Due to vacancies, SFMO had an average of 10 inspectors during FY20.

The closure of state buildings and agencies due to the COVID-19 pandemic limited the number of inspections. Many inspections were postponed to reduce the risk of infection of state-supported living centers, hospitals, nursing homes, assisted living facilities, and detention correctional facilities. Facilities inspected shortly before or during the pandemic may not have had time to correct violations because staff and contractors didn't have access to facilities.

SFMO inspections of state facilities are conducted on a risk analysis basis in consultation with the Texas Facilities Commission and the State Office of Risk Management. SFMO also works with state agencies to prioritize facility inspections and identify deficiencies that pose the most significant risks.

Key Violations During Inspections

- Fire alarm, fire sprinkler, and commercial kitchen suppression systems are not maintained to fire code.
- New construction projects and building purchases by state agencies are not reported to SFMO.
- Extension cords and power strips are used as permanent electrical wiring.
- Firewalls and smoke barriers have unsealed penetrations.
- Some agencies have large cooking operations with steam kettles. The steam kettles are used as fryers and produce grease-laden vapors, which are highly combustible. Nationally recognized testing laboratories do not recommend using steam kettles as fryers.

Many violations noted in this report have existed for years. Agencies and other entities said funding affects their ability to correct violations.

Agency and State Building Reports

General State Building Inspection Data

State buildings inspected: 2,344

Violations found: 6,186

Violations corrected in FY20: 809

Square footage inspected: 53 million

Due to pandemic restrictions, not all operational goals were met.

Operational Goals

- Areas that provide residential and patient care, such as state-supported living centers and state hospitals, will be inspected each year.
- Buildings that are seven stories or higher will be inspected every two years.
- All residential facilities of any state agency will be inspected every two years.
- All state criminal justice facilities will be inspected every two years.
- Other state-owned and leased facilities will be inspected every three to five years.
- Inspectors will verify that fire drills occur regularly at state-operated facilities.
- SFMO will continue to request plans for building and construction projects and provide peer reviews of the plans.
- SFMO is identifying contacts for all state agencies to help facilitate corrections in state-leased buildings.
- SFMO recommends that state agencies report fires through appropriate state procedures. The SFMO will update procedures for reporting fires for state agencies.

Texas Department of Criminal Justice (TDCJ)

Initial inspections: 25

Reinspections conducted: 1

Buildings inspected: 524

Violations found: 2,087

Violations corrected in FY20: 98

Square footage inspected: 7.9 million

Inspection Violations

- Most of the units' fire alarm systems aren't functioning properly. SFMO has asked for correction timelines but had not received them when this report was written.
- Most of the units' kitchen hood suppression systems aren't inspected or maintained. To keep the kitchens open and operating, SFMO developed a temporary fire watch policy. However, it does appear that TDCJ is not following this policy.
- Gas pipeline pressure tests are not performed at most units.
- There are no records of inspection or testing of fire doors, dampers, or standpipe systems when installed.
- There are electrical violations in each inspected unit, including unlabeled breaker

panels, unused openings, breakers tied with copper wire, and extension cords used as permanent wiring.

- Steam kettles are often used as fryers. Nationally recognized testing laboratories don't recommend using them in this manner.

Improvements

- TDCJ and SFMO meet regularly to discuss inspection concerns and corrections.
- TDCJ requests reviews and code requirements before renovations and new construction.
- TDCJ installed battery-operated smoke alarms in employee housing before SFMO left the facility.

Operational Goals

- Facilities where fire protection systems are not maintained or not in service will be considered high-risk and will be inspected more frequently.
- TDCJ will use policies and procedures provided by SFMO to correct violations and achieve compliance.
- TDCJ will perform more routine fire and life safety inspections to correct violations in a timely manner.

Texas Juvenile Justice Department (TJJD)

Initial inspections: 3

Reinspections conducted: 2

Buildings inspected: 35

Violations found: 227

Violations corrected in FY20: 6

Square footage inspected: 314,00

Inspection Violations

- Fire alarm systems don't work properly in some buildings at one campus.
- Fire sprinkler systems and standpipes systems aren't inspected each year.
- There are no records of inspection or testing of fire doors, dampers, or standpipe systems when installed.

