



Annual Report on Life Safety Inspections

Fiscal Year 2021



State Fire Marshal's Office Orlando P. Hernandez, State Fire Marshal

Texas Department of Insurance

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December 31, 2021

The Honorable Greg Abbott
The Honorable Dan Patrick
The Honorable Dade Phelan

Dear Governor Abbott, Lieutenant Governor Patrick, and Speaker Phelan:

The Texas Government Code requires the State Fire Marshal's Office (SFMO) to submit an annual report on the State Fire Marshal's inspection findings. Attached is the report for 2021.

The Texas Department of Insurance (TDI) has shared the contents of this report with the agencies mentioned therein. 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 Kenisha Schuster, Associate Commissioner of Government Relations, at 512-676-6958, if you have any questions or need more information about this report.

Respectfully submitted,

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Orlando P. Hernandez

State Fire Marshal

cc: Senate Business and Commerce Committee
Senate Committee on Jurisprudence
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 FY 21, SFMO inspected 3,948 state-owned and state-leased properties, totaling approximately 45 million square feet. The totals include ammonium nitrate facilities.

In FY 21, SFMO also conducted fee-based, fireworks retail site, and complaint inspections for 2,161 buildings totaling approximately 13 million square feet.

SFMO has 15 fire inspectors, with one inspector dedicated to the Capitol Complex.

The closure of state buildings and agencies due to the COVID-19 pandemic limited the number of inspections conducted. 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 aren't maintained to fire code.
- New construction projects and building purchases by state agencies aren't 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 don't recommend using steam kettles as fryers.

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

Agency and State Building Reports

General State Building Inspection Data

State buildings inspected: 3,948

Violations found: 9,526

Violations corrected in FY 21: 3,340

Square footage inspected: approximately 45 million

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.

Texas Department of Criminal Justice (TDCJ)

Initial buildings inspected: 187

Buildings reinspected: 38 Violations found: 1,688

Violations corrected in FY 21: 425

Square footage inspected: approximately 2.5 million

Inspection Violations

- Most of the units' fire alarm systems aren't functioning properly. SFMO has asked for correction timelines but have 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 doesn't appear TDCJ is following this policy.
- Gas pipeline pressure tests aren't performed at most units.

- There are no records of inspection or testing of fire doors, dampers, or standpipe systems where 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 installed battery-operated smoke alarms in employee housing before SFMO left the facility.
- TDCJ and SFMO meet regularly to discuss inspection concerns and corrections.
- TDCJ requests reviews and code requirements before renovations and new construction.

Operational Goals

- Facilities where fire protection systems aren't 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 and rectify violations in a timely manner.
- TDCJ will report all facility fires through appropriate state procedures.

Texas Juvenile Justice Department (TJJD)

Initial buildings inspected: 4 Buildings reinspected: 1

Violations found: 3

Violations corrected in FY 21: 2

Square footage inspected: approximately 16,000

Inspection Violations

- Portable fire extinguishers aren't appropriately maintained and inspected.
- Flammable liquid identification placards have not been installed.
- Power strips are not plugged directly into a wall outlet.

• Buildings lack the required signage identifying the fire department hose connections.

Improvements

- TJJD officials requested reviews of projects and code requirements before renovations and construction.
- TJJD corrects violations in a timely manner to make their facilities safe.

Operational Goals

- TJJD and SFMO will maintain open communication to ensure safety for residents and staff.
- Facilities where fire protection systems aren't 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.
- TJJD will perform more routine fire and life safety inspections to correct and rectify violations in a timely manner.
- TJJD will report all facility fires through appropriate state procedures.

Texas Department of Transportation (TxDOT) Facilities

Initial buildings inspected: 952 Buildings reinspected: 224 Violations found: 1,951

Violations corrected in FY 21: 1,075

Square footage inspected: approximately 3.6 million

Inspection Violations

- Flammable liquid identification placards have not been installed.
- Compressed gas cylinders aren't secured in place.
- Each facility has electrical violations that include unlabeled breaker panels, unused openings without blank covers, and extension cords used as permanent wiring.
- Portable fire extinguishers aren't protected from damages and do not have monthly inspections performed on them.

