

2016-17

Fire Marshal's Office - Annual Report

6/30/2017

MILFORD FIRE DEPARTMENT

Anthony W. Fino, Senior Fire Inspector

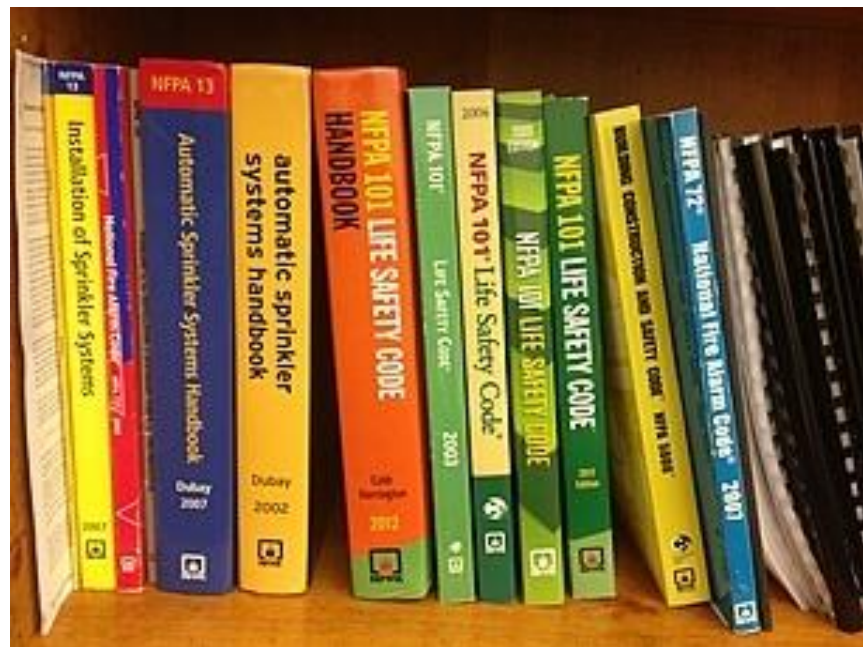


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Milford Fire Marshal's Office

Mission Statement

"The mission of the Milford Fire Marshal's Office is to reduce the economic and human losses associated with fire through public education, fire code enforcement, and fire cause investigation."



Organizational Structure & Functions of the Fire Marshal's Office

The Fire Marshal's Office currently consists of four uniformed members of the Milford Fire Department and one civilian clerk position. The division is led by Assistant Chief/Fire Marshal Bernard Begley. There is one Senior Fire Inspector, Inspector Anthony Fino, and two Fire Inspectors, Inspector Tim Suden and Inspector Marc LaBrecque. There is also an Administrative Clerk, Rose-Marie Colon. A fourth Inspector, David Lazo, is scheduled to begin in July 2017.



The members of the Fire Marshal's Office are responsible for public safety education, fire code enforcement, and fire cause investigation. Public safety education consists of fire safety related programs for school children as young as pre-kindergarten as well as programs for adults, including senior citizens. Fire code enforcement begins with plan review for all new building projects and continues with annual compliance inspections. Fire cause investigation is also conducted by the members of the Fire Marshal's Office for the purpose of reducing future losses associated with fire-related incidents.

Fire Prevention & Public Safety Education

Youth Fire-Setters Intervention Program

One of the longest running public safety programs the Fire Marshal's Office provides is the Milford Youth Fire-Setter Intervention Program. This program has been administered by the Fire Marshal's Office since 1996. We provide services for children and their families who have had exposure to fire-setting behavior. We primarily provide this service for residents of Milford; however, when requested, we also will provide services for those in need in our surrounding communities. We have a small team of registered nurses, therapists, and clinicians who also assist us with this program.

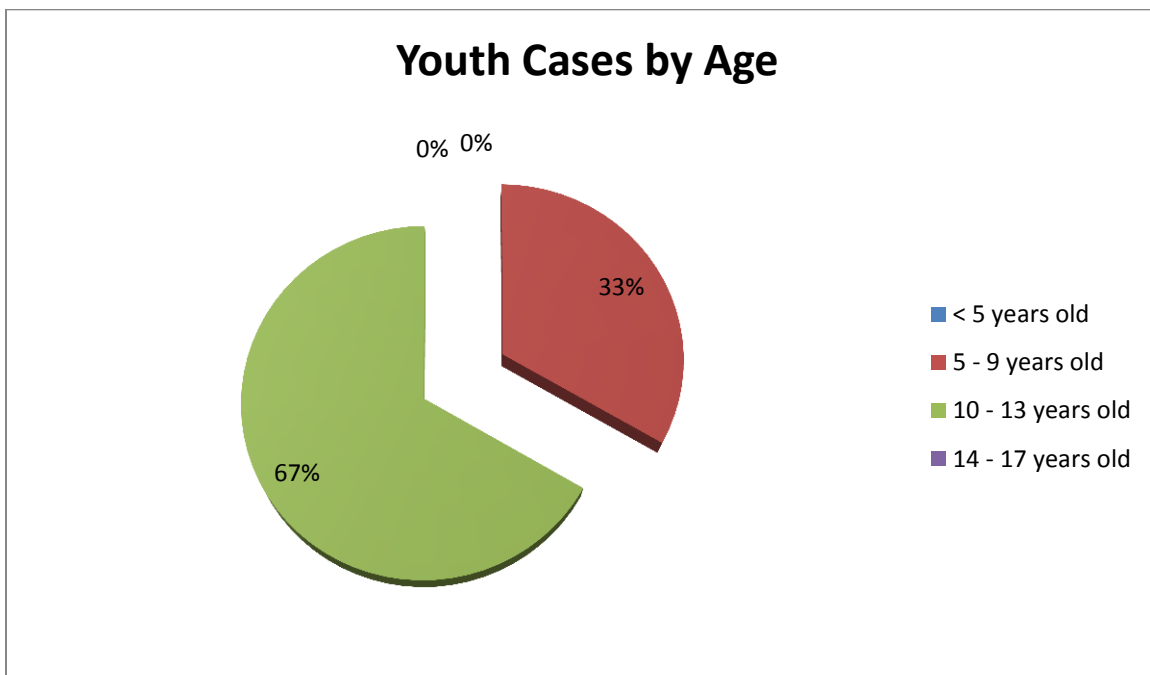


The Program Mission Statement is as follows:

“To identify the fire-setting behavior of children involved in the unsanctioned/unsupervised use of fire, determine the motivation for the fire-setting behavior, and provide prevention education/intervention and referrals if warranted for these children and their families.”

This program provides support and education in fire prevention and safety for the child and his or her family. The program consists of educational sessions with fire safety professionals. Through a comprehensive assessment process, an individualized program will be designed for the child's specific needs. If the child is found to need additional support services, recommendations and referrals to other supporting agencies can be made.

The program provided services for six (6) children in the fiscal year 2016-17. The age breakdown of children involved in our program this year was as follows:

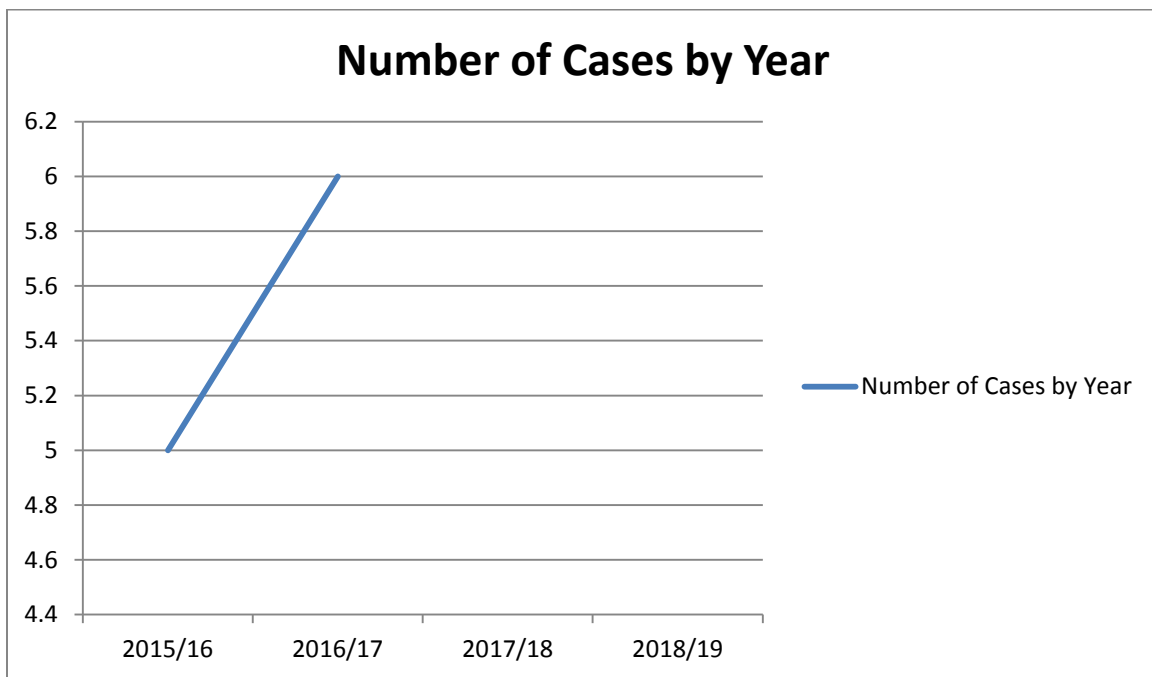


The Program is funded through the department's Fire Intervention account and currently operates on \$2,500.00 annually. These funds are used to purchase educational materials and electronic equipment needed for the program. The funds are also utilized for educational seminars and meetings required for the interventionists working in our program. The non-department team members are required to attend continuing education seminars and workshops related to youth fire-setting.

