

## **FIRES AT U.S. SERVICE STATIONS**

*Incident types and trend data are reported for fires that occurred in or at service stations. Three different types of incidents, structure fires, vehicle fires, and outside and other fires are analyzed for cause, equipment involved, and other type of material first ignited, among other relevant factors specific to each incident type. Other information relevant to this occupancy, such as the hazards of static electricity is presented as well.*

### **Executive Summary**

During the five-year period of 2004-2008, NFPA estimates that U.S. fire departments responded to an average of 5,020 in service or gas station properties per year. These fires caused an annual average of two civilian deaths, 48 civilian fire injuries, and \$20 million in direct property damage. The majority of the fires in this category were vehicle fires. Reported fires in this occupancy group fell 46% from 7,860 in 1980 to 4,280 in 2008.

According to the U.S. Census Bureau, there were 117,000 gasoline stations in the United States in 2007<sup>1</sup>. Fires in these occupancies represent a variety of incidents, including structure fires, vehicle fires, outdoor fires and other fires. The majority of incidents are vehicle fires (61%), but the majority of the property damage (59%), results from structure fires. Outside trash or rubbish fires account for 12% of the fires reported to local fire departments at this type of property.

Twelve percent of fires reported to local fire departments in these properties were structure fires. The most common items first ignited in structure fires at service stations were flammable and combustible liquids and gases, piping or filter (22% of structure fires), followed by rubbish, trash, or waste (18%) and electrical wire or cable insulation (13%).

Most vehicle fires (82%) occurred in passenger vehicles, these fires accounted for nearly half of the total number of civilian injuries that occurred in service station fires of any kind (structure, vehicle, outside, other). The most common type of material first ignited in a vehicle fire was gasoline (28%).

Outside and other fires accounted for 15% of incidents at service stations. Natural vegetation fires accounted for 42% of these incidents. The most common heat source for outside fires was smoking materials (21%).

Twelve percent of fire incidents at service stations were outside trash or rubbish fires.

Individuals interested in keeping service stations safe from fire should consult [\*NFPA 30A – Code for Motor Fuel Dispensing Facilities and Repair Garages\*](#) for information about fire prevention in these properties.

<sup>1</sup>U.S. Census Bureau, Statistical Abstract of the United States: 2010, Table 740 "Economic Census Summary" (NAICS 2002 Basis): 2002 and 2007

Fires in Service Stations by Type of Incident, 2004-2008