Improvements

- Fire alarm and sprinkler systems are inspected annually.
- Fewer exit doors are locked.

- Fire extinguishers are maintained at the six- and twelve-year intervals.
- Fire doors and dampers are tested.
- Fire doors are not propped open with door stops.
- Illuminated exit signs and emergency light units function during test mode.
- Staff has access to fire department key access boxes.

Operational Goals

- SFMO will continue to train TxDOT staff across the state to discuss fire and life safety inspections.
- TxDOT will ensure inspection reports are forwarded to the facility personnel where the inspection was performed.
- TxDOT will continue to perform routine fire and life safety inspections to correct violations in a timely manner.
- TxDOT will report all facility fires through appropriate state procedures.

Texas Department of Transportation (TxDOT) Rest Areas and Safety Centers

Initial buildings inspected: 92 Buildings reinspected: 29 Violations found: 76

Violations corrected in FY 21: 50

Square footage inspected: approximately 280,000

Inspection Violations

- Lacked fire department key access boxes.
- Fire alarm systems aren't inspected each year.
- Each facility has electrical violations that include unlabeled breaker panels, unused openings without blank covers, and extension cords used as permanent wiring.
- Portable fire extinguishers are missing.

Improvements

- Fuel-fired equipment is not stored in business occupancies.
- 911 address signs have been installed.

Operational Goals

- SFMO will continue to train TxDOT staff across the state on how to conduct fire and life safety inspections.
- TxDOT will ensure inspection reports are forwarded to the facility personnel where the inspection was performed.
- TxDOT will continue to perform routine fire and life safety inspections to correct violations in a timely manner.
- TxDOT will report all facility fires through appropriate state procedures.

Texas Department of Public Safety (DPS)

Initial buildings inspected: 77 Buildings reinspected: 26 Violations found: 219

Violations corrected in FY 21: 58

Square footage inspected: approximately 575,000

Inspection Violations

- Portable fire extinguishers aren't appropriately mounted, maintained, and inspected.
- 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.
- DPS expressed that they are eager to continue working with SFMO on a more frequent basis to address violations and communicate the corrections that are made.
- DPS, SFMO, and Texas Facilities Commission (TFC) worked to get resolution on the Rosenberg driver license facility.

- DPS and SFMO will establish safe occupant loads at driver license offices.
- DPS will perform more routine fire and life safety inspections to correct violations in a timely manner.
- DPS will report all facility fires through appropriate state procedures.

Texas Parks and Wildlife (TPWD)

Initial buildings inspected: 607 Buildings reinspected: 101 Violations found: 424

Violations corrected in FY 21: 210

Square footage inspected: approximately 1 million

Inspection Violations

- Portable fire extinguishers aren't mounted correctly at some facilities.
- Some parks don't have enough portable fire extinguishers.
- Spliced wiring is present in some mechanical and electrical rooms.
- Electrical outlets, switches, junction boxes, and breaker panels are missing the cover plate.
- Some parks are missing the fire department key access box.

Improvements

- Fire extinguishers are maintained and inspected according to code specifications.
- TPWD officials requested reviews and code requirements before renovations and new construction.
- TPWD is maintaining the 36-inch clearance around breaker panels.
- TPWD is removing extension cords and multiplug adapters that are being used as permanent wiring.

Operational Goals

- TPWD will perform more routine fire and life safety inspections to correct violations in a timely manner.
- TPWD will report all facility fires through appropriate state procedures.

Universities

Initial buildings inspected: 517

Buildings reinspected: 84 Violations found: 1,882

Violations corrected in FY 21: 347

Square footage inspected: approximately 5.8 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/electrical rooms.
- Many locations have student appliances plugged into surge protectors, not wall outlets.
- Too many combustibles are stored in many mechanical/electrical rooms.
- Many fire alarm and sprinkler systems have been found deficient by licensed firms.
- 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.
- Ceiling tiles aren't maintained to ensure proper and timely activation of fire alarm and sprinkler systems.
- Upper floors don't have enough secondary exits.
- Fueling sites lack the required signage for safety.
- Breaker panel circuit labels aren't being maintained.

