



UNITED STATES BOMB DATA CENTER (USBDC) ARSON INCIDENT REPORT

2017

The Annual Arson Incident Report (AIR) reviews arson-related incidents from data reported to the United States Bomb Data Center (USBDC) through the Bomb Arson Tracking System (BATS).

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EXECUTIVE SUMMARY

OPERATING HIGHLIGHTS

The 2017 *Arson Incident Report (AIR)* is an informational product prepared by the United States Bomb Data Center (USBDC), using incident data reported in the Bomb Arson Tracking System (BATS) by its nearly 2,600 interagency partners and 12,845 registered users. This report examines the total number of fire-related incidents reported in BATS for calendar year 2017 and includes *Incendiary (Arson)*, *Undetermined*, *Accidental* and *Natural* fire-related incidents. It is important to note that BATS is a real-time dynamic incident management system that is strictly user dependent; therefore, it is possible that the data represented in this report may differ slightly from previously reported data due to updates or changes made by the owner of individual records. The reader should also be aware that when compared to the data reflected in the Uniform Crime Report and/or National Fire Incident Reporting System, the number of incidents reflected in BATS captures approximately 20 percent of the annual incendiary (arson) fires reported. Due to this limited dataset, the USBDC cautions the use of this report for analytical purposes.

STRATEGIC HIGHLIGHTS

From January 1, 2017, through December 31, 2017, BATS captured a total of 22,364 *fire-related incidents*. Of these, there were 6,916 incidents reported as “Incendiary or Arson,” which accounted for 31 percent of all the fires reported. The total amount of damages for all fire types was estimated at more than \$1.4 billion, with 1,208 injuries and 603 fatalities associated with the 22,364 reported fires. “Available Combustibles” was identified as the most widely utilized incendiary fire subtype, while “Residential” was identified as the most targeted property type.

LOOKING AHEAD

Throughout 2017, the USBDC continued to build on previous efforts of expanding operational support to all of our interagency partners and members of the BATS user community. The BATS Section (BATSS) has maintained its focus on the BATS program and related system enhancements, while the Arson and Explosives Information and Analysis Section (AEIAS) has focused on arson and explosives analytical products as well as explosives identification, tracing and theft/loss reporting. AEIAS is also responsible for developing and producing intelligence products such as this annual report as well as a variety of other standardized, automated and on-demand reports that serve to inform the BATS user community and increase regional and national situational awareness concerning explosives and arson related incidents. This realignment within the USBDC, along with enhancements of BATS 8.1 and mobile BATS (mBATS2.1), will continue to establish the USBDC as a center of excellence for arson and explosives related reporting within the United States.

James M. Watson
Director, USBDC

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FIRE TYPES – 2017

From January 1, 2017, through December 31, 2017, BATS captured a total of 22,364* fire-related incidents. Of those 22,364 fires, 6,916 were listed in BATS as “Incendiary or Arson,” along with 7,031 listed as “Accidental,” 1,410 listed as “Under Investigation” and 117 as “Natural.” There were also 6,890 fires listed as “Undetermined,” which included the final determination/ classification of the fire investigation, along with fires pending further investigative activities and/ or laboratory examination.

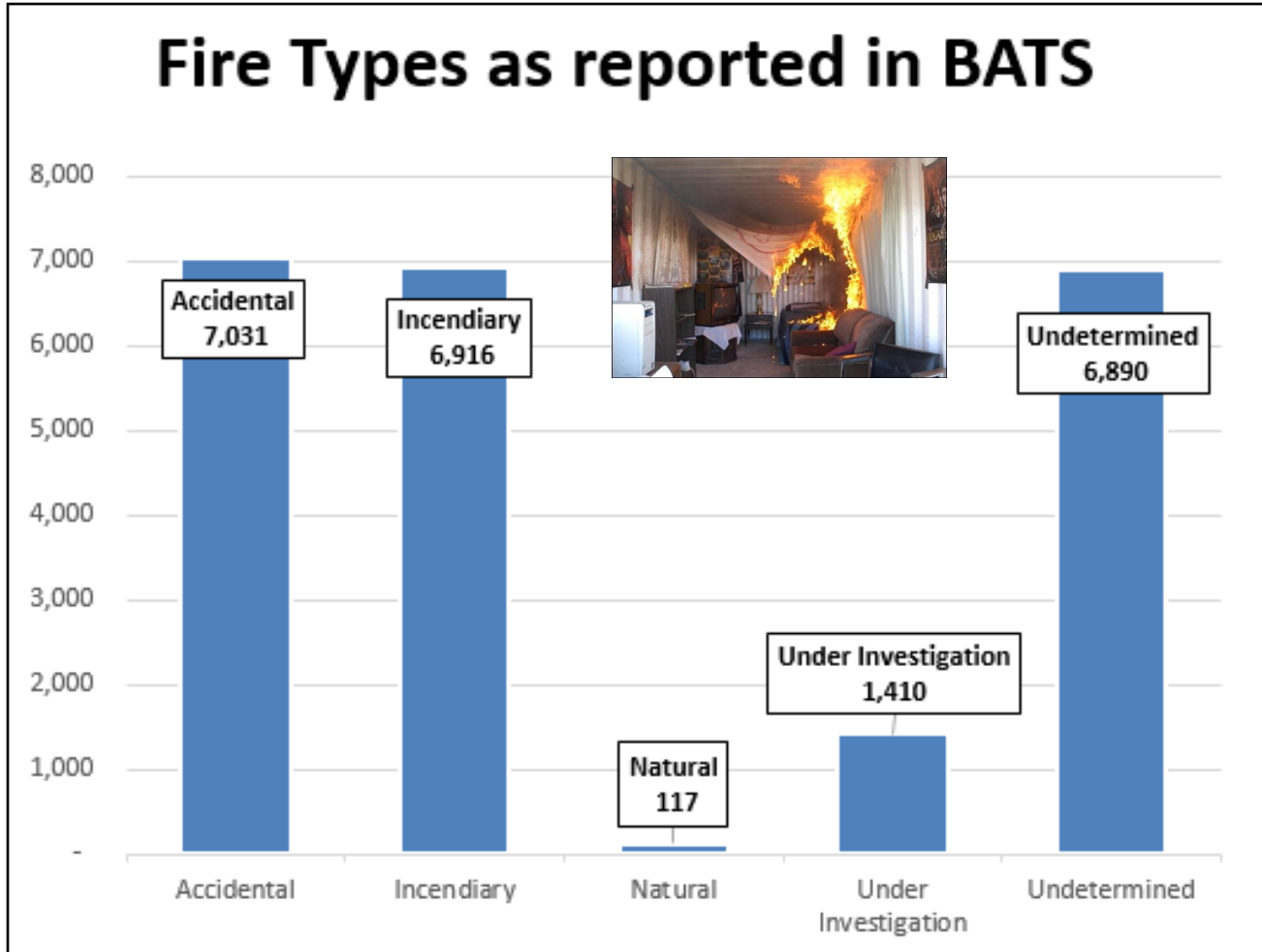


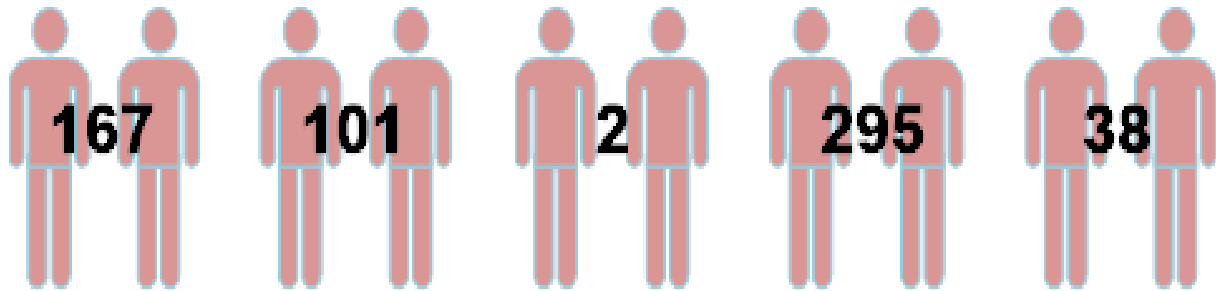
Figure 1. Fire Incident Types



* The number of incidents listed above only accounts for the number of fire/arson incidents reported in BATS, and not the total number of fire/arson related incidents reported in the United States during calendar year 2017.

FIRE FATALITIES – 2017

603 Fire Fatalities in 2017



ACCIDENTAL INCENDIARY NATURAL UNDETERMINED UNDER INVESTIGATION

Of the 603 deaths, 578 individuals were identified as “Victims” and 3 were identified as “Fire Service.” There were also 22 individuals killed who were identified as a “Suspect.”