Improvements

TJJD officials have requested reviews of projects and code requirements before renovations and construction.

Operational Goals

- TJJD and SFMO will maintain open communication to ensure safety for residents and staff.
- Facilities where fire protection systems are not maintained or not in service will be considered high-risk and will be inspected more frequently.
- TJJD will use policies and procedures provided by SFMO to correct violations and

achieve compliance.

- TJJJ will perform more routine fire and life safety inspections to correct and rectify violations in a timely manner.

Texas Department of Transportation (TxDOT)

Initial inspections: 46

Reinspections conducted: 1

Buildings inspected: 215

Violations found: 669

Violations corrected in FY20: 19

Square footage inspected: 1.8 million

Inspection Violations

- Three facilities have inoperable fire alarm and fire sprinkler systems.
- Fire alarm and fire sprinkler systems aren't inspected each year.
- Flammable liquid identification placards have not been installed.
- Fire doors are propped open with door stops.
- Portable fire extinguishers aren't inspected for six- and 12-year maintenance.
- Emergency lighting units don't work.
- SFMO can't verify that some walls separating business and industrial occupancies are fire-rated.
- Each facility has electrical violations that include unlabeled breaker panels, unused openings without blank covers, and extension cords used as permanent wiring.
- Facilities lack fire department access key boxes.
- There are no records of inspection or testing of fire doors and dampers when installed.

Improvements

- Records for emergency lighting tests have been documented.
- Padlocks are used appropriately.
- Fewer exit doors are locked.

Operational Goals

- SFMO will train TxDOT staff across the state to discuss fire and life safety inspections.
- TxDOT will use policies and procedures provided by SFMO to correct violations and ensure compliance.
- TxDOT will perform more routine fire and life safety inspections to correct violations in a timely manner.

Texas Department of Public Safety (DPS)

Initial inspections: 3

Reinspections conducted: 3

Buildings inspected: 6

Violations found: 31
Violations corrected in FY20: 22
Square footage inspected: 44,000

Inspection Violations

- Portable fire extinguishers are not appropriately maintained and inspected.
- Magnetic locking devices on doors don't release properly.
- Multiple locations use extension cords as permanent wiring.
- Emergency lighting units and exit signs don't work.
- Combustibles are stored in electrical rooms.

Improvements

DPS makes corrections as inspections are conducted.

Operational Goals

- DPS and the SFMO will work to establish safe occupant loads at driver's license offices.
- DPS will perform more routine fire and life safety inspections to correct violations in a timely manner.

Texas Parks and Wildlife (TPWD)

Initial inspections: 16
Reinspections conducted: 1
Buildings inspected: 274
Violations found: 177
Violations corrected in FY20: 84
Square footage inspected: 2.3 million

Inspection Violations

- Portable fire extinguishers are not mounted correctly at some facilities.
- Some parks don't have enough portable fire extinguishers.
- Spliced wiring is present in some mechanical and electrical rooms.

Improvements

- Double-sided, keyed deadbolts were replaced with thumb latches on interior locks.
- Fire extinguishers are maintained and inspected according to code.
- TPWD addressed electrical issues and replaced out-of-date, battery-operated smoke alarms.
- TPWD officials requested reviews and code requirements before renovations and new construction.

Operational Goals

TPWD will perform more routine fire and life safety inspections to correct violations in a timely manner.

Universities

Initial inspections: 34

Reinspections conducted: 8

Buildings inspected: 612

Violations found: 2,275

Violations corrected in FY20: 227

Square footage inspected: 33.7 million

Inspection Violations

- Fire doors and door frames aren't inspected annually.
- Fire doors are damaged or missing listed labels.
- Facilities don't have fire department access key boxes.
- Fire doors don't close and latch properly.
- There are unsealed penetrations in IT closets and mechanical and electrical rooms.
- Several universities don't inspect their fire alarm or fire sprinkler systems each year.
- Many locations have student appliances plugged into surge protectors, not wall outlets.
- Too many combustibles are stored in many mechanical/electrical rooms.
- Many universities don't have signs identifying fire department water supply connections, as required by a May 2016 notice from the fire marshal.
- Several universities don't conduct proactive inspections, relying solely on SFMO inspections to identify issues.
- Study areas don't have required sprinkler coverage.
- Ceiling assemblies aren't maintained to ensure proper and timely activation of fire alarm and sprinkler systems.
- Upper floors do not have enough secondary exits.