Improvements

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

- Facilities where fire protection systems aren't maintained or in service will be considered highrisk and inspected more frequently.
- Universities will perform more routine fire and life safety inspections to correct violations in a timely manner.
- Universities will report fires through appropriate state procedures.
- SFMO will work towards a proactive inspection process with universities that have established fire marshal offices.
- SFMO will work with universities to conduct full campus inspections for those that have not been inspected in the past five years.

State-Supported Living Centers

Initial buildings inspected: 88

Buildings reinspected: 4 Violations found: 61

Violations corrected in FY 21: 22

Square footage inspected: approximately 700,000

Inspection Violations

- Appliances such as refrigerators and microwaves are plugged into power strips.
- Ceiling assemblies aren't maintained to ensure proper and timely activation of the fire alarm and sprinkler systems.
- Exit signs don't operate when tested.
- Combustible materials aren't stored in an orderly manner.

Improvements

- Staff corrected several violations during inspection.
- Fire alarm and fire sprinkler systems are maintained and inspected.
- Two campuses installed fire-safe cigarette lighters, replacing disposable lighters and matches. This has reduced the number of reported fires.

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-supported living centers will report fires through appropriate state procedures.
- State-supported living centers and the SFMO will work to decrease the number of false fire alarms at these facilities.

State Hospitals

Initial buildings inspected: 60

Buildings reinspected: 0 Violations found: 93

Violations corrected in FY 21: 0

Square footage inspected: approximately 650,000

Inspection Violations

- Appliances such as refrigerators and microwaves are plugged into power strips.
- Extension cords are used as permanent wiring.
- Storage buildings don't have the required portable fire extinguisher.

Improvements

- The number of violations of items stored in front of breaker panels has decreased.
- The number of door-stops holding open fire doors has decreased.
- The number of damaged ceiling assembly violations has decreased.

Operational Goals

- SFMO will continue to inspect these facilities annually.
- State hospitals will perform more routine fire and life safety inspections to correct violations in a timely manner.
- State hospitals will report fires through appropriate state procedures.
- State hospitals and the SFMO will work to decrease the number of false fire alarms at these facilities.

Texas Facilities Commission (TFC) Owned Properties

Initial buildings inspected: 45

Buildings reinspected: 0 Violations found: 22

Violations corrected in FY 21: 0

Square footage inspected: approximately 750,000

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 improved record keeping for inspections of fire doors, fire alarms, emergency lighting, illuminated exit signs, and fire sprinkler systems.
- TFC kept in constant communication with SFMO on issues that arose with state-owned properties.

• Staff corrected many violations during the inspection.

Operational Goals

- SFMO will continue to work with TFC on inspecting its properties.
- TFC will perform more routine fire and life safety inspections to correct violations in a timely manner.
- TFC will report fires through appropriate state procedures.

Texas State Preservation Board (TSPB) - Capitol Complex and State Cemetery

Initial buildings inspected: 83 Buildings reinspected: 59 Violations found: 63

Violations round.

Violations corrected in FY 21: 57

Square footage inspected: approximately 21 million

Inspection Violations

- Fire doors don't close and latch properly.
- Ceiling tiles aren't maintained in place to ensure proper and timely activation of fire alarm, smoke detectors, and fire sprinklers.
- Emergency light fixtures don't work.
- Rack storage with solid shelving at the Capitol Furnishings Warehouse doesn't meet fire sprinkler requirements and would prevent sprinkler water from extinguishing or controlling a fire in the shelving.
- Several buildings don't have signs identifying fire department water supply connection inlets.
- Lights in stairwells don't work properly.

- SFMO will continue to work closely with the TSPB to ensure fire code compliance.
- SFMO will continue to inspect TSPB facilities annually with monthly re-inspections.
- SFMO will work with the TSPB to ensure it provides a response to inspection reports with violations.

Texas Facility Commission (TFC) - State-Leased Spaces

Initial buildings inspected: 280 Buildings reinspected: 102 Violations found: 2,308

Violations corrected in FY 21: 833

Square footage inspected: approximately 4.55 million

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.
- Fire doors are propped open, not maintained, and inoperable.