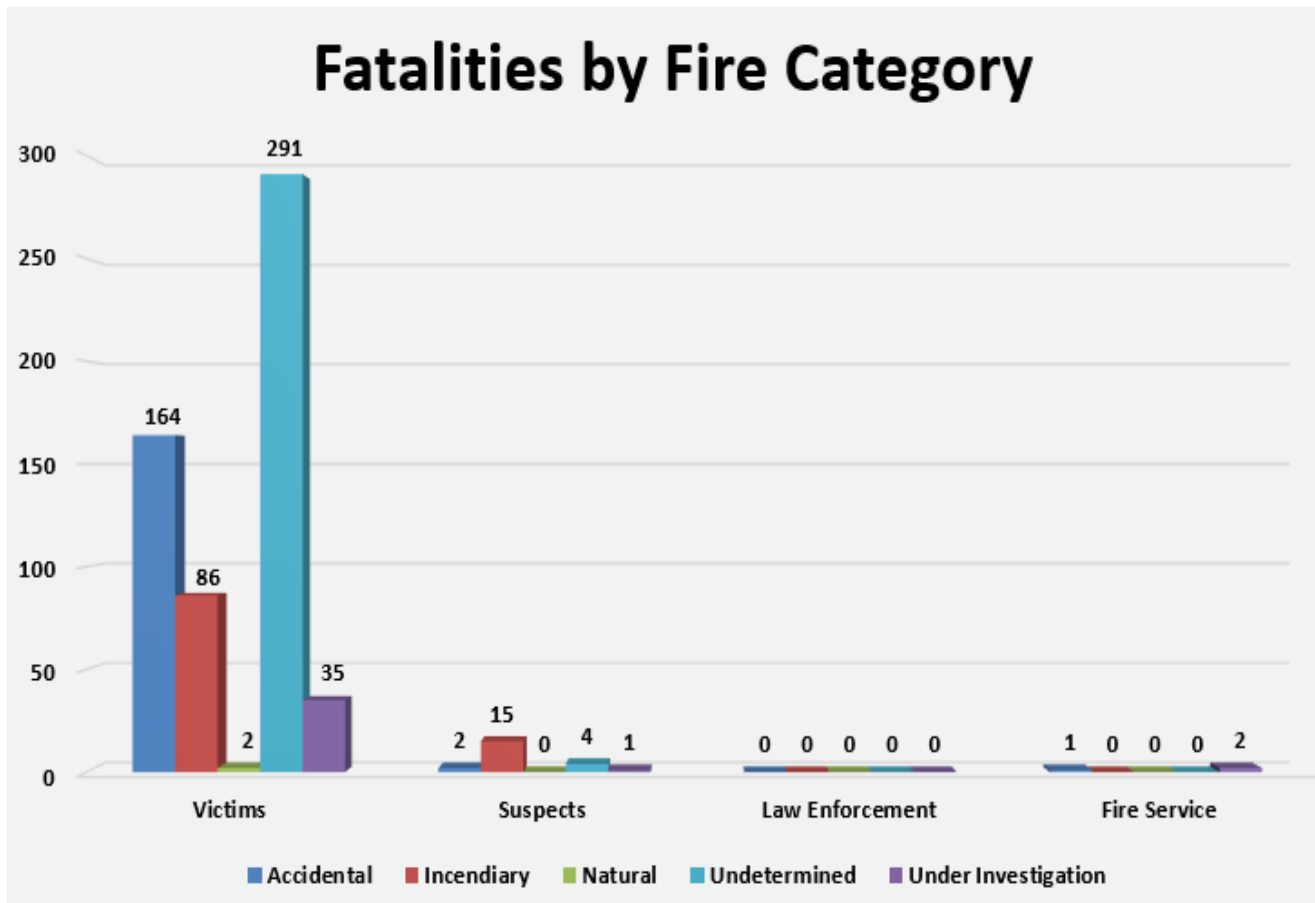
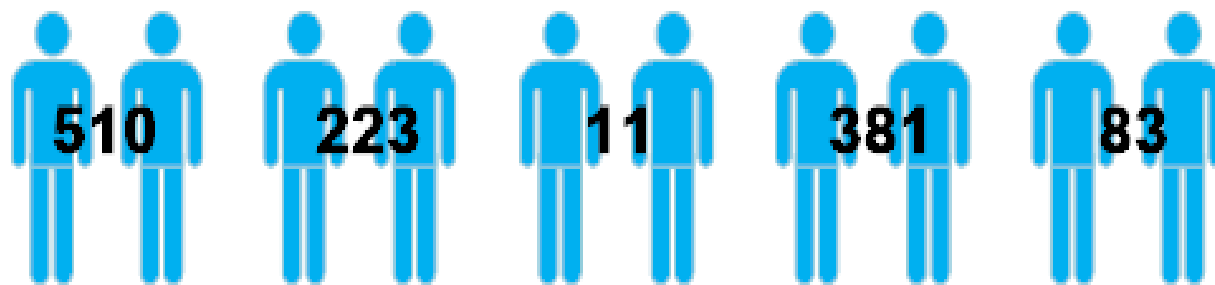


Figure 2. Fatalities by Fire Category

FIRE INJURIES – 2017

1,208 Fire Injuries in 2017



ACCIDENTAL INCENDIARY NATURAL UNDETERMINED UNDER INVESTIGATION

Of the 1,208 injuries, 852 individuals were identified as “Victims,” 273 were identified as “Fire Service” and 32 were identified as “Law Enforcement.” There were also 51 individuals injured who were identified as a “Suspect.”

Injuries by Fire Category

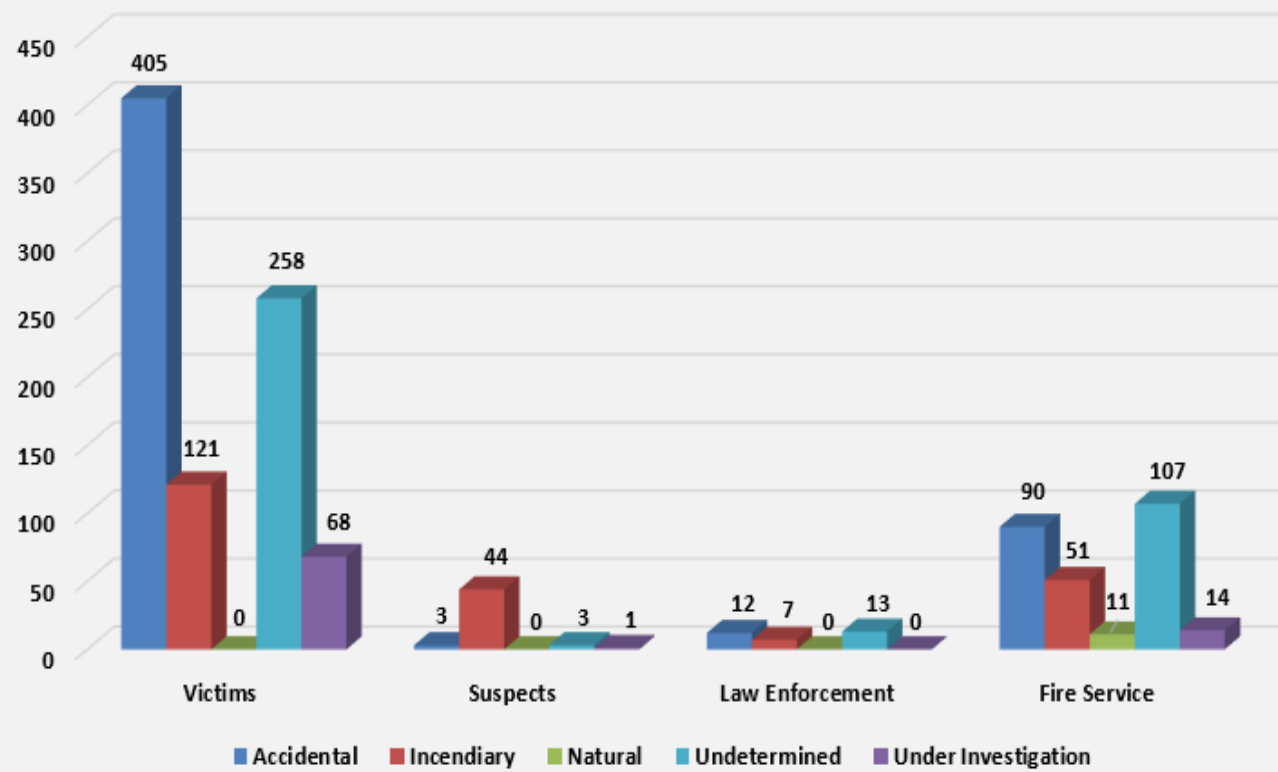


Figure 3. Injuries by Fire Category

FIRE DAMAGES – 2017

Damage Amount (\$) for Fire Types

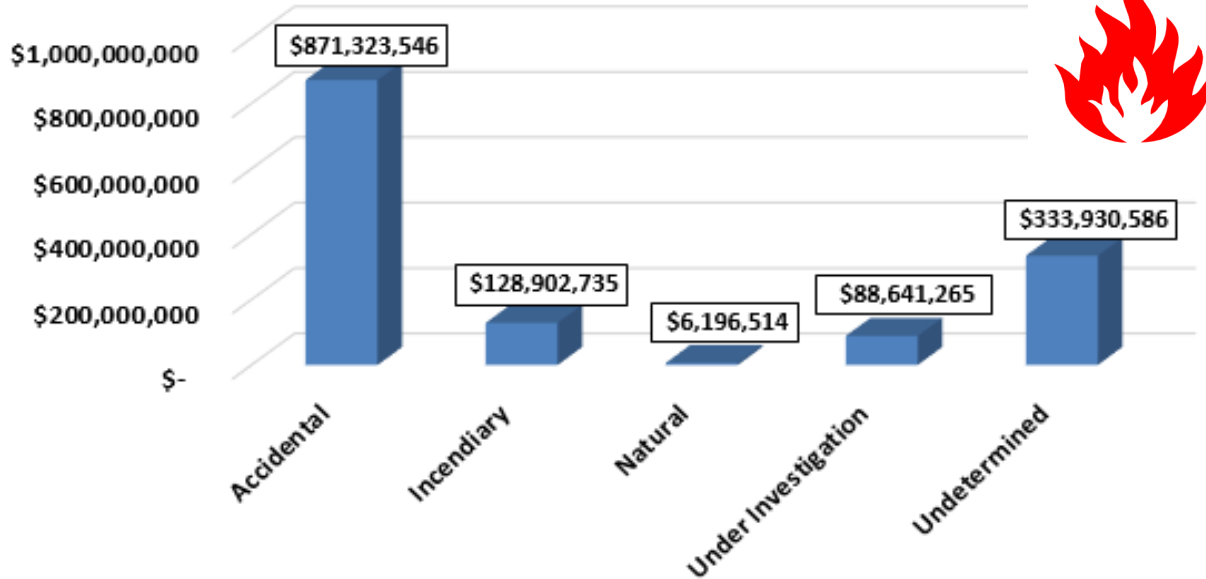


Figure 4. Damage Amount for Fire Types

Damages associated with the 22,364 fire incidents reported in BATS totaled more than \$1,428,994,645 for calendar year (CY) 2017. Fires listed as “Accidental” led the fire type category with \$871,323,546 in damages, while “Residential” properties was the leading category of property types associated with Incendiary (Arson) fires, with damages at \$47,488,841.