Improvements

- Universities are using fewer extension cords.
- Some universities have requested a review of code requirements before renovations and new construction.
- Universities that have been inspected give a timely response to the inspection report.

Operational Goals

- Facilities where fire protection systems aren't maintained or in service will be considered high-risk and inspected more frequently.
- Universities will perform more routine fire and life safety inspections to correct violations in a timely manner.

State-Supported Living Centers

Initial inspections: 4

Reinspections conducted: 4

Buildings inspected: 253

Violations found: 257

Violations corrected in FY20: 46

Square footage inspected: 857,000

Inspection Violations

- Electrical breaker panels don't have circuit identification labels.
- Ceiling assemblies aren't maintained to ensure proper and timely activation of the fire alarm and sprinkler systems.
- Door stops are used to hold open fire-rated doors.
- Fire alarms and sprinkler systems in several facilities have deficiencies.
- Steam kettles are used as fryers. Nationally recognized testing laboratories don't recommend using them in this manner.
- There are no records of inspection or testing of fire doors and fire/smoke dampers when installed.

Improvements

Staff corrected several violations during inspection.

Operational Goals

- SFMO will continue to inspect facilities annually.
- State-supported living centers will perform more routine fire and life safety inspections to correct violations in a timely manner.

State Hospitals

Initial inspections: 4

Reinspections conducted: 3

Buildings inspected: 201

Violations found: 160

Violations corrected in FY20: 132

Square footage inspected: 1.2 million

Inspection Violations

- Items are stored in front of breaker panels.
- Walk-in freezers have side locks and padlocks.
- Door stops are used to hold open fire-rated doors.
- Steam kettles are used as fryers. Nationally recognized testing laboratories don't recommend using them in this manner.
- Fuel stations don't have appropriate emergency instructions and protection.

Improvements

- The number of extension cord violations continues to decrease.
- Staff corrected several violations during inspection.
- Staff are removing secondary locking devices on closet doors in patient areas.

Operational Goals

- The SFMO will continue to inspect these facilities each year.
- State hospitals will perform more routine fire and life safety inspections to correct violations in a timely manner.

Texas Facilities Commission (TFC-Owned Properties)

Initial inspections: 13

Reinspections conducted: 2

Buildings inspected: 55

Violations found: 114

Violations corrected in FY20: 81

Square footage inspected: 2.2 million

Inspection Violations

- Extension cords and daisy-chained power strips are used for permanent wiring in some locations.
- Appliances are plugged into extension cords, not wall outlets.

Improvements

- TFC has improved record keeping for inspections of fire doors, fire alarms, emergency lighting, illuminated exit signs, and fire sprinkler systems.
- TFC constantly communicates with SFMO on issues that arise with state properties.
- Staff corrected many violations during the inspection.

Operational Goals

- SFMO will continue to work with TFC on inspecting properties it owns.
- TFC will perform more routine fire and life safety inspections to correct violations in a timely manner.

Texas State Preservation Board (Capitol Complex and State Cemetery)

Initial inspections: 4

Reinspections conducted: 28

Buildings inspected: 89

Violations found: 29

Violations corrected in FY 20: 22

Square footage inspected: 2.1 million

All Texas State Preservation Board buildings are inspected during each fiscal year. Monthly re-inspections are conducted to confirm that violations are corrected and to identify new violations.

Inspection Violations

- Many buildings don't have signs identifying fire department water supply connections, as required by a May 2016 notice from the fire marshal.
- Fire doors do not close and latch properly.
- Ceiling tiles are not maintained to ensure proper and timely activation of fire alarm and sprinkler systems.
- Emergency light fixtures don't work.
- Rack storage with solid shelving at the Capitol Visitor's Parking Garage does not meet fire sprinkler requirements and would prevent sprinkler water from extinguishing or controlling a fire in the shelving.