The Milford Youth Fire-Setters Program was also awarded State Pilot Program status in 2016 by the Office of the State Fire Marshal. Milford was one of only three departments in the state to earn this recognition. With this recognition, we will work with the OSFM and the State Department of Children and Families to develop a standardized curriculum and program development guideline to be used as the model

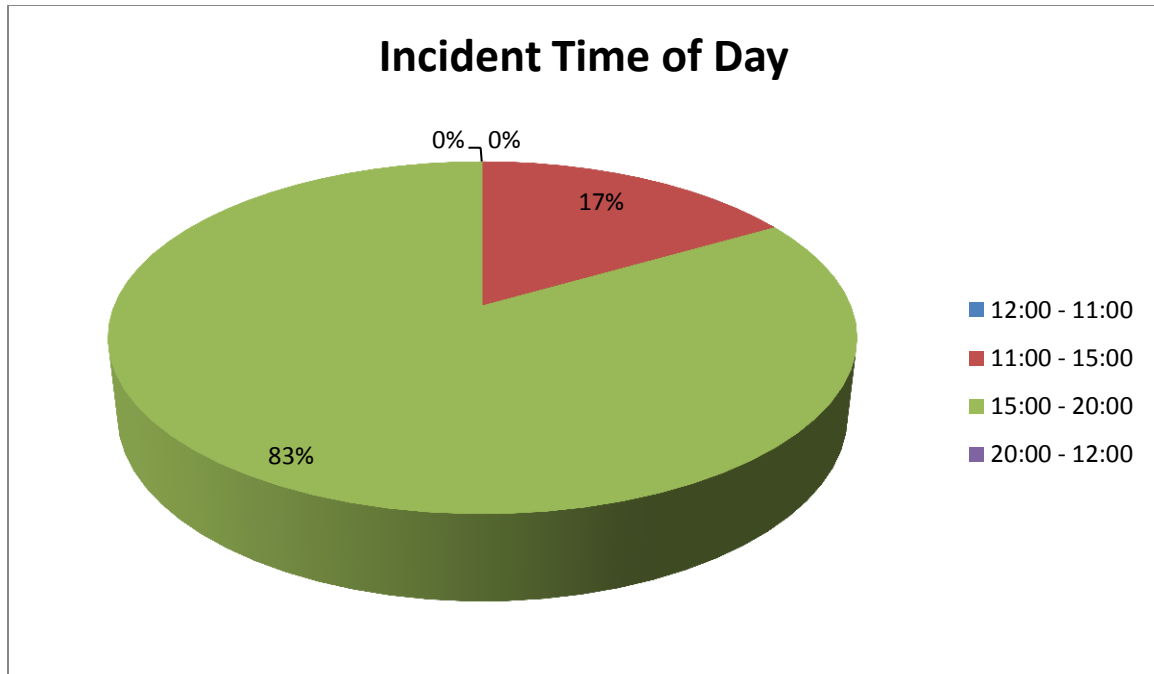
for future programs throughout the state. We are hopeful that additional funding and resources will also become available through the pilot program process.

Youth fire-setting cases are documented in a state-approved database called Y-Fires. All data (excluding all personal information) can be shared with other programs operating in the state. We also assess the data annually to see trends in youth-related fire incidents from year to year. The chart below displays the number youth fire-setting cases that we see annually.



(Annual Youth Fire-Setting Cases)

We also assess the youth fire-setting activity based on the time of day that the incidents occur. We generally find that most incidents occur in the afternoon, between the hours of 3pm and 8pm. These incidents indicate a lack of parental supervision in the typical after-school hours.



(Youth Fire-Setting by Time of Day)

Youth fire-setting continues to be a serious concern for fire prevention. Although the number of cases is generally low, the incidents make up the majority of intentionally set fires. Nationally, over 50% of all reported arson fires are set by juveniles. We see similar percentages in our community. These incidents can lead to large monetary fire losses and even personal injury. Additionally, we see a direct correlation between youth fire-setting behavior and social/emotional disorders. For this reason, we have now partnered with the Milford Health Department and the Youth and Family Services Division to include certified therapists in our program sessions. In the cases where further clinical services are warranted, direct referrals are recommended to the Youth and Family Services Division. We feel that this partnership is critical for the comprehensive support services that most of these children and their families need.

Smoke & Carbon Monoxide Alarm
Installation Program

Our office currently offers a free smoke alarm and carbon monoxide alarm installation program for Milford residents. According to a recent study conducted by the NFPA and NFIRS, from the years 2009 - 2013 there was an average of 940 deaths per year in homes with no working smoke detection. That is 38% of residential fire deaths! *



The installation program ensures that smoke and carbon monoxide alarms are installed properly and in the right location in the home. By doing this, we make sure that our residents are safe and not part of the statistics. Members currently working in the Fire Marshal's Office schedule appointments and meet with homeowners in order to make the proper installation. There is also now a procedure for on-duty engine companies to complete the installations, when necessary.

The Department installed **38** smoke alarms and **32** carbon monoxide alarms in **43** residential homes in fiscal year 2016/17.

* Ahrens, Mary ." Smoke Alarms in US Homes." NFPA Research and Reports. September 2015. Quincy: NFPA.

Since 2014, we have been installing 10-year lithium battery alarms exclusively. The 10-year battery technology provides for worry-free protection and peace of mind. Our Office creates a permanent record of the number and location of each alarm installed and the date of the installation. This provides us the opportunity to provide replacement of the alarms at the end of their life cycle. Another benefit of the 10-year battery alarms is that they do not require semi-annual battery replacement. We no longer have to worry about the possibility of the homeowner forgetting to change their batteries and the smoke alarm failing when needed.



In the fiscal year 2016-17, the department responded to **6** structure fires in single-family residential homes. In these incidents, **4** were found to have working smoke alarms. Of the two residences found without working smoke alarms, one was renovated with an upgraded hard-wired, interconnected smoke alarm system. The other is still in the renovation process.

Portable Fire Extinguisher Training

The Fire Marshal's Office also provides portable fire extinguisher training for various employees in their workplaces. This training is OSHA and Fire Code compliant training for those businesses that are required to provide it. The training utilizes the BullEx® ITS Intelligent Training System and provides for a "hands-on" fire extinguishing experience.



The BullEx® ITS Intelligent Training System is a sophisticated piece of training equipment, and as such, requires routine maintenance and service. This service requires approximately \$800 annually. This cost is for the routine maintenance and can increase if additional service is found to be needed. We also need to purchase liquid propane for the fuel of the BullEx® ITS Intelligent Training System. The system is supplied by typical 20lb propane cylinders. In the fiscal year 2015-16, we spent a total of \$500.00 on maintenance and supplies required for fire extinguisher training. The system failed at the end of the 2016 season and the necessary repairs will cost \$1200.

Unfortunately, due to the budget deficits, the fire extinguisher training has been suspended until additional funding is provided to service the equipment. We hope to begin providing employee training again in July of 2017.

**Fire extinguisher training is required to be conducted outside; therefore, the training is only conducted during the months of May through October.*

Propane Collection Services

The Fire Marshal's Office conducts two propane collection days each year. These collection days are conducted in the Spring and the Fall and are held at the North End Fire Station. The department collects old liquid propane cylinders from Milford residents for free disposal. Old, abandoned propane cylinders are a serious fire and explosion hazard. There are very few places that will accept these cylinders so we offer the service. We partner with Paraco Gas Company who will then collect all the cylinders and provide for their safe recycle/disposal.



In the fiscal year 2016-17, we collected a total of **476** propane cylinders during our two collection days. 265 cylinders were collected on September 24, 2016 and 211 cylinders were collected on May 20, 2017. This continues to be a popular program in town and continues to collect a large number of otherwise hazardous cylinders.

Safe Ash Disposal Campaign

Over the past several winters the office has seen a considerable number of fires in the winter season. As this is common in cold weather regions with supplemental heating appliances, there have been an alarming number of these fires that were found to be directly related to careless ash/coal disposal. Most notably, the Stamford fire tragedy in December of 2011, which claimed the lives of three children and two adults, was determined to be caused by the careless disposal of fireplace ashes. To avoid such losses in Milford, our office began a public safety campaign this year to inform and educate our citizens in the practice of safe ash disposal. We used public safety announcements on both our city webpage and our department Facebook® page. We also employed a metal ash bucket raffle in which we purchased ten metal ash buckets from Lowe's and donated them to Milford Residents by raffle.



We began the public safety campaign on November 18, 2015 and provided the metal ash buckets to the Milford raffle winners on December 4, 2015. The distribution of the ash buckets was recorded by name and address in our Firehouse® records. We saw our first winter season without an ash disposal fire in the winter of 2015-16. We hope to continue this trend into the future. Winter 2016-17 was also free from ash-related fires. To date, we feel that this has been one of our most successful fire prevention programs!

Public Education Presentations

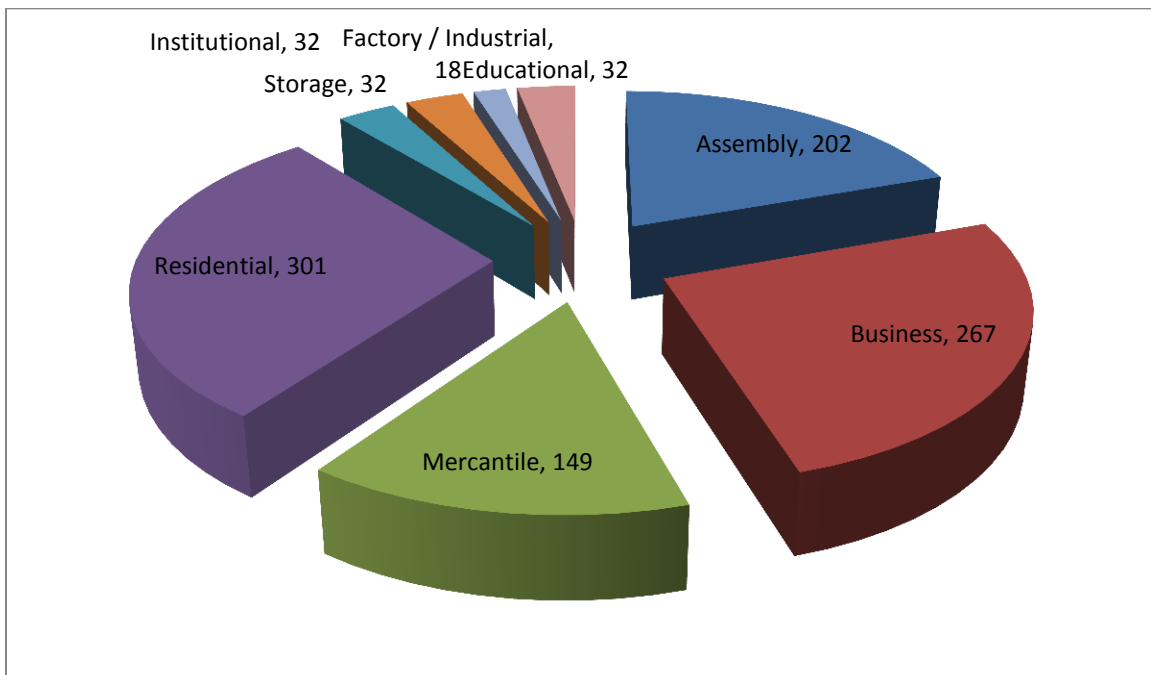
The members of Fire Marshal's Office perform several safety education presentations to the public each year. These presentations range in topics from fire safety to slip and fall prevention for senior citizens. Our target audiences also range from pre-kindergarten children to the elderly. In recent years, we have also expanded our training to the Milford Board of Education staff. We now perform annual training for all school staff from principals to school greeters.



The Fire Marshal's Office performed **28** total hours of safety presentations this year. These presentations also include fire evacuation drill observations in many school and business buildings. This total is typically higher; however, public education was significantly limited after the resignation of the two Fire Inspectors in January 2016. With the addition of three (3) new Fire Inspectors, we hope to increase the public fire education programs.

Fire Code Enforcement

This section is a report based on the compiled data of all Fire Code inspections conducted by the Milford Fire Marshal’s Office in the fiscal year 2016-17. The inspection record data is based on the inspection requirements of Connecticut General Statute 29-305. The Statute includes inspections required for both “new” construction and “existing” buildings. The chart below illustrates the **1033** “existing” building inspections that are required to be completed once per year, based on occupancy type. This number has increased from 984 in the 2015-16 year. This represents an increase in commercial building and development within our community.