Damage Amount (\$) of Incendiary Fire Targets

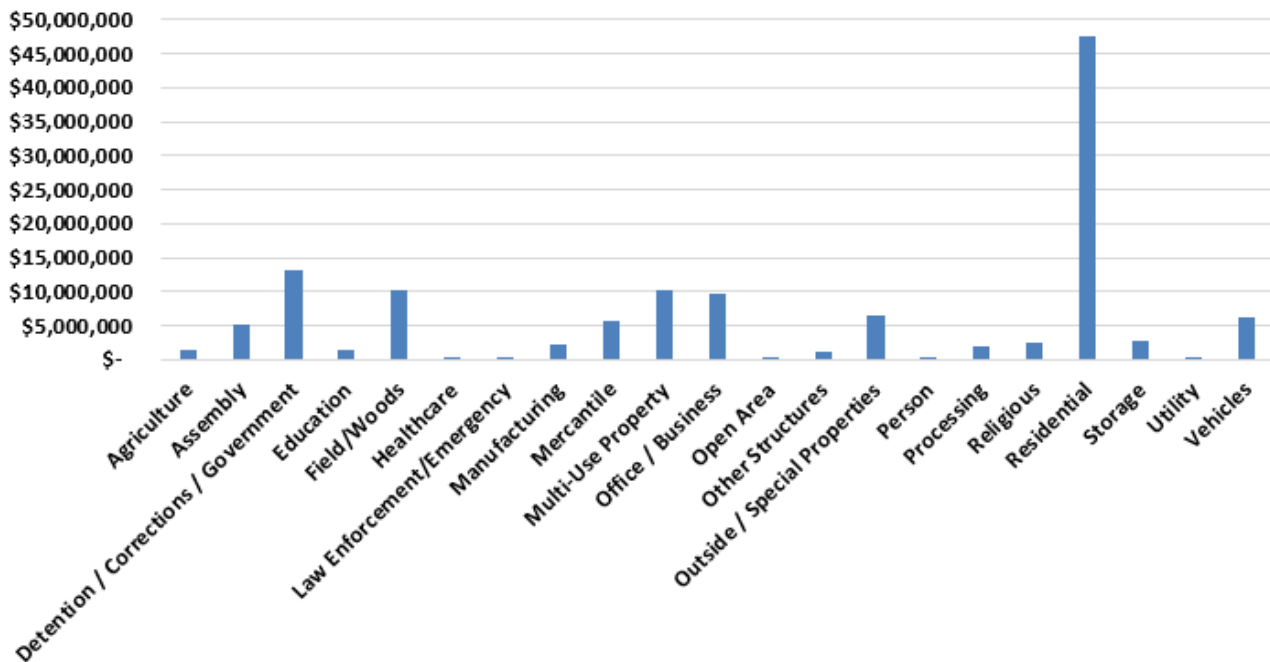


Figure 5. Damage Amount of Incendiary Fire Targets

INCENDIARY FIRE SUBTYPES – 2017

Of the 6,916* Incendiary (Arson) fire-related incidents reflected in BATS, there were 1,438 Incendiary fires listed as involving an “Accelerant,” along with 3,382 fires involving “Available Combustibles,” 279 fires involving an “Incendiary Device” and 247 fires listed as “Pending Laboratory Analysis.” There were also 1,040 Incendiary fires listed as “Unknown” and 530 Incendiary fires with no information reported or left “Blank.”

Incendiary Fire Subtypes

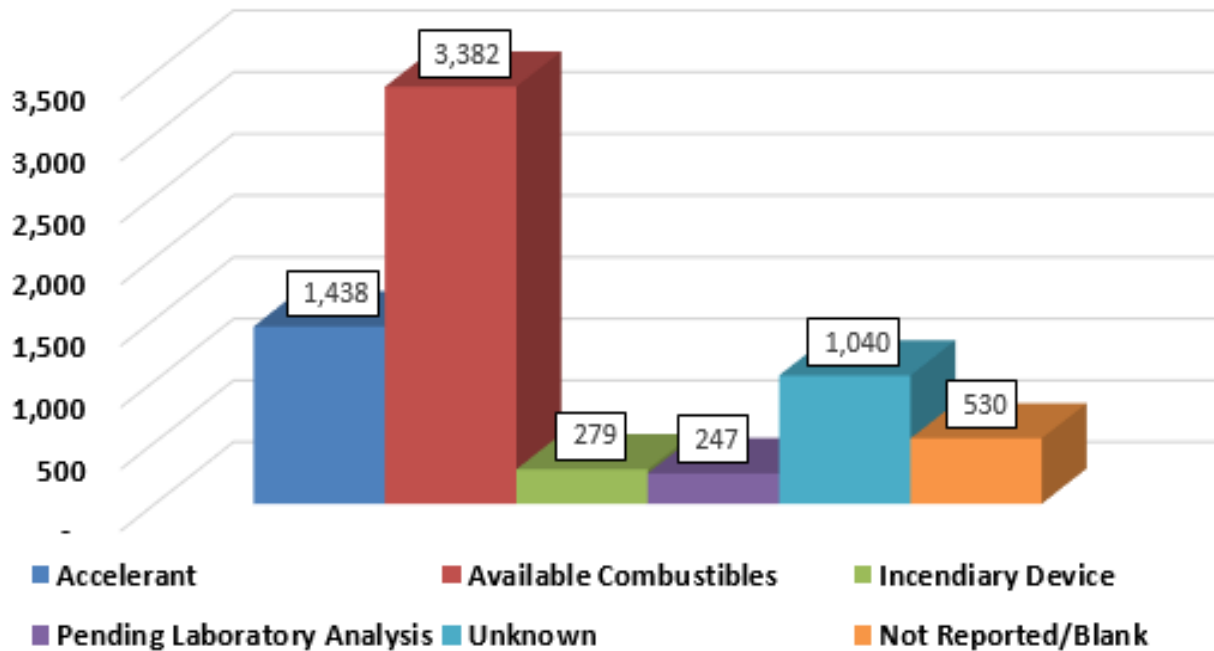


Figure 6. Incendiary Fire Subtypes

* The number of incidents listed above only accounts for the number of fire/arson incidents reported in BATS, and not the total number of fire/arson related incidents reported in the United States during calendar year 2017.



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INCENDIARY FIRES (STATE) – 2017

A review of the 6,916* fires listed in BATS as “Incendiary or Arson” by location (State) revealed the highest number of incidents were reported in Florida (821), followed by California (818) and then Texas (779). These three States accounted for more than 34 percent of the total “Incendiary” fires reported in BATS during calendar year 2017.