Operational Goals

- SFMO will continue to work closely with the Texas State Preservation Board to ensure fire code compliance.
- SFMO will continue to inspect Texas State Preservation Board facilities annually.
- SFMO will work with the Texas State Preservation Board to ensure it provides a response to inspection reports with violations.

State-Leased Spaces

Initial inspections: 24

Reinspections conducted: 13

Buildings inspected: 38

Violations found: 111

Violations corrected in FY20: 64

Square footage inspected: 285,000

Inspection Violations

- Emergency light fixtures don't work.
- Storage is stacked too high, obstructing sprinkler heads.
- Appliances are plugged into extension cords, not wall outlets.
- Exit signs don't work.
- Ceiling tiles aren't maintained to ensure proper and timely activation of fire alarm and sprinkler systems.
- Fire alarm and fire sprinkler systems aren't maintained or inspected annually.

Improvements

Some locations correct violations in the inspection report in a timely manner and request a re-inspection.

Operational Goals

- SFMO will continue to work closely with state-leased facilities to ensure fire code compliance.
- SFMO is identifying contacts for each state agency that occupies leased spaces to make sure they are aware of violations.

Ammonium Nitrate (AN) Inspections

Initial inspections: 33

Reinspections conducted: 1

Buildings inspected: 34

Violations found: 19

Violations corrected in FY20: 8

Square footage inspected: 168,000

Inspection Violations

- Bins don't have signs identifying AN storage.
- Wood storage bin walls show signs of AN soaking into walls.
- Portable fire extinguishers aren't maintained.
- Two buildings had structural damage to exterior walls.

Improvements

- Local fire departments are aware of the facilities and can respond with appropriate staff, equipment, and tactics.
- Increased signage notifies emergency responders of facility risks.

Operational Goals

- SFMO will continue to work closely with AN facilities to ensure fire code compliance.
- SFMO will continue to inspect AN facilities annually.

Fee-Based/Complaint Inspections

Initial inspections: 418

Reinspections conducted: 176

Buildings inspected: 1,422

Violations found: 2,980

Violations corrected in FY20: 1,771

Square footage inspected: 7 million

When requested, SFMO conducts fee-based inspections of foster homes, nursing homes, day care facilities, county correctional institutions, hospitals, assisted living facilities, and group homes. These inspections are required at state-licensed facilities.

In fiscal year 2020, SFMO performed 594 fee-based and complaint inspections, a decrease from fiscal year 2019 (951 inspections). This decrease was due to the COVID-19 pandemic.

Inspectors are completing inspections in assisted living facilities, nursing homes, and hospitals as restrictions on visitors are loosened. By statute, a person must be certified by the Texas Commission on Fire Protection to conduct fire safety inspections required by state or local law. Most local jurisdictions either don't have a local fire marshal that employs a certified

inspector, or they don't conduct these inspections. In these situations, SFMO inspects the properties.

Common Inspection Violations

- Fire alarms, fire sprinkler systems, and hood suppression systems aren't maintained.
- Portable fire extinguishers aren't inspected as required by fire code.
- Exits are obstructed.
- Combustible storage is kept in unapproved locations.
- Holes in fire or smoke rated walls allow smoke and flame to spread throughout a building.
- Electrical wiring is exposed or not installed to code.
- Lack of required fire alarm or fire sprinkler systems.
- Insufficient inspection records or testing of fire doors and fire or smoke dampers when installed.
- Emergency lighting units and exit signs don't work or aren't inspected each month.

Improvements

- Most violations are corrected within 30 days, allowing facilities to remain licensed.
- SFMO works with the licensing agencies to bring locations into compliance. If a facility doesn't pass a fire inspection, it could lose its license.

Operational Goals

- SFMO will help customers understand violations and the importance of correcting them.
- SFMO will continue to work with locations with significant violations to help them to stay open.



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