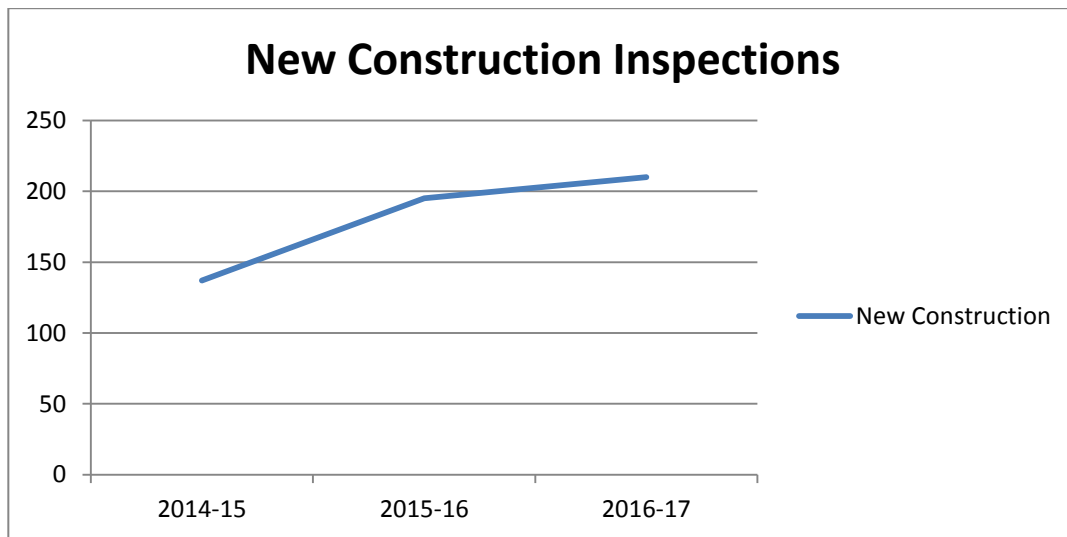


Total Existing Building Inspections by Occupancy Type

CGS 29-305 requires annual inspections for all Assembly, Institutional, and Residential occupancies. Mercantile, Business, and Storage occupancies are required to be inspected on a three (3) year cycle. Factory/Industrial occupancies are required to be inspected on a four (4) year cycle. The records in this report have been adjusted to reflect the inspection cycle prescribed in the Statute. There are **1,985** existing buildings requiring inspection; **1033** of these buildings are required to be inspected each year to

meet the cycled schedule. As a result of newly constructed buildings entering into the system, the total number of existing buildings requiring inspection increased to 1,985. The increase in occupancies requiring inspection continues to cause a further strain on the office. The already understaffed office will continue to show a decline in inspection productivity if an increase in staffing is not realized.

The Connecticut General Statutes also require the local fire marshal (or his/her designees) to conduct inspections for all “new” construction in all buildings, other than single- or two-family homes. This puts an additional strain on the local marshal’s office. The number of new construction inspections is dynamic and can fluctuate annually as a result of a variety of factors. In the fiscal year 2015-16, the Milford Fire Marshal’s Office was required to conduct **195** new construction inspections. This is an increase of 58 inspections over the 137 conducted in 2014-15. Fiscal year 2016-17 produced **210** new construction inspections. Depending on the direction of the economy, we need to prepare for a potential increase in new construction demands.



New construction inspections are given priority over all other inspections; however, there is a much greater liability associated with the existing building inspections. The existing buildings are inherently less safe due to their outdated building construction and the common lack of fire protection systems. The majority of fires we encounter in Milford occur in buildings built prior to 1990. Building and fire codes were relatively weak prior to 1990, and in many communities, the codes were not enforced very effectively. Since 1990, the building and fire codes have been based on a strict set of national codes, and as a result, much safer buildings have been constructed. This statement was supported in 2016-17, where only one fire was reported in a

commercial building. This fire was accidentally caused by workers performing roof repairs.

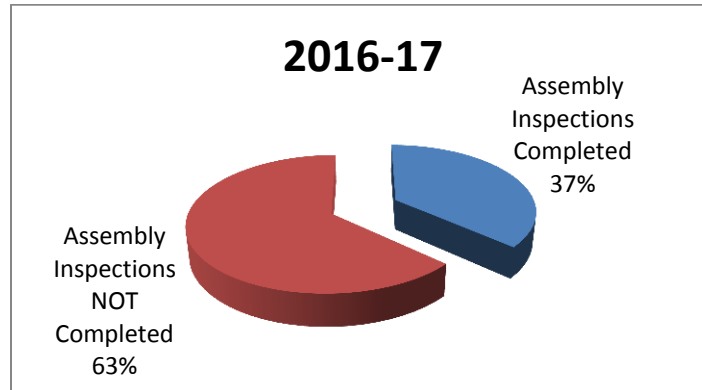
In addition to fires in older buildings, most significant fire damage and civilian casualty occurs in residential building fires. As a result, most fire marshals in Connecticut have turned a priority to the inspection of the multi-family residential properties in their communities. In Milford, there are **301** residential properties that fall under the statutory requirements for annual fire code inspection. Each year, our office makes effort to gain entry to these buildings to conduct the required inspections. Each year, a significant percentage of these properties go uninspected due to a lack of available human resources. In 2016-17, our office was able to inspect only **22** of these (or **7%**). This was a decline in inspection productivity of 2% in the last year.

The need for full statutory compliance has become evident in recent years. There have been several cases across Connecticut that involved fire-related injuries, deaths, and/or property loss in multi-family residences. In each of these cases, the municipalities have been ordered to make financial restitutions based on the lack of required fire safety code inspections. The courts have ruled, in most cases, that a “lack of manpower” does not provide any governmental immunity from compliance with the statute. Courts have interpreted this to be a ministerial duty rather than discretionary. Some cases have even involved charges of “recklessness” against local fire marshals for not conducting the required inspections. Several links to pertinent court cases have been provided at the end of this report. It is my opinion that every effort must be made to conduct these inspections, as required by law. The need for compliance is evident; to protect both the fire department and the city from financial liability. More importantly, we have an ethical obligation to the citizens of Milford to ensure their safety.

Once the newly hired Fire Inspectors have completed their state-mandated certification training, multi-family residential home inspections will be a priority for this Office. Further assessment of this safety concern will be made in upcoming months and years.

The following pages provide the fiscal year 2016-17 inspection records based on the various occupancy types and their inspection frequencies required by statute.

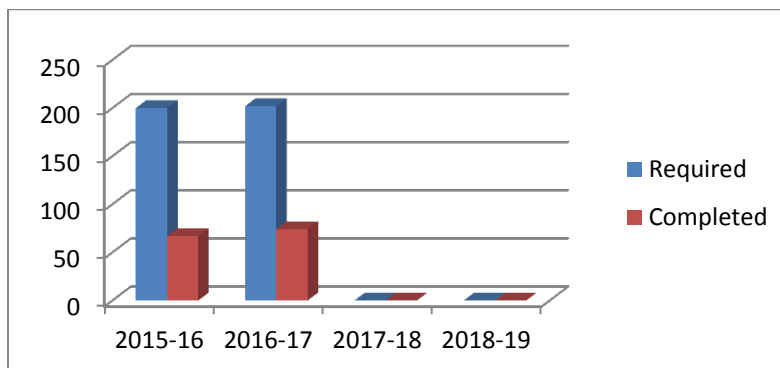
Assembly Occupancy Inspections



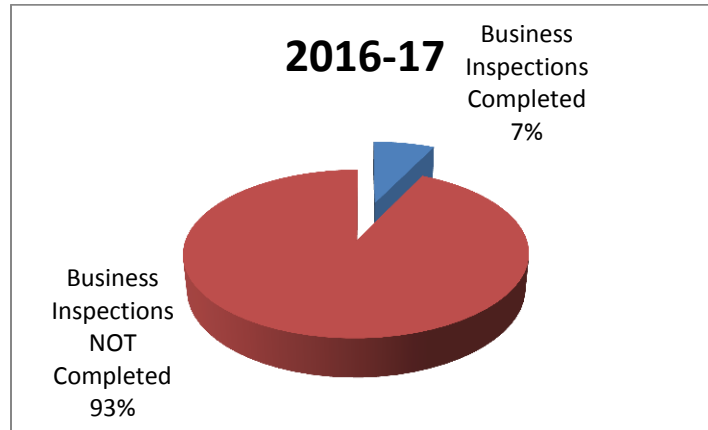
Assembly occupancies include restaurants, bars, clubs, churches, and halls, etc. If alcohol is served at these occupancies, they will require a Liquor License from the State Liquor Commission. There are **202** Assembly occupancies in Milford. Assembly occupancies are required to be inspected annually by Connecticut General Statute 29-305.

In fiscal year 2016-17, our office completed **74** of the **202** required Assembly inspections. This equates to **37%** of the statutory requirement.

The percentage of completed inspections increased 4% in the last year.

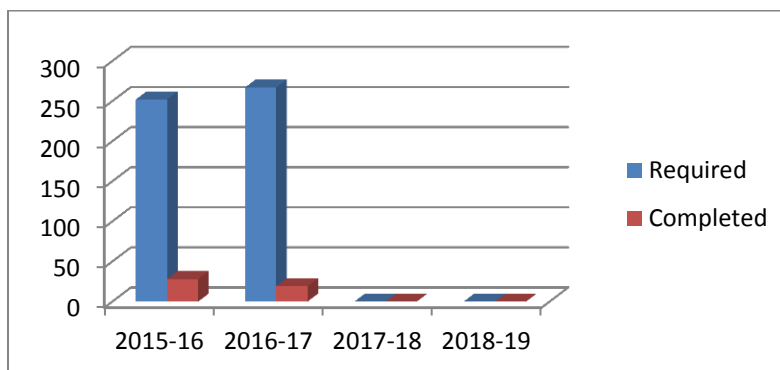


Business Occupancy Inspections

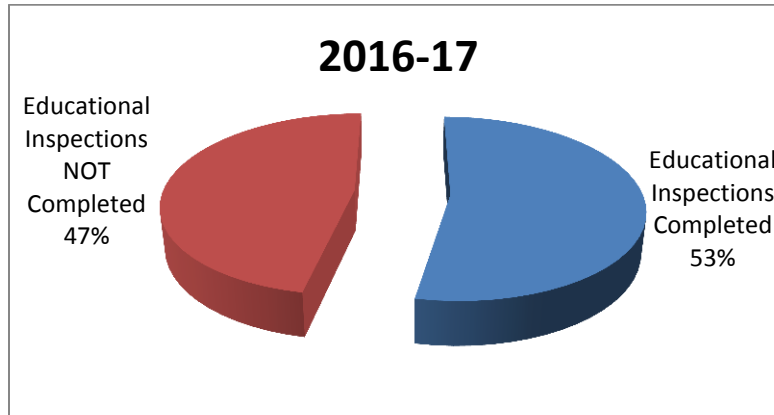


Business occupancies include offices, professional services, banks, clinics, beauty shops, etc. Educational facilities for students above twelfth grade are also Business occupancies, as are restaurants with less than 50 occupants. There are **801** Business occupancies in Milford. Business occupancies are required to be inspected once every three years by Connecticut General Statute 29-305. This equates to **267** Business occupancies requiring inspection each year.