INCENDIARY FIRES BY STATE

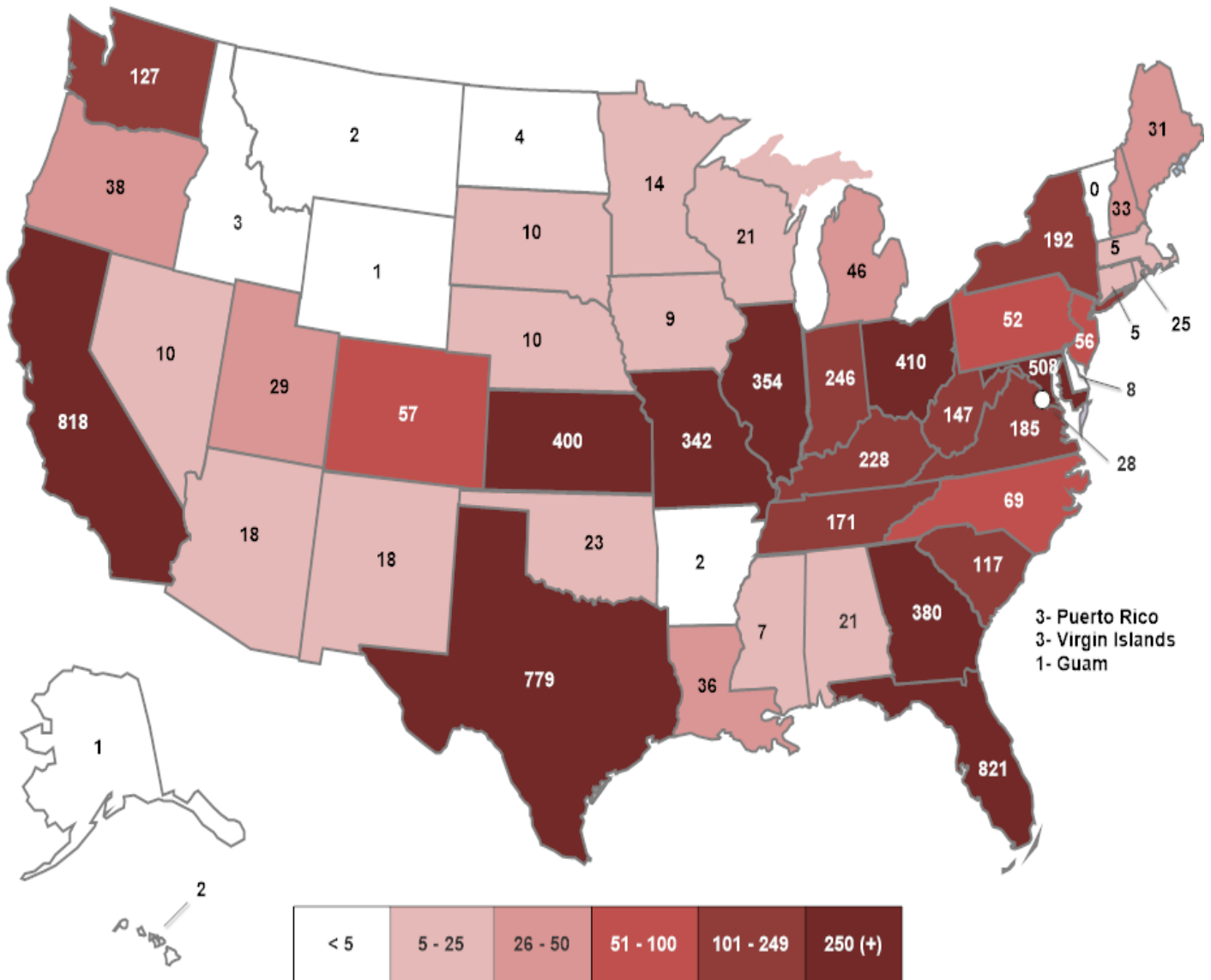


Figure 7. Incendiary Fires by State

* The number of incidents listed above only accounts for the number of fire/arson incidents reported in BATS, and not the total number of fire/arson related incidents reported in the United States during calendar year 2017.

INCENDIARY FIRES (FEMA REGIONS) – 2017

A breakdown of the 6,916* fires listed in BATS as “Incendiary” by Federal Emergency Management Agency (FEMA) Regions revealed the highest number of incidents occurred in the following three regions: Region IV (1,814); Region V (1,091); and Region VI (858). These three regions accounted for more than 54 percent of the total “Incendiary” fires reported in BATS during calendar year 2017.

INCENDIARY FIRES BY FEMA REGIONS

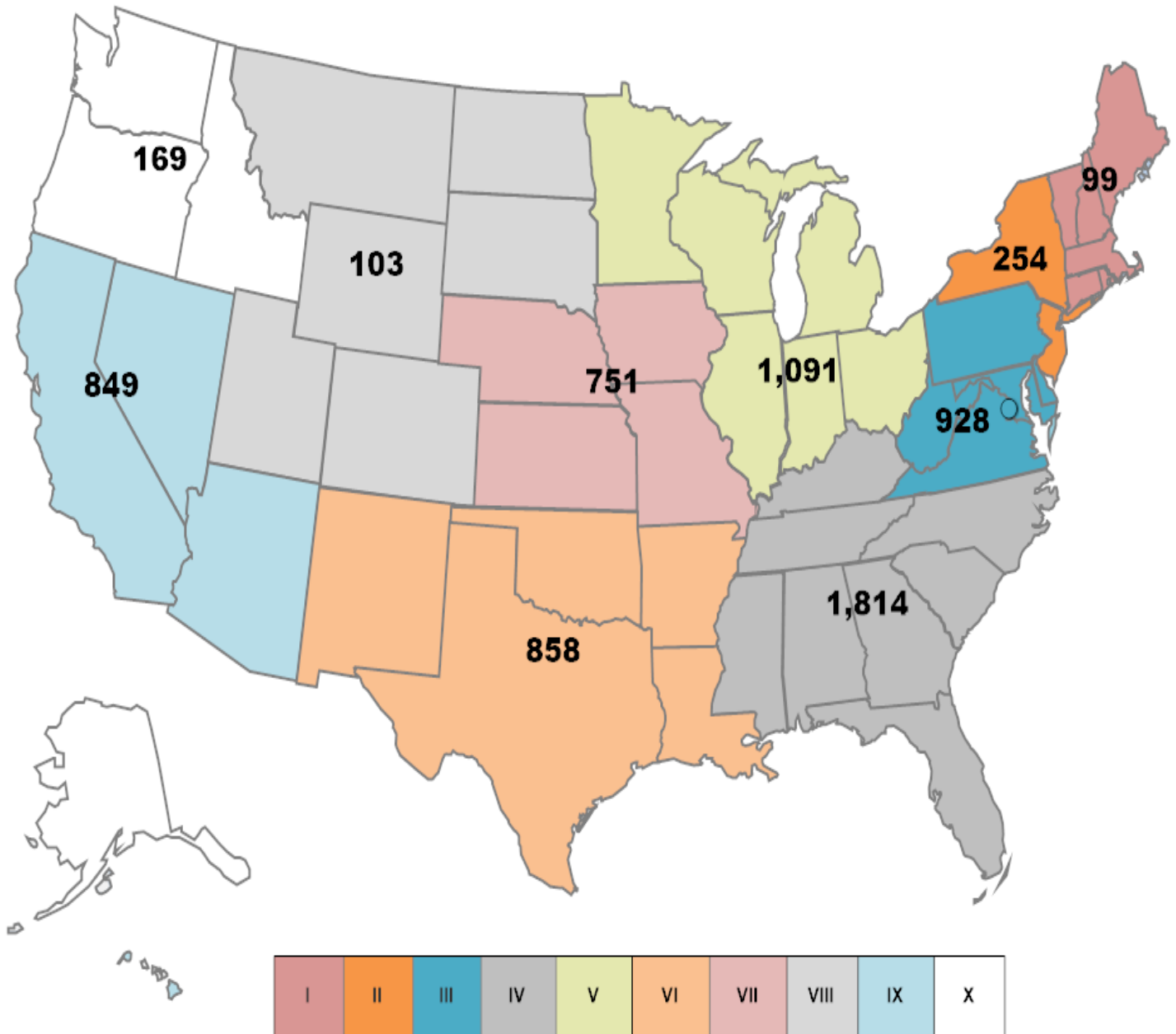


Figure 8. Incendiary Fires by FEMA Regions

* The number of incidents listed above only accounts for the number of fire/arson incidents reported in BATS, and not the total number of fire/arson related incidents reported in the United States during calendar year 2017.

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PROPERTY TYPES – 2017

There were 22 different “Property” types selected within BATS that involved “Incendiary” fires for 2017. Residential fires accounted for more than 40 percent of all “Incendiary” incidents

