

# **Data.Gov Dataset FEMA United States Fire Administration National Fire Incident Reporting System 2002 Fire Incident & Cause Data**

**Tuesday, December 11, 2012  
Version 1.0**





## Revision History

Version	Description of Version	Date Completed
1.0	New document	12/11/12

## 1. 2002 National Fire Incident & Cause Data

### 1.1. What is the data in the submission?

This submission contains an initial release of 2002 NFIRS database including details on fire incidents and causes. The NFIRS database comprises 75 percent of all reported fires that occur annually and state participation in NFIRS is voluntary.

### 1.2. How is it generated?

Within the NFIRS states, participating local fire departments fill out Incident, Casualty and optional reports for fires and other incident types as they occur. They forward the completed incidents via paper forms or computer files to their state office where the data are validated and consolidated into a single computerized database. Feedback reports are generated and forwarded to the participating fire departments. Periodically, the aggregated statewide data is sent to the National Fire Data Center at the USFA to be released and included in the National Database.

### 1.3. How can the data be used?

Because there are thousands of local fire departments using NFIRS, it is impossible to document all the ways they are using the data. For departments in states that rely heavily on NFIRS for reporting fire statistics, an important advantage is that local fire departments can compare their own productivity and effectiveness with the state average. They can also seek out statistics on fire departments in communities similar to their own and conduct comparisons.

The fire department of San Antonio, Texas relies heavily on its local NFIRS. The system is automated at the level of the fire house and runs almost in real-time because firefighters file reports on calls within twenty minutes of returning to the station. The location of calls is recorded in the system using X-Y coordinates that refer to the location the firefighters responded to, which is not always the same as the address recorded when the original call for service was placed. The rich resources of this system allow the fire department to conduct many sophisticated analyses including:

- Identification of trends in the number of calls to the fire department, the types of calls made, and the origin of calls. This information is used, for example, to plan station relocations.
- Justification of fire department budgets to the city council. The system will allow the fire department to count, for example, the number of brush

fires it to which it has responded, identify whether the trend is upward or downward, and then make an assessment as to whether the department has enough brush fire trucks in service.

This database is used to answer questions about the nature and causes of injuries, deaths, and property loss resulting from fires. The information is disseminated through a variety of means to states and other organizations. The National Fire Incident Reporting System is a model of successful Federal, State and local partnership. The database constitutes the world's largest, national, annual collection of incident information.

In the context of safety.data.gov, it is anticipated that the NFIRS data, once fully available, can be analyzed for trends and predictive analysis, and mashed up with other data (such as census) to make socio-economic evaluations of fire incidents.

#### 1.4. What data types will be in the tool?

The NFIRS system has numerous data elements that detail fire incidents. The many data elements detail, for example, the fire department, fire incident, the occupants, structure and equipment used, hazard material involved and casualty details. NFIRS exports are well documented and the metadata is available in this entry.