In fiscal year 2016-17, our office completed **19** of the **267** required Business Occupancy inspections. This equates to **7%** of the statutory requirement.



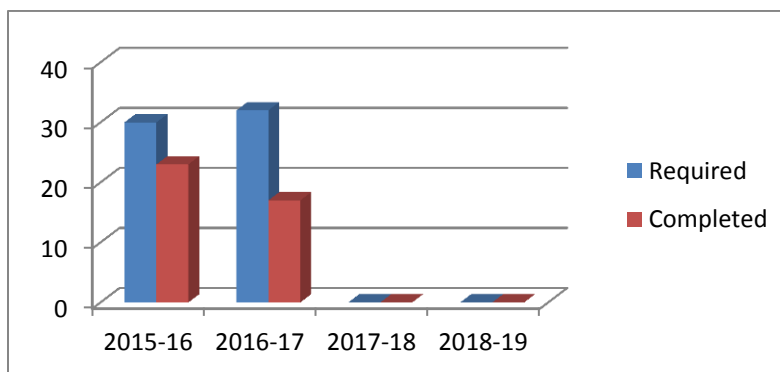
Educational Occupancy Inspections



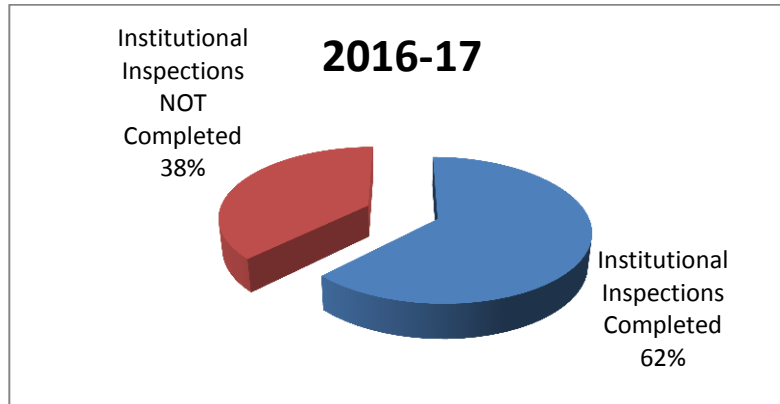
Educational occupancies include schools and buildings providing educational activities for children in kindergarten through the twelfth grade. There are **32** Educational occupancies in Milford. All Educational occupancies are required to be inspected annually by Connecticut General Statute 29-305.

In fiscal year 2016-17, our office completed **17** of the **32** required Educational inspections. This equates to **53%** of the statutory requirement.

The percentage of completed inspections **declined 24%** in the last year.

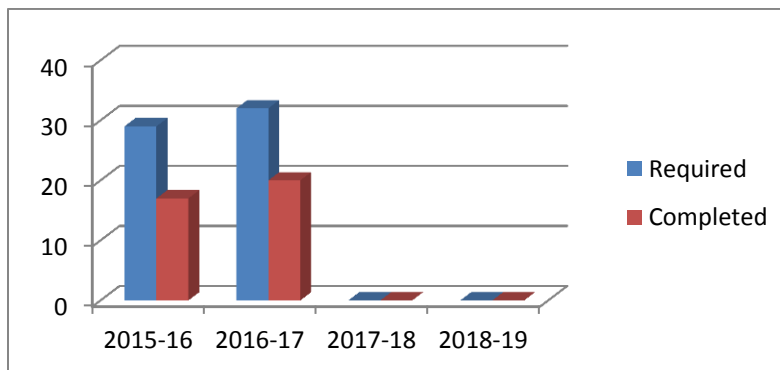


Institutional Occupancy Inspections

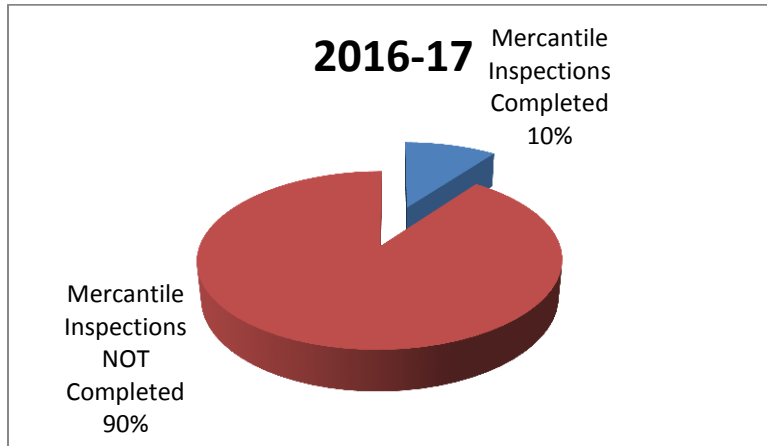


Institutional occupancies include hospitals, nursing homes, detention centers, and day care facilities. There are **32** Institutional occupancies in Milford. Institutional occupancies are required to be inspected annually by Connecticut General Statute 29-305.

In fiscal year 2016-17, our office completed **20** of the **32** required Institutional Occupancy inspections. This equates to **62%** of the statutory requirement.

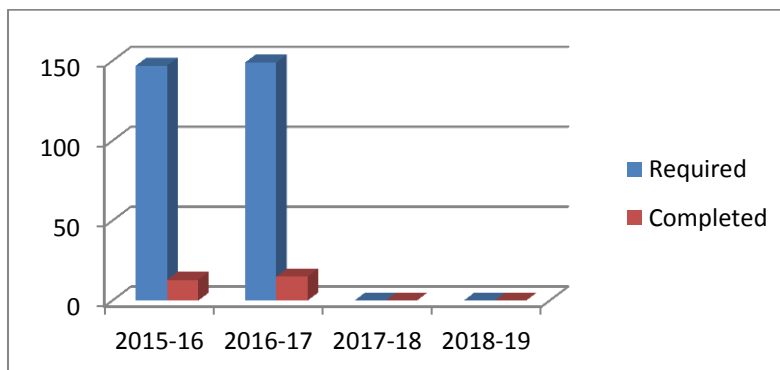


Mercantile Occupancy Inspections

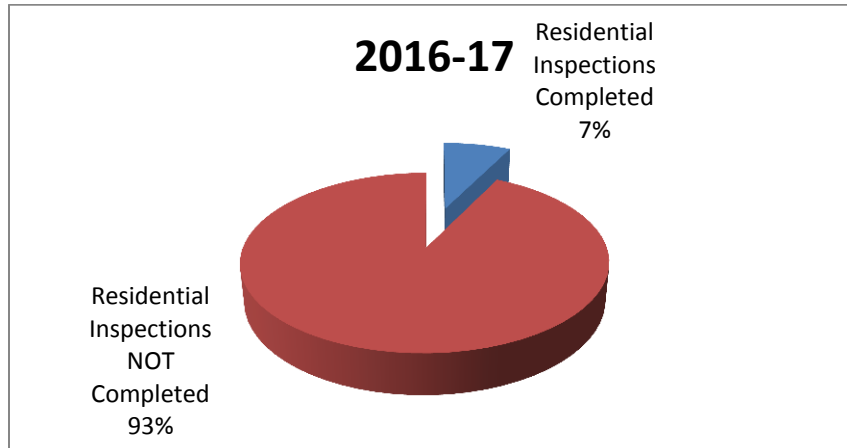


Mercantile occupancies include occupancies whose primary function is the display and sale of goods. There are **447** Mercantile occupancies in Milford. Mercantile occupancies are required to be inspected once every three years by Connecticut General Statute 29-305. This equates to **149** Mercantile occupancies requiring inspection each year.

In fiscal year 2016-17, our office completed **15** of the **149** required Mercantile inspections. This equates to **10%** of the statutory requirement.



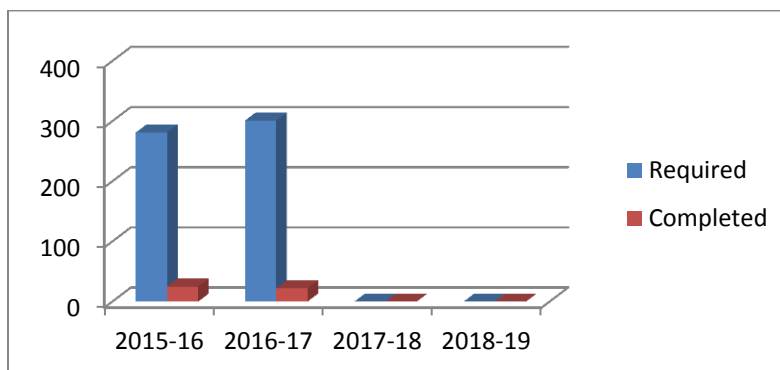
Residential Occupancy Inspections



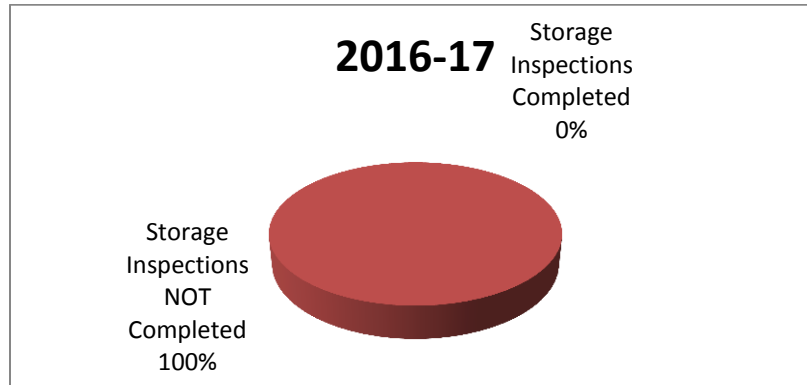
Residential occupancies include apartments, condominiums, hotels & motels, and residential board and care facilities. There are **301** Residential occupancies in Milford. All Residential occupancies are required to be inspected annually by Connecticut General Statute 29-305.

In fiscal year 2016-17, our office completed **22** of the **301** required Residential inspections. This equates to **7%** of the statutory requirement.

The percentage of completed inspections **declined 2%** in the last year.