Incendiary Fires by Property Types

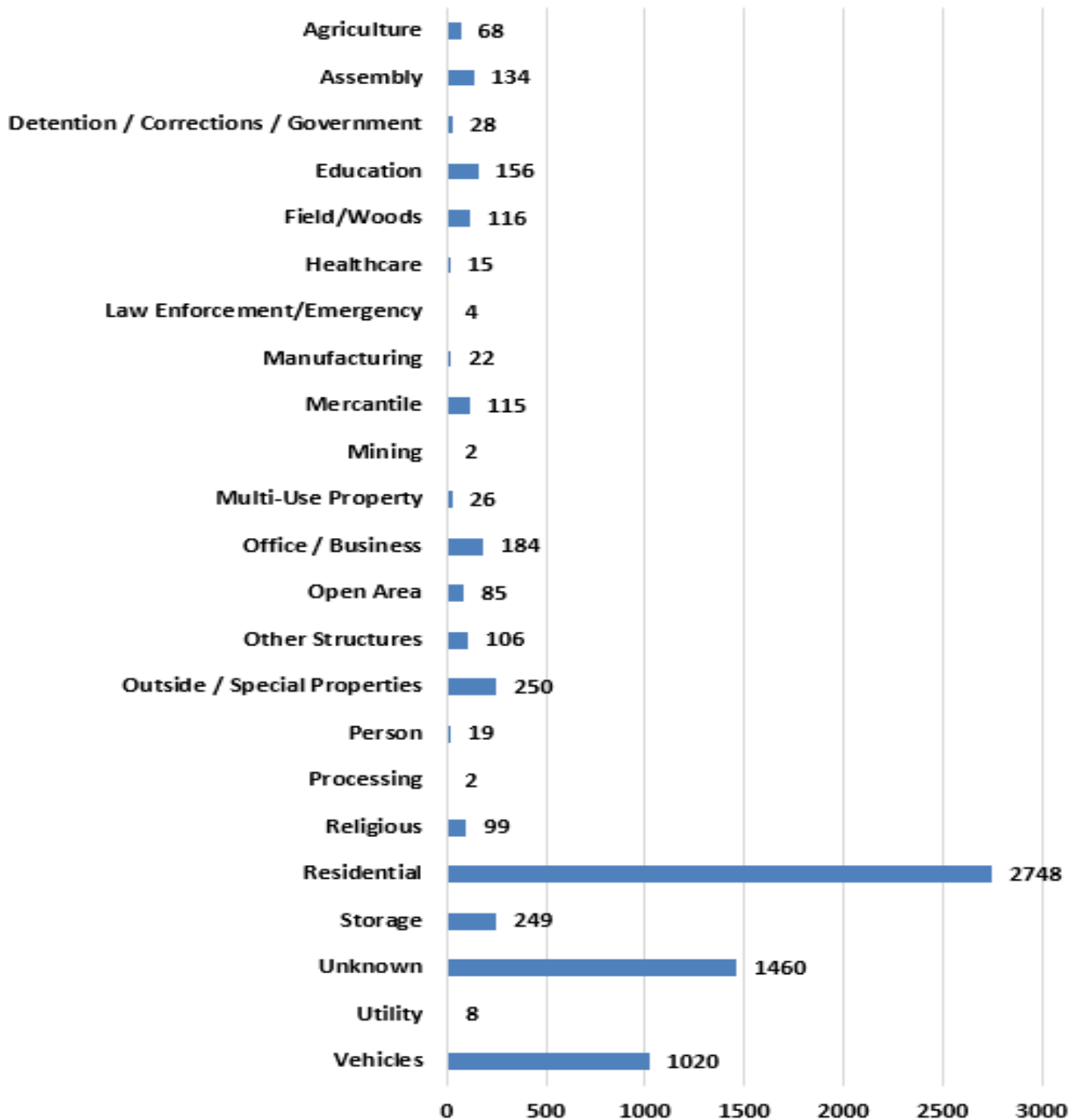


Figure 9. Incendiary Fires by Property Types

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TIME/DAY/MONTH OF OCCURRENCE – 2017

A review of the time of day that “Incendiary” fires occurred showed a noticeable difference between the hours of daylight and darkness. Incidents of “Incendiary” fires occurring during the predominant hours of darkness (21:01 until 03:00) identified 2,591 incidents and accounted for 37 percent of the incidents. The time period of 09:01 until 12:00 (daylight morning hours) had the lowest number of incidents at 539 or 8 percent of incendiary fires reported in BATS during 2017.

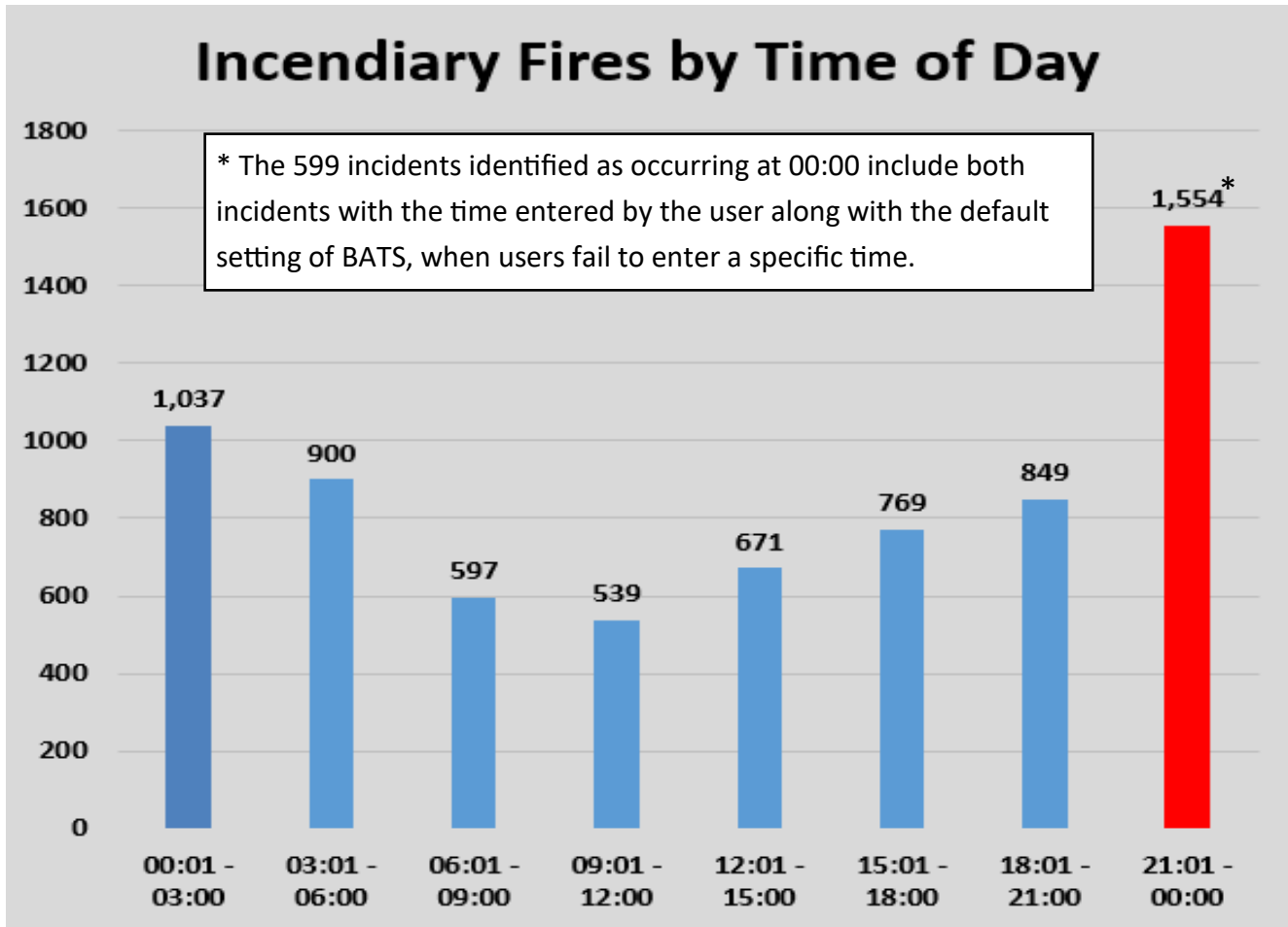


Figure 10. Incendiary Fires by Time of Day

A review of the day of the week that “Incendiary” fires occurred did not show any significant variation between the 7 days of the week. Incidents reported on Sunday were identified as having the highest rate of occurrence, with 1,157 (or 17 percent) of all reported incidents. Friday was identified as having the lowest rate of occurrence of “Incendiary” fires, with 898 (or 13 percent) of all reported incidents.

A review of the months that “Incendiary” fires occurred did not show any significant variation among the 12 months of calendar year 2017. Incidents occurring in July were identified as the most frequent month of the year in which an “Incendiary” fire may occur, with 697 (or 10 percent) incidents. December was identified as having the lowest frequency of “Incendiary” fires occurring, with 470 (or 7 percent) incidents.

INCENDIARY FIRES (VEHICLES) – 2017

During calendar year 2017 there were 1,020 incidents of incendiary fires associated with vehicles. Of those vehicle fires, 631 were associated with an “Automobile/Car,” 138 were associated with a “Truck (Pickup)” and 92 were associated with a “Sport Utility Vehicle (SUV).” There were also 102 fires associated with “Other” vehicles.

