

## Proposed Fire Marshal Function

The Fire Prevention Division (FPD) of the San Marcos Fire Department (SMFD) currently performs the following key fire prevention functions:

- Fire & Life Safety inspection for construction related permits
- Plans Reviews for construction related permits
- Citizen inquiries and questions
- Annual inspections of commercial facilities for licensing requirements
- Complaint based fire and life safety inspections
- Fire investigations
- Consulting to COSM departments on fire and life safety matters

Based on a standard 40-hour work week or 2,080 hours per year, the Fire Marshal and Assistant Fire Marshals have approximately 1,700 hours, per year, for fire prevention functions. The adjusted work hours include time away from fire prevention duties for vacation, sick, holiday, and state-mandated/required continuing education.

In CY 2016, the FPD conducted 2,092 inspections related to construction permits. This number was obtained from *mypermitnow.org*. On the average, including commute, inspection, and report preparation time, each inspection averages 1.5 hours. This average includes inspections that require two inspectors. The time does not include the scheduling and other administrative tasks related to each inspection. The inspections that require two inspectors include, but are not limited to, fire hydrant hydro tests and alarm final acceptance inspections. Based on this figure, a minimum of 1.8 personnel are needed for these inspections.

The FPD also performs plan reviews on relative construction permit applications.

In CY 2016 and 2017, the FPD averaged completing approximately 640 plan reviews. The time to conduct the review, prepare follow-up documentation, and complete the plan review, is approximately 3 hours, on the average. Based on this figure, 1.1 personnel are needed for plan reviews.

In CY 2017, the SMFD responded to 34 structure fires, 39 vehicle fires, and 36 grass fires. On approximately 75% of the structure fires, 25% of the vehicle fires, and 10% of the grass fires, a fire investigator would have been or was required. The average time to complete a structure fire investigation is six hours. Vehicle and grass fires are approximately three hours. Based on these averages and assumptions, a total of 381 hours would be required for fire investigations. The time above does not include follow-up investigation, fire testing, or courtroom testimony related to any of the investigations. At least 0.5 of a personnel is required for fire investigations.

For permit-related plan reviews, inspections, and fire investigations, 3.4 field personnel in the FPD would be required, at a minimum.

The number of annual fire inspections for licensing requirements (i.e., hospitals, day care centers, assisted living facilities, foster homes, et al) is not known due to a lack of readily accessible and/or electronic documentation maintained by previous fire marshal personnel.

Currently, there are approximately 5,600 commercial water meters in the COSM. Based on U.S. Census Bureau data, the FPD estimates there are approximately 4,000 businesses operating in the COSM. No regular compliance inspections are being conducted of these businesses or commercial facilities. The standard for the frequency of these inspections is commonly referenced in NFPA 1730: *Standard on*

*Organization and Deployment of Fire Prevention, Inspection, and Code Enforcement, Plan Review, Investigation, and Public Education Operations (2016 ed.).*

NFPA 1730 in Annex A, Section A3.3.3.1 defines *High Risk Occupancies*, as apartments, hotels, dorms, lodging, assembly, child care, detention, educational, and healthcare. It should be noted that assemblies include places of worship and restaurants. The standard for inspections on these type of facilities is once annually.

NFPA 1730 in Annex A, Section A3.3.3.2 defines *Low Risk Occupancies* as mercantile and businesses, such as attorneys' offices, CPA offices, real estate offices, doctor's offices, dentists, banks, et. al. The standard for inspections on these occupancies is once every three years.

NFPA 1730 in Annex A, Section A3.3.3.3 defines *Moderate Risk Occupancies* as ambulatory care facilities and industrial operations. The standard for inspections on these occupancies is once every two years.

Based on the estimated number of businesses in the COSM and the frequency of inspections outlined in the standards established by NFPA 1730, an additional 1,900 inspections should be required. This equates to 1.7 personnel needed for "annual" inspections.

It is imperative to promptly address complaints of fire and life safety concerns received from citizens and members of the public. For example, in early April 2018, a complaint was received on a business in the COSM. A couple nights prior to the inspection, the business had a small fire in the building which required the response of the SMFD. During the inspection, the following issues were identified:

- Critical electrical issues
- Blocked doors
- Impeded stairways
- A non-working commercial kitchen suppression system
- Storage of tires and flammable liquids and gases in large quantities inside the building
- An attached auto repair garage that was not permitted and was operating in an unsafe manner

The auto repair facility was referred to the permitting office. The restaurant was closed until all fire safety issues were corrected. The remainder of the business was allowed to continue operating and has willingly cooperated with the FPD to correct identified life safety hazards.

During another inspection, it was discovered a business had operated without having their automatic sprinkler system inspected for approximately 15 years.

Complaint and annual inspections are imperative to the life safety of the firefighters of the SMFD and the citizens and visitors of the COSM.

Based on the 3.4 field personnel needed only for plans reviews and construction-related inspections, the FPD has limited capacity for annual licensing inspections, and no capacity to conduct regular annual inspections of all businesses in the COSM. Additionally, no resources are currently available for Community Risk Reduction or fire safety public education through the FPD. Finally, the workload identified above does not include complaint inspections. The workload also does not include e-mail, phone, or in-person communications with citizens or customers on issues not directly related to the functions identified above. Also, the management of scheduling and maintaining the data associated with the above activities is not included in the workload. Many of the activities which the field personnel of the FPD lack capacity to perform, are accomplished by an administrative support person.

Based on the data outlined above, 3 field personnel and an administrative support professional is the minimum necessary personnel to conduct limited duties within the FPD.

To complete the current tasks and annual inspections, 5 field personnel and an administrative professional, for a total of six personnel, would be required. Even with five field personnel, no capacity for complaint-based inspections, fire and public safety education, or community risk reduction initiatives exist.