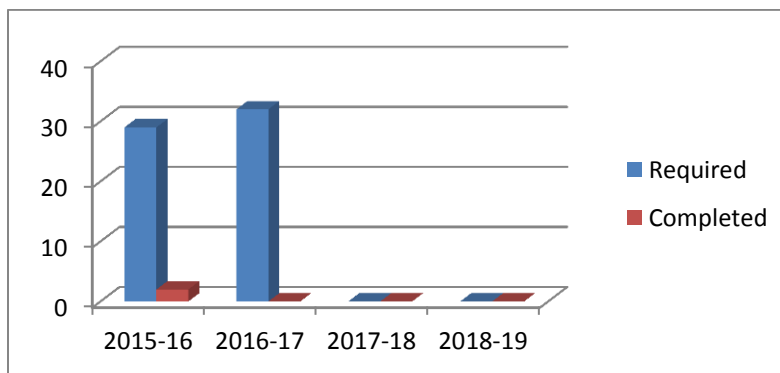


Storage Occupancy Inspections

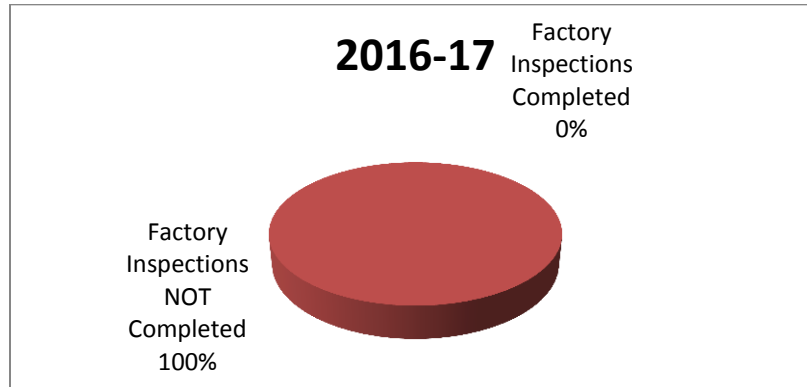


Storage occupancies include occupancies whose primary function is the storage of goods. Also included in Storage occupancies are motor vehicle repair facilities and facilities employing paint spray booths. There are **97** Storage occupancies in Milford. Storage occupancies are required to be inspected once every three years by Connecticut General Statute 29-305. This equates to **32** Storage occupancies requiring inspection each year.

In fiscal year 2016-17, our office completed **0** of the **32** required Storage inspections. This equates to **0%** of the statutory requirement.

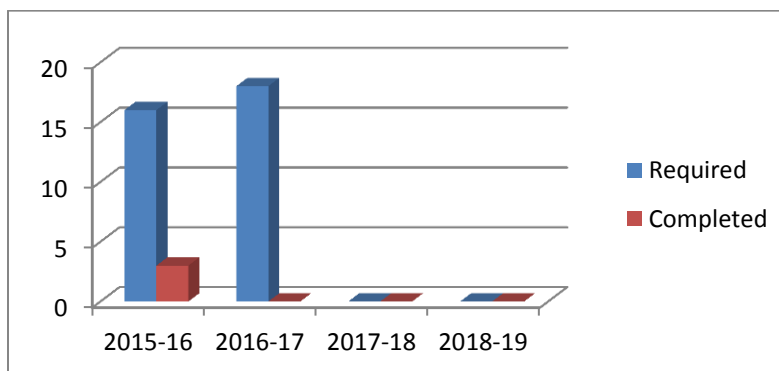


Factory/Industrial Occupancy Inspections

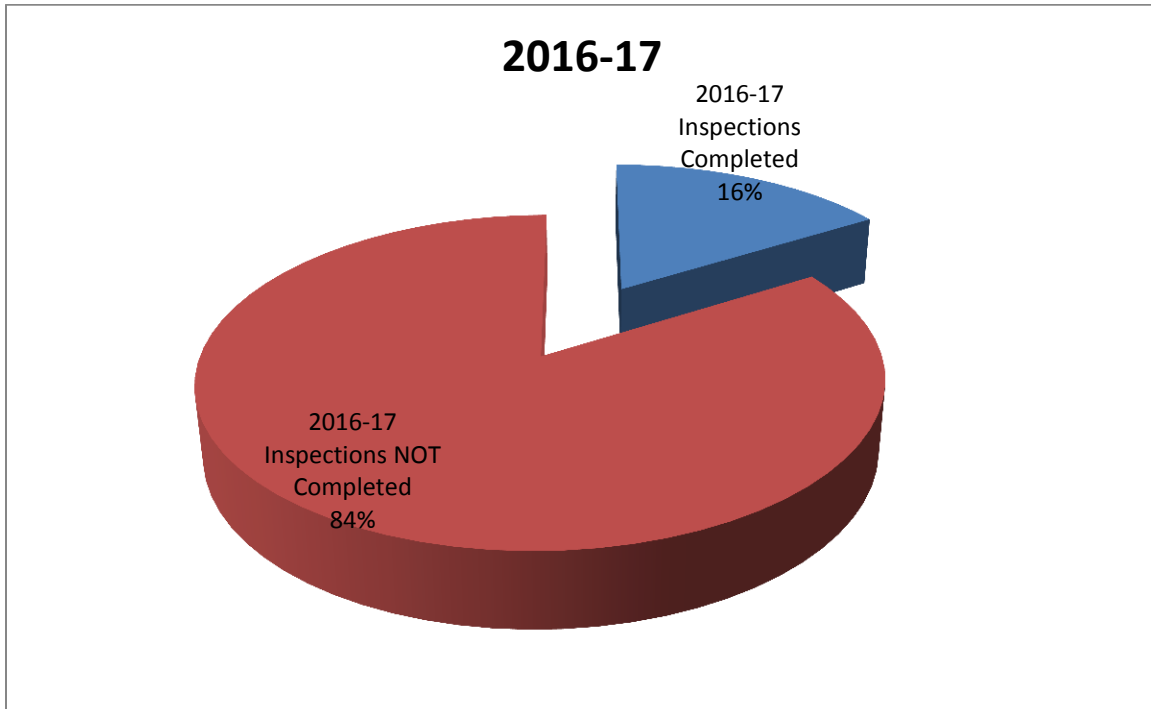


Factory/Industrial occupancies include occupancies whose primary function is assembling, fabricating, and/or manufacturing operations. There are **73** Factory/Industrial occupancies in Milford. Factory/Industrial occupancies are required to be inspected once every four years by Connecticut General Statute 29-305. This equates to **18** Factory/Industrial occupancies requiring inspection each year.

In fiscal year 2016-17, our office completed **0** of the **18** required Factory/Industrial inspections. This equates to **0%** of the statutory requirement.



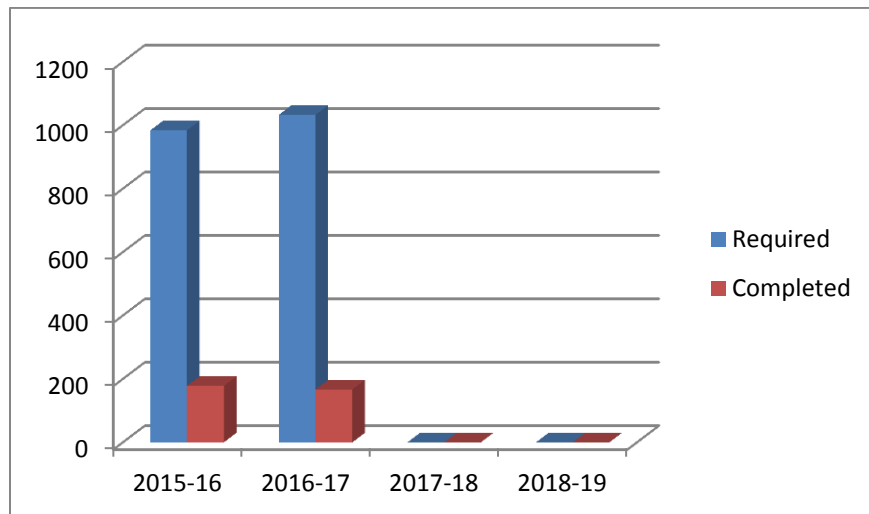
2016-17 Inspections Completed



In the fiscal year 2016-17, there were **1,033** inspections required to be conducted in accordance with Connecticut General Statute 29-305. Our office, consisting of only one Senior Fire Inspector was able to complete **167** of these inspections. This equates to **16%** of the statutory requirement.

As stated, the Fire Marshal's Office previously consisted of three (3) full-time certified Fire Inspectors. Two (2) of the Inspectors resigned in November 2015 and January 2016, respectively. Since **January 2016**, the office has been run with one (1) Inspector and the Fire Marshal. In addition to fire code inspection, each Inspector is required to perform several other public safety functions on a daily basis. These functions include, but are not limited to, fire prevention and safety education and fire origin and cause investigation. Also included in the Inspector's work are new construction inspections in all commercial and multi-family residential properties. The new construction inspection numbers vary annually; however, they continually add a significant demand to each Inspector's workload. Not included in this report, are records of all re-inspections conducted by the Inspectors when initial inspections fail. Commonly, there are violations found upon inspection that require one or more re-inspections before compliance is met.

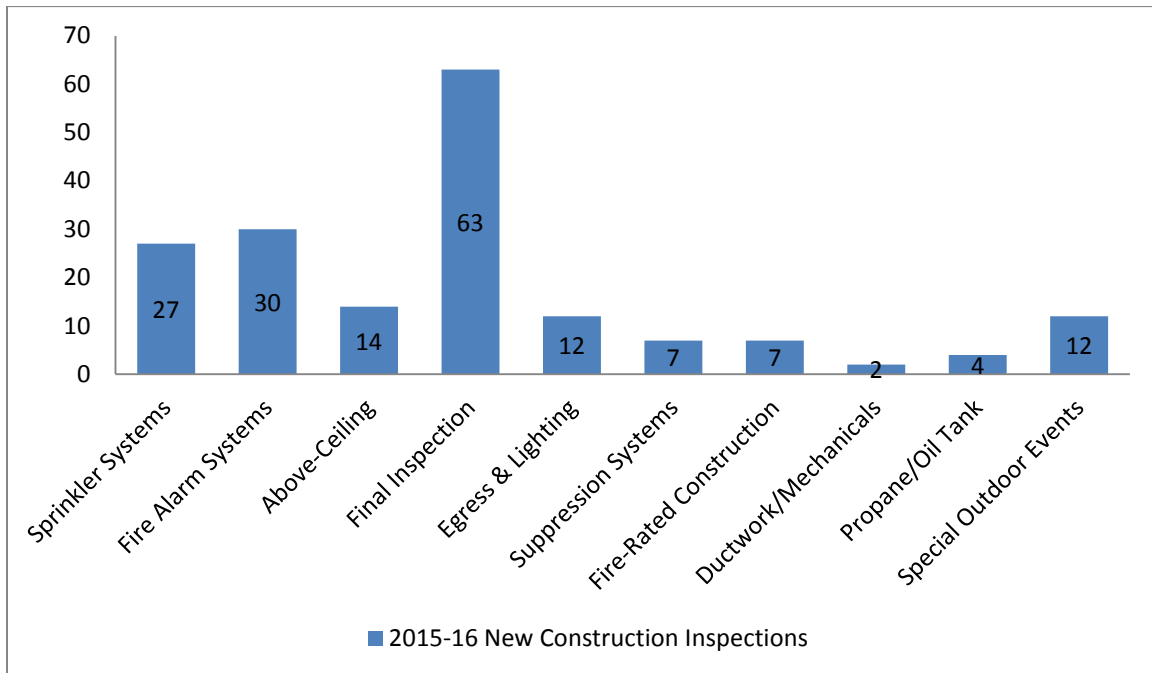
Based on the data compiled and a thorough review of all the demands each Inspector is required to meet, the need for additional Inspectors is evident. Having accurately tabulated the number of inspections required annually, based on occupancy type, and reviewing the current extraneous demands on each Inspector, I have requested additional certified Fire Inspectors for several years. Chief Douglas Edo was able to successfully negotiate additional manpower in the 2016-17 union contract negotiations. Beginning in July 2017, the Fire Marshal's Office will consist of a Deputy Fire Marshal, a Senior Fire Inspector, and two (2) Fire Inspectors. Once all the positions have been filled, we will have four (4) full-time Fire Inspectors to work under the Fire Marshal's direction. The inspection demands and the number of building inspections completed will continue to be evaluated annually. We expect to see a dramatic increase in the productivity of the Office.