Incendiary Fires by Type of Vehicle

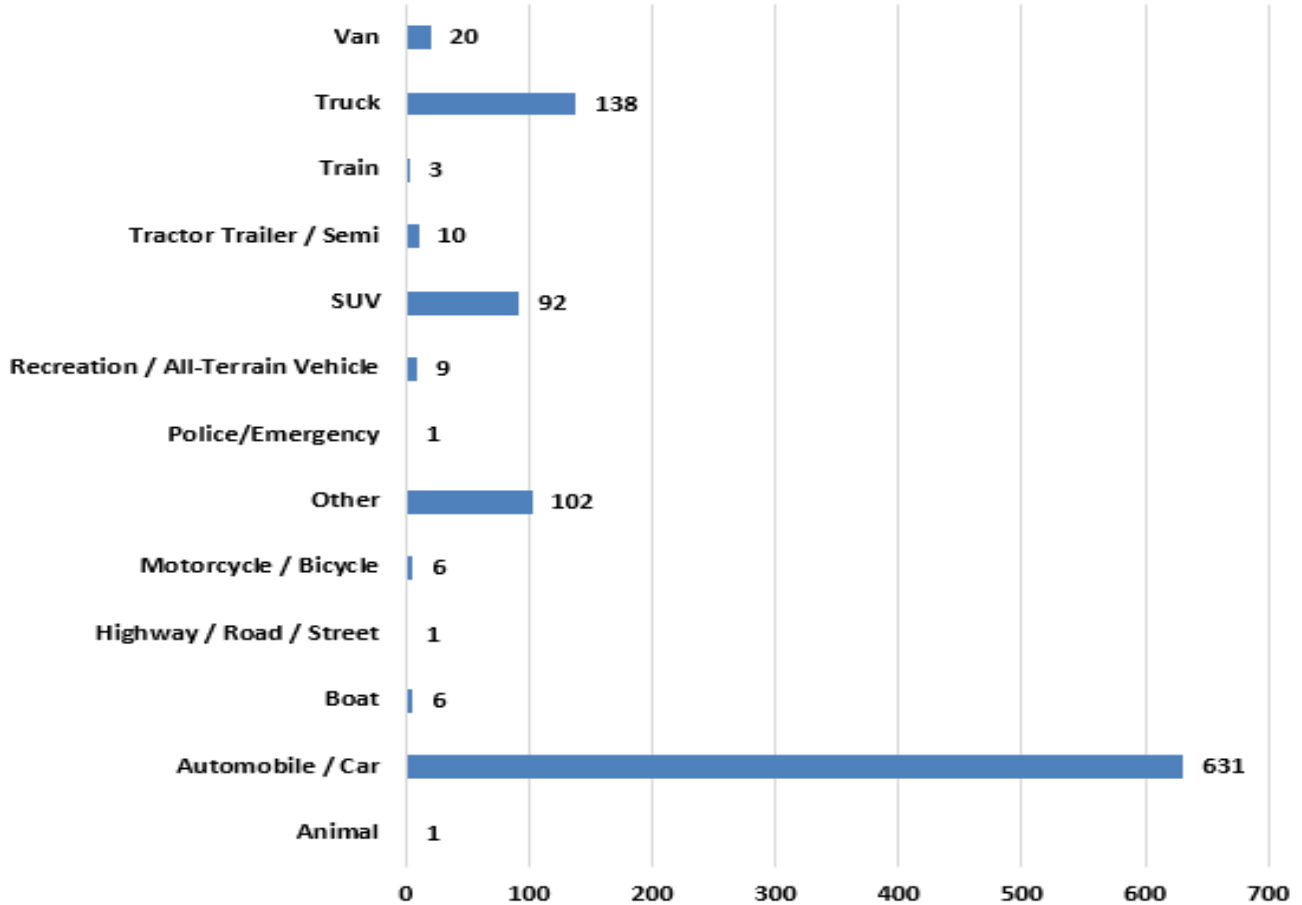


Figure 11. Incendiary Fires by Type of Vehicle



INCENDIARY FIRE DESCRIPTORS – 2017



The top three “Fire Descriptors” identified for the 6,916 Incendiary fires reported in 2017 were Open Flame, Ignitable Liquid and Lighter.

**** More than 64 percent of reported Incendiary fires did not identify any type of fire descriptors.**

10 Most Common Fire Descriptors for Incendiary Fires

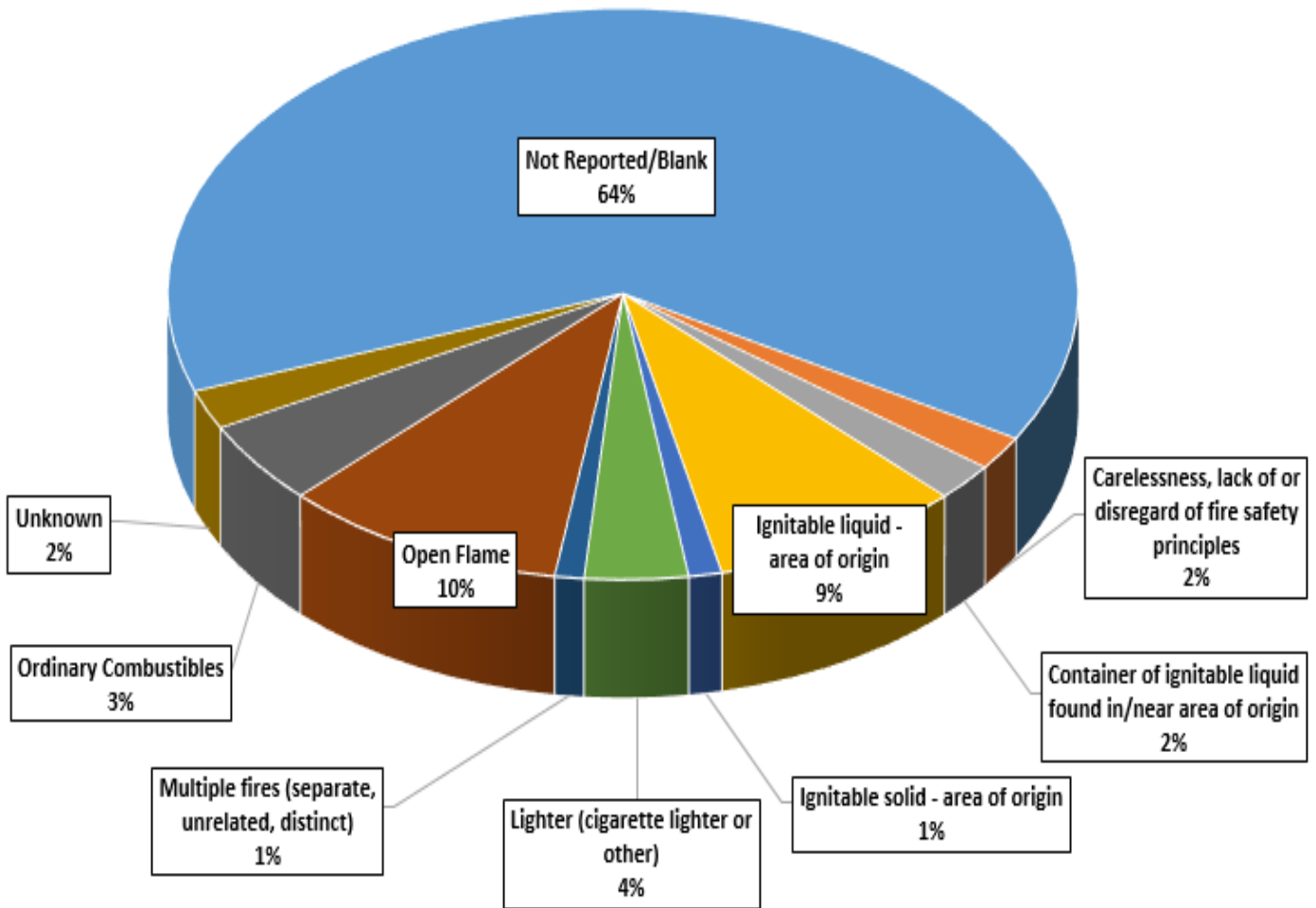


Figure 12. Common Fire Descriptors of Incendiary Fires

MOTIVES FOR INCENDIARY FIRES – 2017

There were nine types of motivation selected within BATS for an “Incendiary” fire. The top 3 types of known motivation selected for the 6,919 Incendiary fires reported in 2017 were “Revenge,” “Crime Concealment” and “Excitement.”

Motives for Incendiary Fires

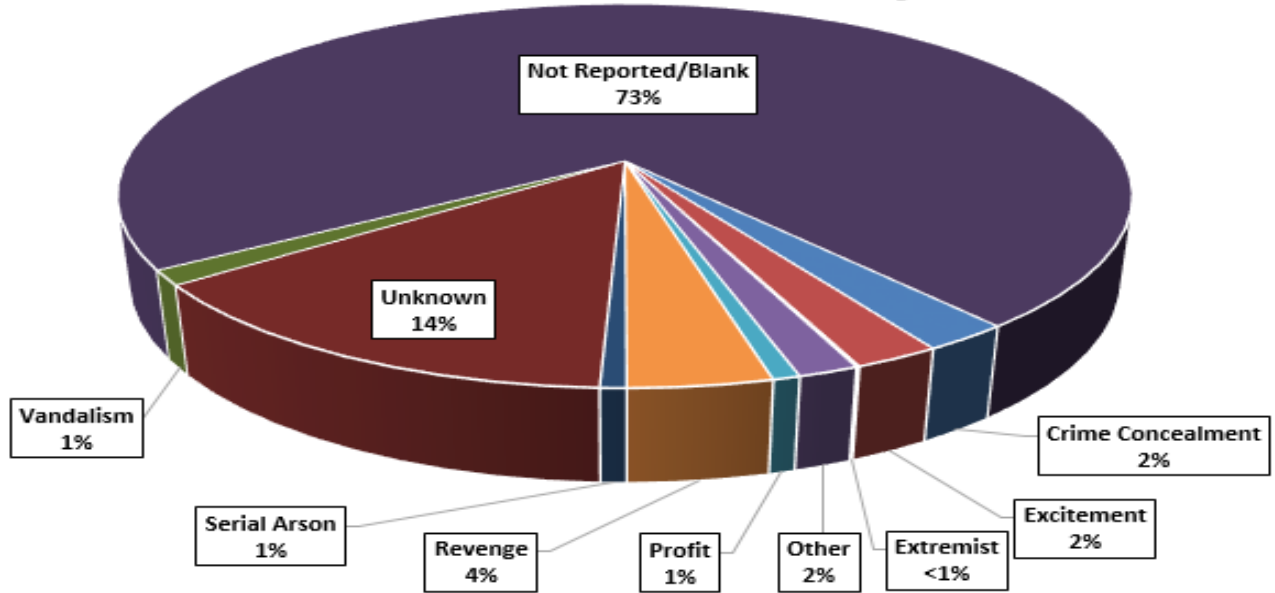


Figure 13. Motives for Incendiary Fires

There were eight types of motivation selected within BATS for an “Incendiary” fire involving a juvenile offender. The top three types of known motivation selected for the 181 Incendiary fires reported in 2017 were “Excitement,” “Other” and “Vandalism.”