Improvements

Some locations corrected violations in the inspection report in a timely manner and requested a reinspection.

Operational Goals

- SFMO will continue to work closely with state-leased facilities to ensure fire code compliance.
- TFC and the lessor need to identify who is responsible for the correction of each violation based on the lease agreement to provide for a timelier correction of noted violations.
- SFMO will identify contacts for each state agency that occupies leased spaces to make sure they are aware of the violations.

Ammonium Nitrate (AN) Storage Facilities

Initial buildings inspected: 30

Buildings reinspected: 2 Violations found: 8

Violations corrected in FY 21: 5

Square footage inspected: approximately 400,000

Inspection Violations

- One building had an obstructed exit.
- Wood storage bin walls show signs of AN soaking into walls.
- Portable fire extinguishers aren't maintained.

Improvements

- Local fire departments were made 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 / Consultation / Firework Retail

Initial buildings inspected: 944 Buildings reinspected: 441 Firework Retail Sites: 776 Violations found: 2,516

Violations corrected in FY 21: 2,516

Square footage inspected: approximately 13 million

In fiscal year 2021, SFMO performed 1,385 fee-based, consultation, and complaint inspections, an increase from fiscal year 2020 (594 inspections). This increase was a result of many locations allowing inspections to be conducted as COVID-19 restrictions were lifted. The number of consultations increased due to SFMO inspectors, who are subject matter experts, being requested to assist local fire marshals with their inspections.

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 flames to spread throughout a building.
- Electrical wiring is exposed or not installed to code specifications.

• 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.

Operational Goals

- SFMO will continue working with the licensing agencies to bring locations into compliance.
- 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.

Texas Historical Commission (THC)

Initial buildings inspected: 115

Buildings reinspected: 40 Violations found: 260

Violations corrected in FY 21: 130

Square footage inspected: approximately 335,000

Inspection Violations

- Three buildings require a new fire alarm system to be installed.
- Extension cords aren't being used properly.
- Portable fire extinguishers aren't maintained or are missing.
- Exposed wiring isn't protected from damage.

Improvements

- THC is working on correcting violations.
- THC communicated regularly with the SFMO and is eager to get the rest of their buildings inspected during FY 22.

- SFMO will continue to work closely with THC on bringing the inspected facilities up to code
 while maintaining the historical preservation of the buildings.
- SFMO will inspect THC buildings on a three-year cycle unless re-inspections are needed on buildings with open violations.

Texas Workforce Commission (TWC) and Texas Workforce Solutions (TWS)

Initial buildings inspected: 54 Buildings reinspected: 20 Violations found: 448

Violations corrected in FY 21: 114

Square footage inspected: approximately 860,000

Inspection Violations

- Fire alarm systems aren't maintained.
- Using electrical appliances not in accordance with the manufacture recommendations.
- Portable fire extinguishers aren't mounted correctly.
- Portable fire extinguishers aren't maintained.
- Exit signs and emergency lighting units failed to operate when tested.

Improvements

- TWC worked diligently to correct violations found in their buildings.
- TWC worked closely with TWS to help facilitate the correction of violations.

Operational Goals

- SFMO will continue to work closely with TWC to ensure their properties are code compliant and will work to bring TWS into compliance.
- SFMO will inspect TWC and TWS buildings on a three-year cycle unless reinspection's are needed on buildings with open violations.

General Land Office (GLO)

Initial buildings inspected: 25

Buildings reinspected: 2 Violations found: 20

Violations corrected in FY 21: 12

Square footage inspected: approximately 1.1 million

Inspection Violations

Improper storage of combustible materials in electrical closets.

Improvements

- GLO will continue correcting many violations.
- GLO communicated regularly with the SFMO and is eager to get their remaining buildings inspected during FY 22.

- SFMO will continue to work closely with GLO to ensure fire code compliance.
- SFMO will inspect GLO buildings on a three-year cycle unless reinspection's are needed on buildings with open violations.



Annual Report of Life Safety Inspections

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