TOTAL INSPECTIONS COMPLETED BY YEAR

New Construction Inspections

By Inspection Type



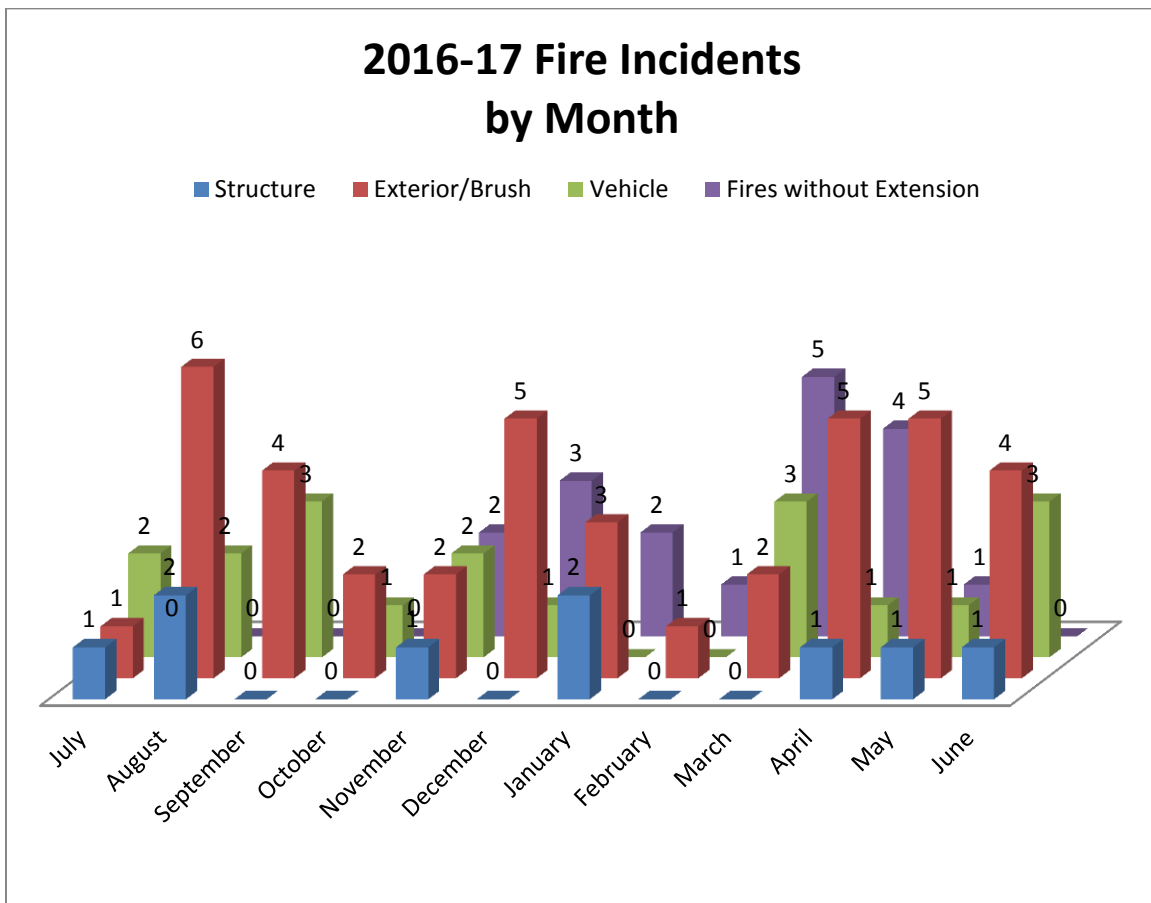
A total of **210** New Construction inspections were conducted by the Fire Marshal's Office in 2016-17, further categorized by inspection type.

❖ A full, detailed compilation of the inspection records involves several hundred pages. The detailed inspection records were omitted from this report but can easily be provided upon request.

Fire Cause Investigation

The members of the Fire Marshal's Office conduct fire investigations to determine the origin and cause of fires and explosions within the jurisdiction of Milford. The main objective of the fire cause investigation is to determine how a fire started in order to prevent fires and fire-related losses in the future. The fire cause data that is developed is used to create codes and regulations as well as public education programs.

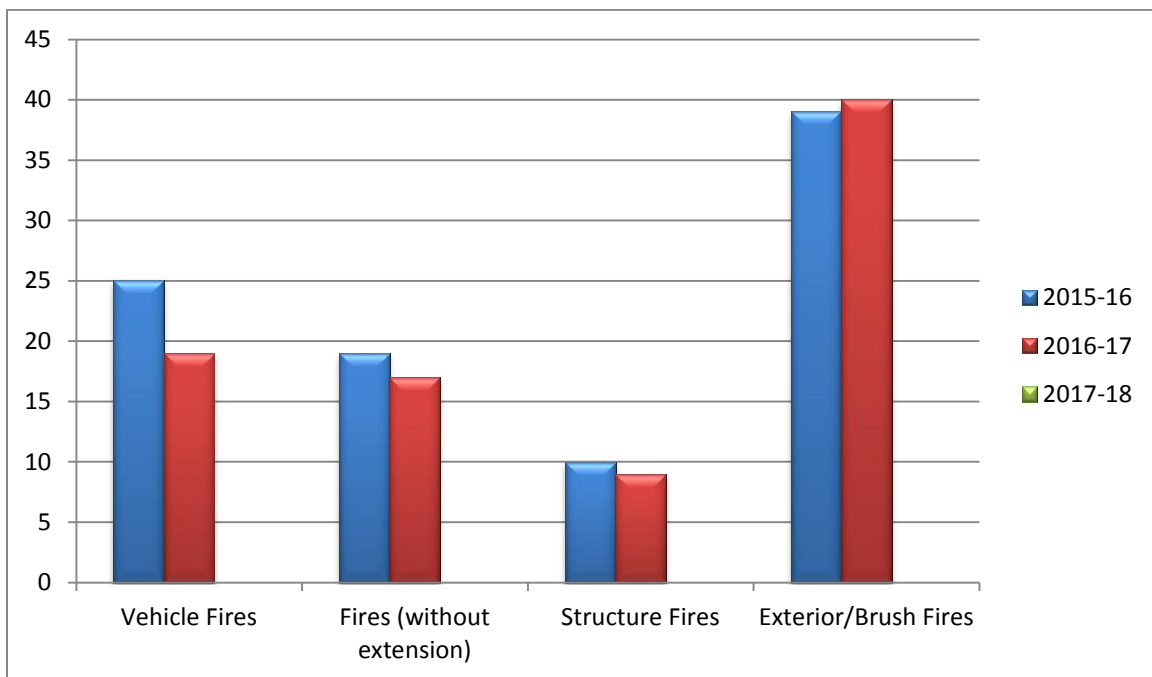
In fiscal year 2016-17, the Milford Fire Department responded to **86** fire-related calls. **This number of fire calls was 8% lower than the previous year.** The chart below illustrates the fire incidents based on fire type. The Fire Marshal's Office investigated **31** of these fires.



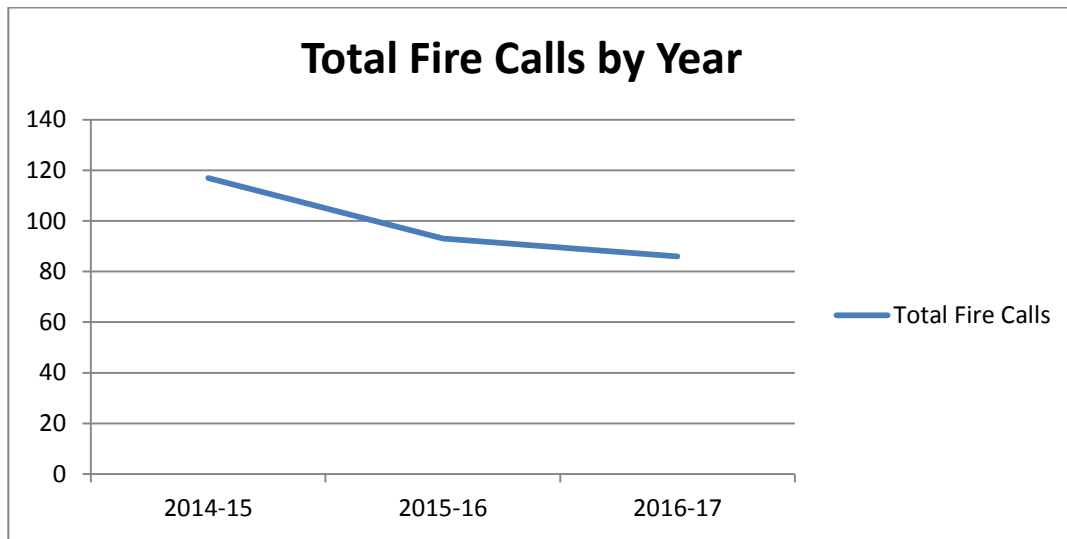
Annual Trending of Fire Incidents

The chart below is a year to year breakdown of fire incidents by type. This is the second year of analysis; therefore, we can begin to chart trends in fire incidents by frequency and type. From 2015-16 to 2016-17, each category of fire type has declined. We saw the largest decline in Vehicle Fires, with 25 incidents in 2015-16 reduced to 17 in 2016-17. The information gathered will be used to develop focused fire prevention programs aimed at target risks.

Total Structure Fires declined from 10 to 9. Unfortunately, we saw an increase in Exterior Fires. This number increased from 39 in 2015-16 to 40 in this past fiscal year. While Exterior Fires result in the lowest amount of dollar loss, they continue to be a strain on our resources.



Annual Trending of Fire Incidents



The total number of fire-related calls has decreased by 26% over the previous three (3) fiscal years. The only fire type to increase over this period was the previously mentioned Exterior Fire increase in the current fiscal year. There are many factors that lead to trending in the number of fire-related calls; however, we hope to continue to reduce fire-related loss through an aggressive public education and code inspection campaign. The addition of new Fire Inspectors should aid in this goal.