Motives of Juvenile Offenders

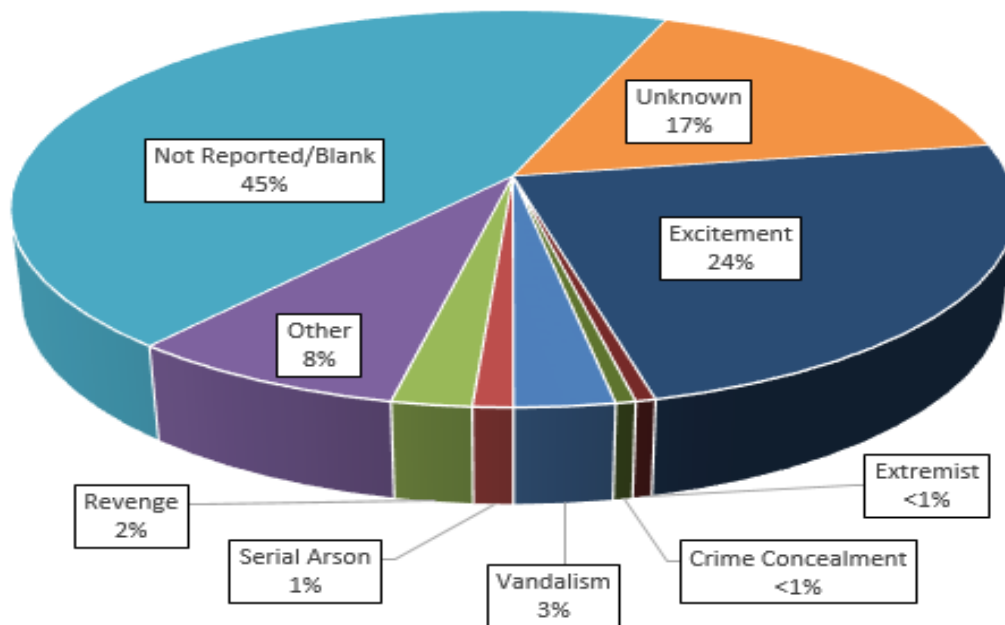


Figure 14. Motives for Juvenile Offenders

JUVENILE OFFENDER FIRES – 2017

There were 181 Incendiary fires recorded in BATS during 2017 where the suspect was listed as a “Juvenile Offender.” A review of the property type involved in those 181 incidents revealed the primary property target of juvenile offenders was “Residential” followed by “Education” and “Field/Woods.” These 3 property types accounted for 72 incidents or 40 percent of the property types targeted by juvenile offenders during 2017.



Property Types of Juvenile Offender Fires

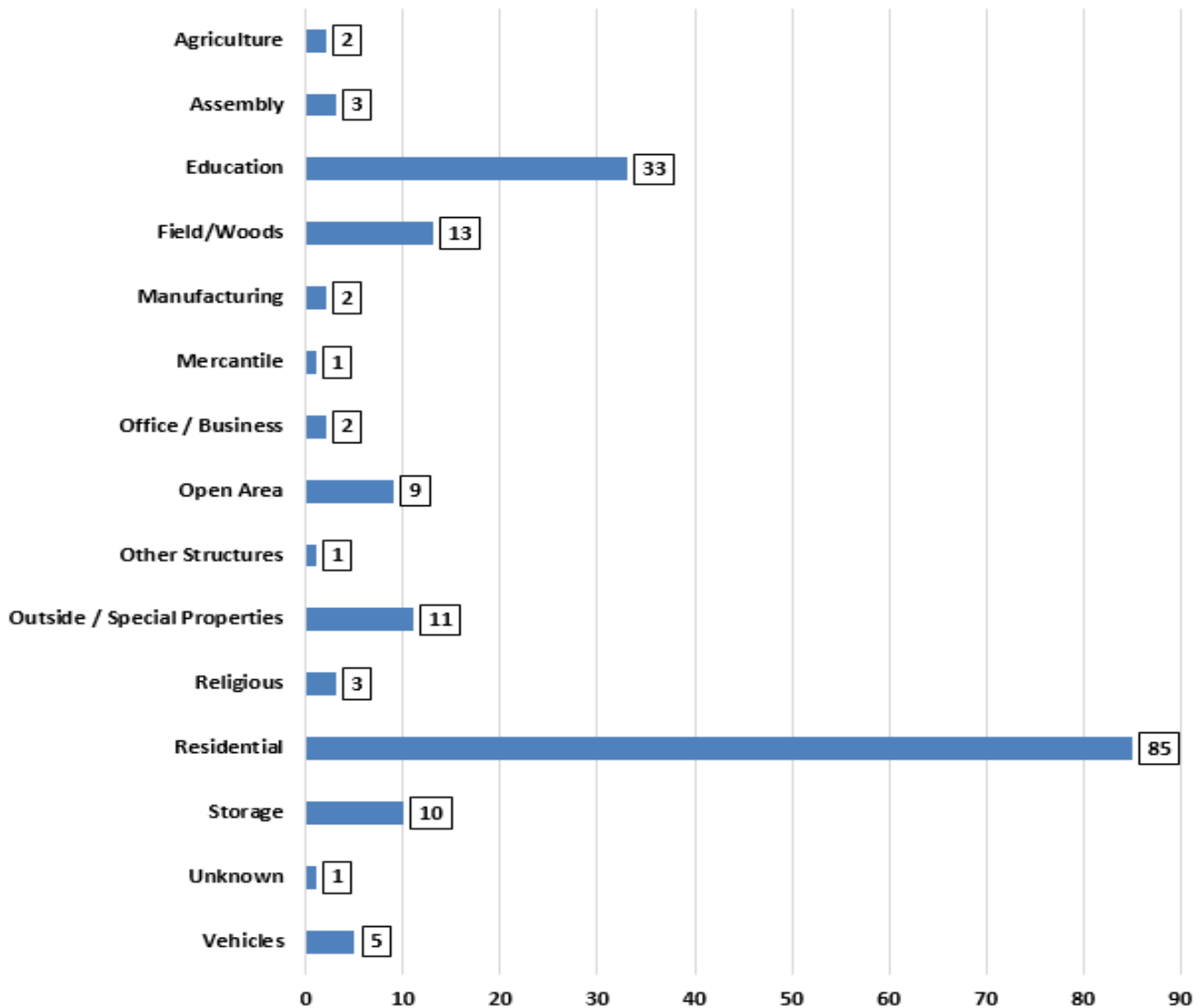
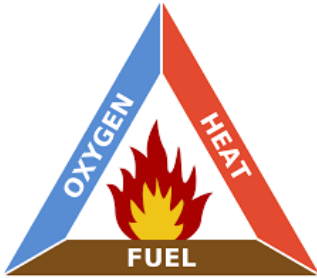


Figure 15. Property Types of Juvenile Offender Fires

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AREAS OF ORIGIN – 2017

The top 3 “Areas of Origin” identified for the 6,916 Incendiary fires reported in 2017 were “Function Areas,” “Transportation, Vehicle Areas” and “Other.”*



Areas of Origin	Total
Assembly, Sales Areas (Groups of People)	248
Function Areas	715
Means of Egress	238
Multiple Places of Origin/Placement	328
Not Applicable	17
Other	543
Service Areas	5
Service, Equipment Areas	9
Storage Areas	319
Structural Areas	286
Technical Processing Areas	2
Transportation, Vehicle Areas	628
Unknown	3,578

The top 3 “Areas of Origin” identified for the 2,748 Residential Incendiary fires reported in 2017 were “Function Areas,” “Multiple Places of Origin/Placement” and “Structural Areas.”*



Residential Fires – Areas of Origin	Total
Assembly, Sales Areas (Groups of People)	192
Function Areas	548
Means of Egress	189
Multiple Places of Origin / Placement	247
Not Applicable	5
Other	162
Service Areas	1
Service, Equipment Areas	4
Storage Areas	133
Structural Areas	212
Transportation, Vehicle Areas	26
Unknown	1,029

The top 3 “Areas of Origin” identified for the 348 incendiary fires related to Commercial use reported in 2017 were “Function Areas,” “Other” and “Storage Areas.”*



Commercial Fires – Areas of Origin	Total
Assembly, Sales Areas (Groups of People)	17
Function Areas	43
Means of Egress	10
Multiple Places of Origin / Placement	22
Not Applicable	1
Other	40
Service Areas	1
Service, Equipment Areas	3
Storage Areas	36
Structural Areas	21
Transportation, Vehicle Areas	6
Unknown	148

* The category of “Unknown” was not listed as a top area of origin for incendiary fires, as the category includes all incidents where “Unknown” was selected or left blank by the user.

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HOUSE OF WORSHIP FIRES – 2017

Between January 1, 2017, and December 31, 2017, BATS captured a total of 197 fire-related incidents involving a house of worship (HOW). Of the 197 HOW fires, 99 were listed in BATS as “Incendiary,” 30 as “Accidental” and 3 as “Natural.” There were also 48 fires listed as “Undetermined” and 17 listed as “Under Investigation,” as the incident was pending further investigative activities and/or laboratory examination.