2016/17 Fire Incidents

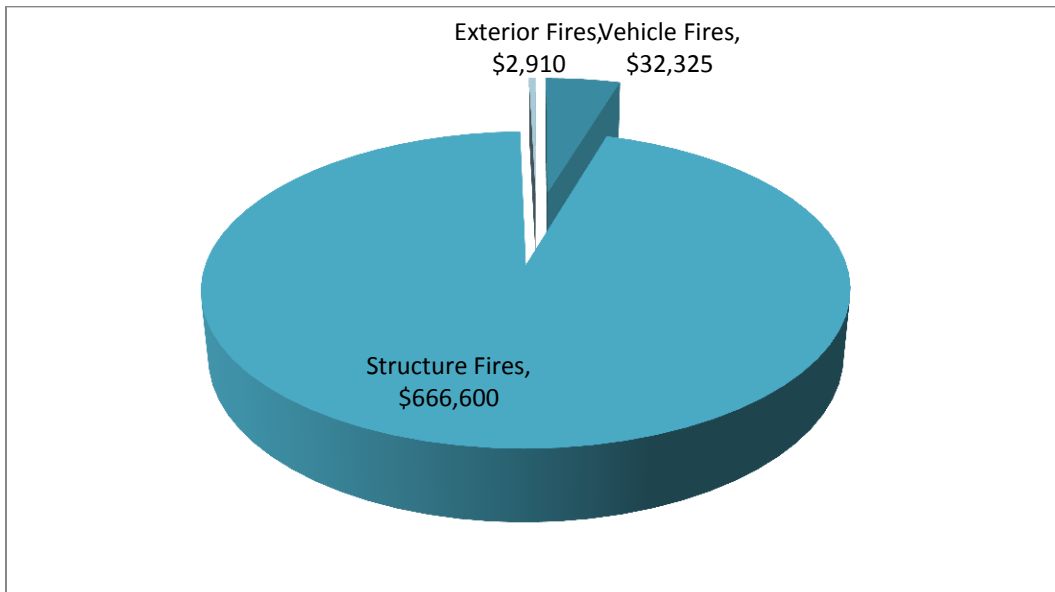
The nine (9) structure fires in the fiscal year 2016-2017 are identified below in **bold** by date and address. Estimated property loss is also provided for each.

Date	Address	Fire Description	Estimated Loss
7/2/16	29 Brooklawn Drive	Structure Fire - Shed	\$18,000
7/18/16	1201 Boston Post Road	Exterior Fire - Mulch fire	\$0
7/20/16	Chatham Avenue	Vehicle Fire	\$1000
7/23/16	1376 Boston Post Road	Vehicle Fire	-
8/9/16	Route 15 N	Exterior Fire - Mulch fire	\$0
8/13/16	498 New Haven Avenue	Exterior Fire - Mulch fire	\$0
8/15/16	15 Intervale Parkway	Exterior Fire - Mulch fire	\$0
8/16/16	45 Bayshore Drive Ext.	Structure Fire - Bedroom	\$75,000
8/19/16	82 Rowe Avenue	Vehicle Fire	\$7,000
8/23/16	82 Tower Street	Exterior Fire - Brush fire	\$500
8/24/16	336 Boston Post Road	Structure Fire - Roof fire	\$35,000
8/25/16	180 Wampus Lane	Exterior Fire - Brush fire	\$0
8/25/16	95 Wolf Harbor Road	Vehicle Fire	\$0
8/26/16	1 Railroad Avenue	Exterior Fire - Mulch fire	\$0
9/2/16	188 Woodmont Road	Vehicle fire	\$0
9/13/16	395 W Rutland Road	Exterior Fire - Mulch fire	\$0
9/13/16	670 Boston Post Road	Exterior Fire - Mulch fire	\$0
9/17/16	85 Viscount Drive	Exterior Fire - Mulch fire	\$0
9/21/16	221 Old Gate Lane	Exterior Fire - Rubbish fire	\$0
9/24/16	I-95N - Exit 39A	Vehicle fire	\$0
9/29/16	1 Parkway Feeder	Vehicle fire	\$0
10/6/16	123 Stiles Street	Exterior Fire - Open Burning	\$0
10/7/16	1 Milford Point Road	Vehicle fire (fatal fire)	\$4,000
10/15/16	1686 Boston Post Road	Exterior Fire - Mulch fire	\$0
11/8/16	I95 North - Exit 36	Vehicle fire	-
11/11/16	Cherry Street	Exterior Fire - Mulch fire	\$0
11/11/16	1041 New Haven Avenue	Exterior Fire - Mulch fire	\$0
11/13/16	281 Burnt Plains Road	Chimney Fire - No Extension	\$100
11/27/16	34 Live Oaks Road	Dryer Fire - No Extension	\$1,500
11/27/16	7 Chapel Street	Structure Fire - Outbuilding	\$30,000
11/28/16	345 Old Gate Lane	Vehicle Fire	\$4,000
12/8/16	88 Noble Avenue	Smoldering laundry - No Extension	\$0
12/13/16	I95 N	Exterior Fire - Brush Fire	\$0
12/13/16	I95 N	Vehicle Fire	\$1100
12/16/16	30 Research Drive	Exterior Fire - Dumpster Fire	\$300
12/20/16	98 East Broadway	Oven Fire - No Extension	\$0
12/22/16	257 Depot Road	Exterior Fire - Dumpster Fire	\$10
12/22/16	270 Rowe Avenue	Exterior Fire - Dumpster Fire	\$0

12/24/16	206 Meadows End Road	Chimney fire - No Extension	\$0
12/24/16	Harborside Drive	Exterior Fire - Brush Fire	\$0
1/1/17	87 Trumbull Avenue	Exterior Fire - Open Burn	\$0
1/3/17	24 Ward Street	Structure Fire - Mailbox	\$2,500
1/5/17	186 Broadway	Exterior Fire - Xmas Lighting	\$500
1/5/17	172 Snow Apple Lane	Cooking Fire - No Extension	\$500
1/8/17	267 Melba Street	Structure Fire	\$280,000
1/19/17	159 Magnolia Road	Exterior Fire - Open Burn	\$0
1/23/17	155 Cherry Street	Arson Fire – No Extension	-
2/5/17	39 Pumpkin Delight Road	Exterior Fire - Rag	\$0
2/26/17	117 Cascade Blvd	Dryer Fire - No extension	\$6,000
3/7/17	11 Depot Road	Appliance - No extension	\$1,000
3/7/17	11 Pascal Drive	Exterior Fire - Mulch	\$0
3/10/17	75 Demaio Drive	Cooking Fire - No extension	
3/14/17	333 Woodmont Road	Vehicle Fire	\$7200
3/15/17	311 Housatonic Drive	Oven Fire - No extension	\$0
3/19/17	76 Founders Way	Vehicle Fire	?
3/21/17	72 Broadway	HVAC Fire - No extension	?
3/21/17	195 Cherry Street	Exterior Fire	\$0
3/23/17	85 Viscount Drive	Cooking Fire - No extension	\$0
3/31/17	430 Boston Post Road	Vehicle Fire	\$5000
4/3/17	33 Cricklewood Road	Cooking Fire - No extension	\$7000
4/6/17	195 Platt Street	Electrical Fire - No extension	\$500
4/12/17	775 Oronoque Road	Vehicle Fire	?
4/14/17	5 Colony Road	Exterior Fire - Mulch	\$0
4/14/17	1201 Boston Post Road	Exterior Fire - Mulch	\$0
4/16/17	1627 Boston Post Road	Exterior Fire - Mulch	\$0
4/17/17	1433 Naugatuck Avenue	Cooking Fire - No extension	\$500
4/18/17	74 Turnpike Square	Exterior Fire - Dumpster	\$0
4/19/17	2 Alpha Street	Exterior Fire - Grill	\$0
4/24/17	343 Old Gate Lane	Cooking Fire - No extension	\$0
4/30/17	423 Housatonic Drive	Structure Fire - Kitchen	\$150,000
5/4/17	1376 Boston Post Road	Exterior Fire – Brush fire	\$0
5/6/17	185 Melba Street	Exterior Fire - Mulch	\$0
5/9/17	121 West Main Street	Cooking Fire – No extension	
5/17/17	365 Boston Post Road	Exterior Fire - Mulch	\$0
5/18/17	3 Crown Street	Structure Fire – Exterior Deck	\$2500
5/19/17	69 Kinlock Terrace	Exterior Fire – Lawnmower	\$200
5/21/17	50 Peck Street	Exterior Fire – Lawnmower	\$1000
5/28/17	15 Sigwin Drive	Vehicle Fire	?
6/3/17	21 Daggett Street	Structure Fire – Incendiary	\$50,000
6/4/17	102 Lansdale Avenue	Vehicle Fire	\$3,025
6/13/17	457 Bridgeport Avenue	Exterior Fire - Mulch	\$0
6/19/17	1501 Boston Post Road	Exterior Fire – Illegal Burn	\$0
6/26/17	84 Saw Mill Road	Exterior Fire – Pond Motor	\$200

6/26/17	195 Cherry Street	Vehicle Fire	?
6/28/17	65 Crestwood Road	Vehicle Fire - Incendiary	\$2000
6/30/17	109 Bryan Hill Road	Exterior Fire – Mailbox	\$200

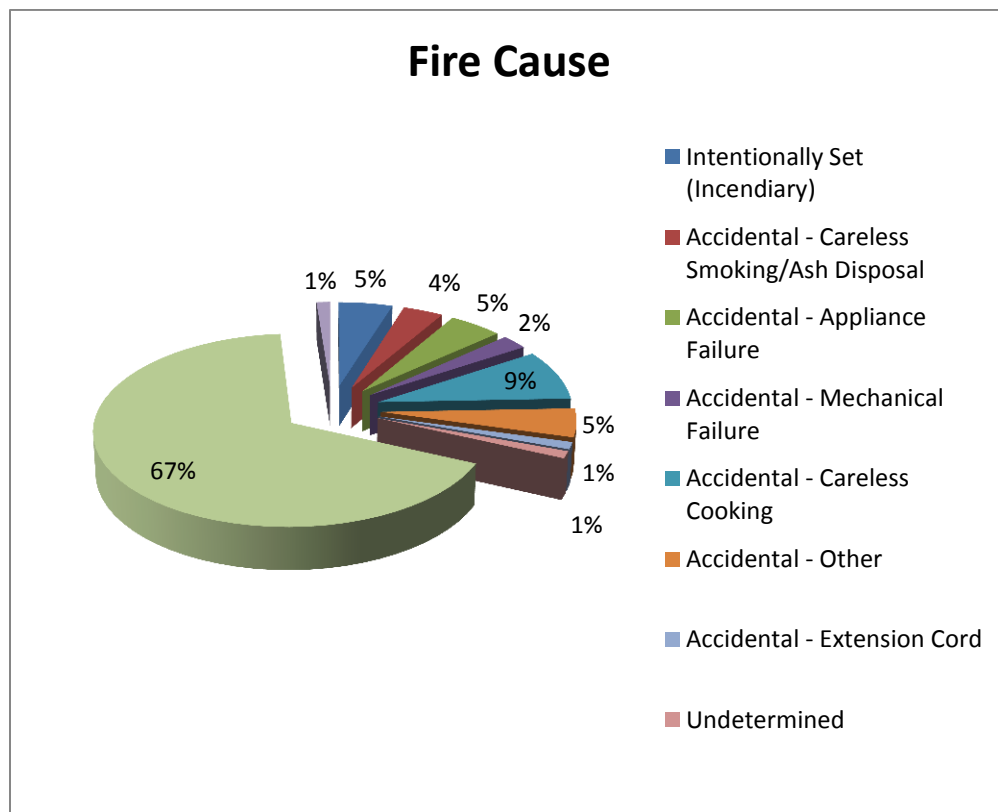
The estimated dollar loss associated with the fire incidents in 2016/17 is valued at **\$701,835**. This value is lower than the actual dollar loss, as many of the incidents were not analyzed for dollar loss, or no value was provided in the reporting. Vehicle Fires continue to be of fire types with inadequate dollar loss documentation. Through better reporting, we could hope to more accurately calculate the estimated dollar loss associated with fire each year.