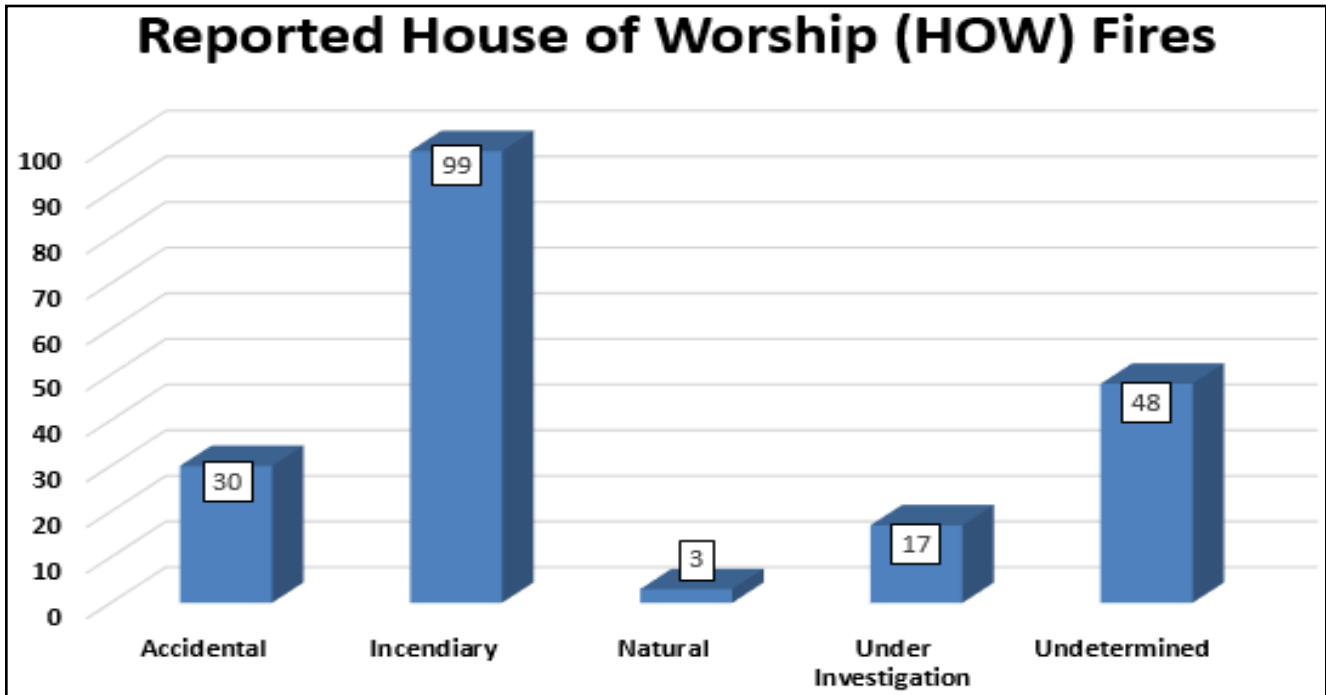


Figure 16. House of Worship Fires

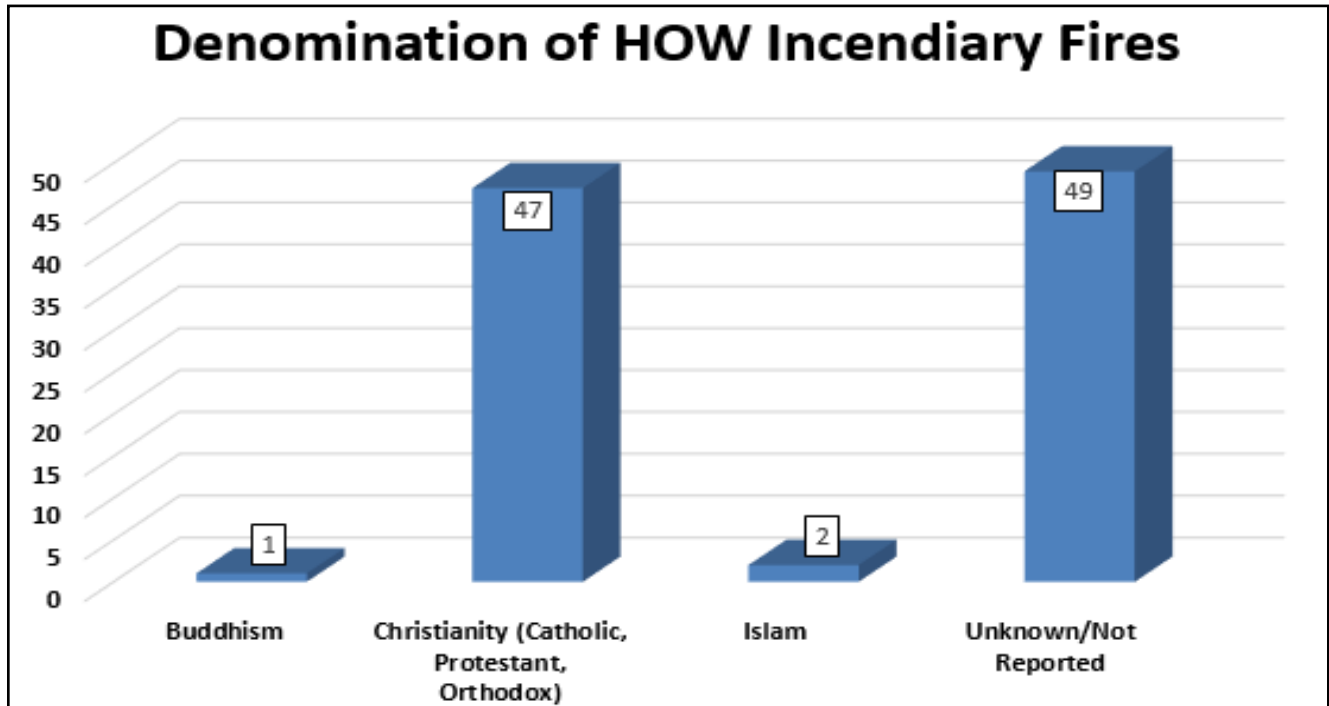


Figure 17. Denomination of HOW Fires

EDUCATION FIRES – 2017

There were 220 fires associated with an “Education” target between January 1, 2017, and December 31, 2017. Of those 220 fires reported in BATS, 156 were listed as “Incendiary,” 28 were listed as “Accidental” and 32 were listed as “Undetermined.” There were also four (4) fires listed as “Under Investigation,” as the incident was pending further investigative activities and/or laboratory examination. The target subtype category of “High School/Junior High/Middle School” accounted for 42 percent of all fire types and 49 percent of all Incendiary fires associated with an “Education” target.

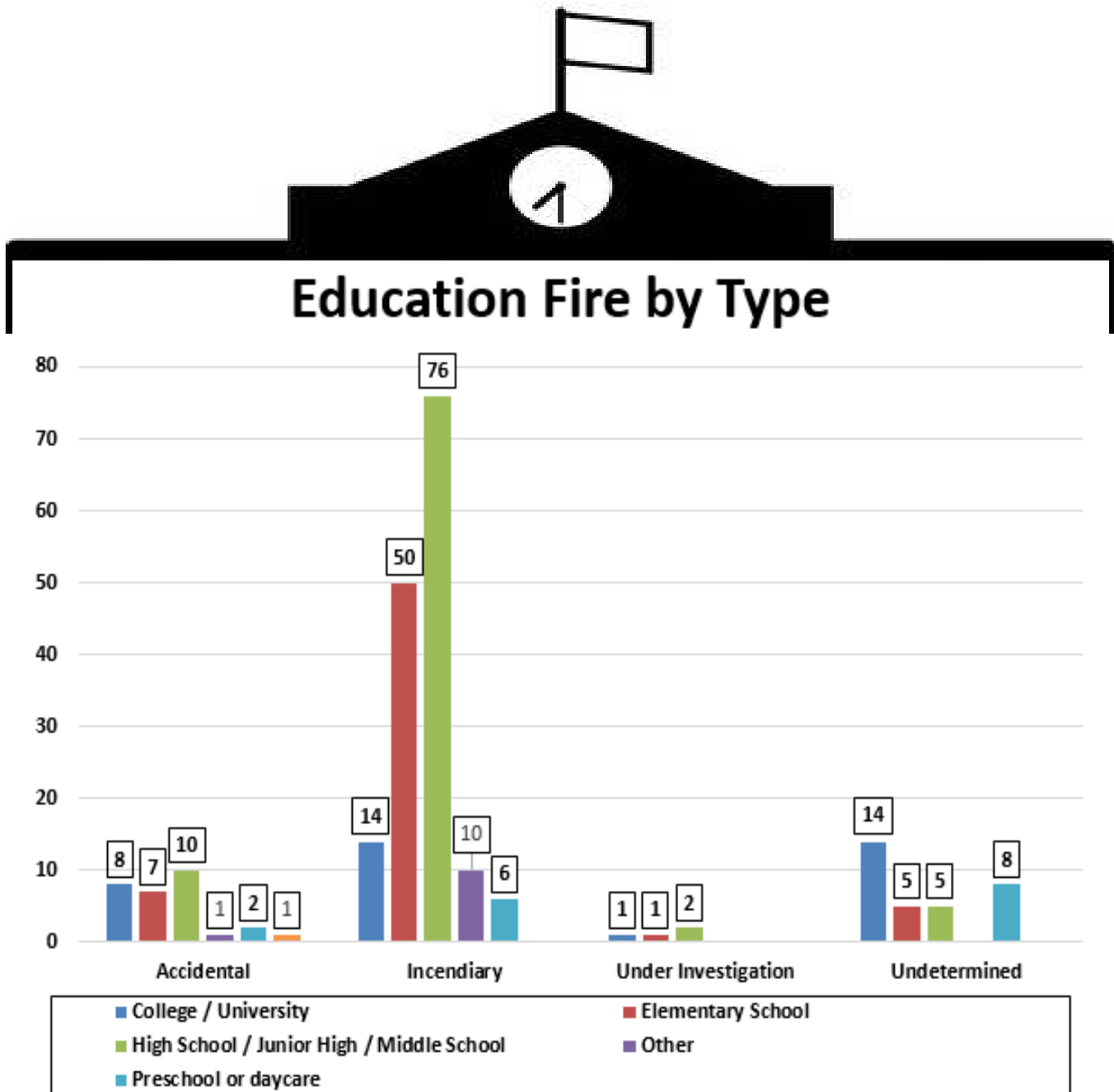


Figure 18. Education Fires

CONTACT INFORMATION

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TO REQUEST ADDITIONAL INFORMATION, PLEASE SEND AN EMAIL TO:

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