Dollar Loss by Fire Type

Fire Cause Determinations

The fire cause breakdown in 2016-17 is indicated on the pie chart below. Only fires investigated by a Certified Fire Investigator are given an official fire cause. Fires that were not investigated are categorized as such, and totaled 55 incidents. Most of these incidents are Vehicle or Exterior Fires. We are hopeful that with the future increase in the number of certified fire investigators, a higher percentage of fires can be officially investigated.

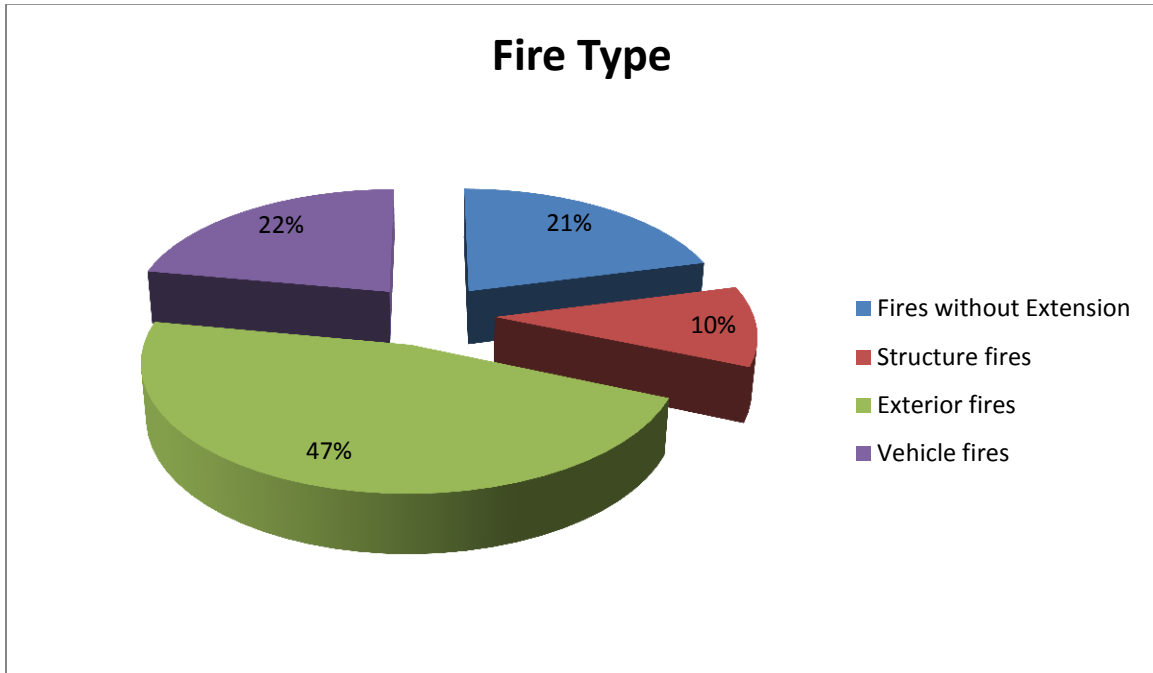


Incendiary fires accounted for four (4) of the fires this year. One of these incidents was determined to have been caused by three juveniles. In the other cases, no perpetrators have yet to be identified. Ten (10) fires were determined to have been caused by careless cooking practices; one of which lead to structure involvement. Four (4) fires were caused by other forms of human error. In addition, two (2) structure fires were determined to have been caused by careless disposal of smoking materials. The ten total fires resulting from careless cooking operations was less than the twelve

recorded in 2015-16; however careless cooking operations continued to be a leading cause of fire in residential buildings. Eight out of the nine structure fires that occurred in the 2016-17 fiscal year occurred in residential occupancies. We continue to see approximately 90% of all Structure Fires occurring in residential occupancies.

Fire Incidents by Type

The fire incidents in 2016-17 are indicated by fire type on the pie chart below:



The analysis shows that **69%** (59 of 86) of all fires in the city of Milford were either vehicle fires or exterior brush-type fires. Exterior Fires are almost always caused by human error or intention. Careless practices with outdoor cooking equipment and careless disposal of hot ashes are common examples of Exterior Fire causation. Public education is required to help reduce the number of fire incidents in this area.

Vehicle Fires also continue to be a common area of fire-related incidents. While some of these fires are intentionally set, most are simply a result of mechanical/electrical failures.

In the Fiscal Year 2016-2017, the Department responded to **9 Structure Fires**. For the purposes of this report, a Structure Fire is defined as a fire event in which a structure and/or its contents are damaged by fire. A fire originating on the exterior of a building and spreading to involve the structure would be included in this definition. Fires occurring within a structure, but resulting in no damage to the structure or its contents would not be included. Chimney fires with no extension or damage outside of

the flue assembly and stovetop fires that are confined to the cooking vessel are examples of fires that are not defined as Structure Fires.

Of the aforementioned 9 Structure Fires, seven (7) were found to be Accidental, one (1) was determined to be Incendiary, and one (1) was found to be Undetermined. There were also several exterior fires at 155 Cherry Street that were determined to be Incendiary in nature. These fires did not cause damage to any structures resulting in their being categorized separately. The structure fire at 423 Housatonic Drive was the result of careless cooking operations in a single-family home. There was one (1) civilian fatality this year in a vehicle fire that occurred at 1 Milford Point Road. The structure fire at 21 Daggett Street was caused by youth fire-setting, resulting in the arrest of three (3) juveniles by the Milford Police Department.

Based on the data analyzed, we can make several distinct conclusions. The first is the probability of fire by type. Almost half (47%) of all reported fires in Milford are "Exterior Fires". These are fires that include outside refuse containers, such as dumpsters and trash cans, and natural vegetation fires, including grass, leaves, and mulch. Motor vehicle fires make up 22% of the total fire incidents. Fires that occur in or around buildings and which spread outside of the first fuel ignited make up the smallest percentage at 10%. All but one of these building fires occurred in residential homes constructed of Type V Wood Frame construction. In the year 2016/17, we responded to one (1) fire (with structure involvement) in a commercial building. This was a roofing fire at 336 Boston Post Road, accidentally ignited by workers during a re-roofing construction project. Fires in commercial buildings continue to represent the lowest number of fire-related calls. We should continue to see commercial building fires declining in the future. With the increase in the number of fully-sprinklered buildings, we should also continue to see a dramatic decline in dollar loss related to fire in these buildings.

Through a continued diligence to building and fire code enforcement in both new construction (design phase) and in existing building inspections, we should recognize substantiated reductions in overall fire loss each year. In addition, our fire origin and cause determinations should be used to develop public education programs directed at the most common fire causes.

Summary & Analysis

The members of the Fire Marshal's Office are responsible for the following duties: fire code enforcement, fire prevention education, and fire origin and cause investigation. In accordance with our mission, we strive to develop the best possible strategies to accomplish our primary goal of reducing fire-related losses. Unfortunately, in recent years, we have continually fallen short of our established goals.

Through a detailed analysis of the office and its activities in 2015-16, a list of organizational weaknesses were identified. The weaknesses were as follows:

- ❖ Lack of adequate manpower
- ❖ Lack of consistency in personnel
- ❖ Job description limitations
- ❖ No generation of revenue
- ❖ No career path for employees

The staffing in 2015-16 consisted of one (1) Fire Marshal, one (1) Senior Fire Inspector, and two (2) Fire Inspectors. Chief Edo was able to address this concern through the addition of a fourth Fire Inspector in the Office. The 2017-18 staffing will be (1) Fire Marshal, (1) Deputy Fire Marshal, (1) Senior Fire Inspector, and two (2) Fire Inspectors. This is the first increase in office staffing since 1990.

For several years, the office suffered from members either retiring or resigning from the office. Some members also requested transfer back to positions in operations. This led to a crippling lack of consistency in the office. Chief Edo was able to address this concern with a new promotional process. The new promotional process consists of a resume submission and oral examination. Members chosen for the promotion must now commit to a minimum of five (5) years of service as an Inspector. We feel that this new process will result in long-term employment consistency and more experienced Inspectors.

With the addition of the Deputy Fire Marshal position, the current job descriptions can now be expanded to include more critical job duties. Once fully trained and certified, all Inspectors can now perform all the functions required within the scope of their training. No restrictions based on union contractual obligations should hinder job performance. The amended empowerment for each member to be able to perform a

wider range of duties will result in the accomplishment of more of our organizational goals.

Currently, the Fire Marshal's Office does not charge fees for any of our services. We have proposed a fee schedule implementation plan each year, since 2012. We have documented the potential for an annual fee generation of approximately \$60,000 to \$80,000. These fees would be collected for services that we are already currently providing. The amount of revenue would increase as a result of any additional services that we could provide through the addition of Fire Inspectors. The revenue may also be used to cover any expenses required to implement any of the other strategic goals. The fire marshal fee schedule plan has been implemented in all surrounding cities and towns to fund their respective needs for additional manpower and pay grade increases; we need to do the same. This will be a primary goal for the upcoming year.

Finally, the Milford Fire Marshal's Office formerly consisted of three (3) union positions. The Fire Marshal is a non-union position, and by contract, is not open to application to any member of the Fire Marshal's Office. The top step in the office was Senior Fire Inspector. Most department members saw the job of Fire Inspector as a "dead-end" career path. Chief Edo addressed this weakness with the negotiated addition of the Deputy Fire Marshal position. This position was created as a step above the Senior Fire Inspector and now provides the office with a "career ladder" that will not only encourage talented and educated members to apply for the positions, but also to ensure the department will always have knowledgeable and experienced personnel in the positions.

Having re-examined the five (5) organizational weaknesses identified in the 2015-16 Annual Report, it is clear that 4 of the 5 weaknesses have been substantially corrected. The exact measurement of how beneficial these changes will be will require future documentation; however, we are extremely excited with the support we've received from Chief Edo, Fire Marshal Begley, and the Board of Fire Commissioners. We fully expect to be able to develop this office into one of the best in the State and look forward to doing so!

Respectfully submitted,

Anthony W. Fino

Deputy Fire Marshal

Court Case Links

Juan Pinos v. Mystic Fire District (2009)

<http://caselaw.findlaw.com/ct-superior-court/1565174.html>

Smart v. Corbitt (2011)

<http://judicialview.com/state-cases/connecticut/torts/smart-v-corbitt/44/24830>

Rinh Thach v. City of Bridgeport et al., Docket No. CV07-5009210
(2012)

<http://www.ctpost.com/local/article/Bridgeport-to-settle-fatal-fire-lawsuit-4240060.php>