

# 2014 NFIRS FILES

## Data Quality Notes

### Basic Incident File

- 1) **ACT\_TAK1**—There are four records with a missing value (required field)
- 2) **ACT\_TAK2**—There are 2,532 records with the value of “-”. There is one record with a value of “0.” There is one record with a value of “02.” There is one record with a value of “1.” There are four records with a value of ‘6’. There is one record with a value of “IN.” There are eight records with a value of “UU”.
- 3) **ACT\_TAK3**—There is one record with a value of ‘+’. There are 562 records with the value of “-”.
- 4) **THREE ACT\_TAK FIELDS**—
  - There are 2,311 records where ACT\_TAK1 equals ACT\_TAK2
  - There are 553 records where ACT\_TAK1 equals ACT\_TAK3
  - There are 1,197 records where ACT\_TAK2 equals ACT\_TAK3
  - There are 223 records where all three ACT\_TAK values are equal
- 5) **SUP\_APP, EMS\_APP, OTH\_APP**—there are some records with thousands of apparatus that responded. Likely a data entry error.
- 6) **SUP\_PER, EMS\_PER, OTH\_PER**—there are some records with very high values. Likely a data entry error. For **SUP\_PER**, there are two records with a value of “-1.”
- 7) **PROP\_LOSS**—there are two records with a negative value.
- 8) **CONT\_LOSS**—there are three records with a negative value.
- 9) **DET\_ALERT**—there are 12,248 confined fire incident records that have a missing value (CRG says this is a required field for confined fires).

**NEGATIVE NUMBERS**—there 6 records in the basicincident.txt file that have negative numbers in fields where that should not occur. The records are:

Record Number	Value	Field
606977	-1	Contents Loss
1100578	-1	Contents Loss
1681886	-40	Contents Loss
1681886	-6	Property Loss
1790409	-100	Contents Loss
2032012	-1	Suppression Personnel
2032105	-1	Suppression Personnel

### **Incident Keys:**

"IL"^"VA304"^05072014^"376"^0^  
"NC"^"06205"^01312014^"14"^0^  
"SC"^"04233"^07282014^"2571"^0^  
"TX"^"BV311"^07222014^"3863"^0^  
"WA"^"17M08"^04292014^"1406798"^0^  
"WA"^"17M08"^05312014^"1408594"^0^

## **Basic Incident Address File**

- 1) There are two incidents where **STREET\_PRE** has an invalid value of 'EA'.
- 2) There appear to be street numbers in the **STREETTYPE** field for some incidents. This field should reflect the street prefix codes listed in the CRG.
- 3) **STATE\_ID**—There are three records with a value of "TR" for location address.

## **Fire Incident File**

- 1) **NUM\_UNIT**—there are 202 records that have a "-1" value and 333,390 that have a "0" value. There are two records with a value of "9999." There are also two records with invalid entries (8E4, 54E6).
- 2) **BLDG\_INVOL**—there are 271 records that have a "-1" value
- 3) **ACRES\_BURN**—there are 336 records with a "-1" value
- 4) **THREE ON\_SITE\_MAT fields**—
  - There are 22 records where ON\_SITE\_M1 equals ON\_SITE\_M2
  - There are 12 records where ON\_SITE\_M1 equals ON\_SITE\_M3
  - There are 10 records where ON\_SITE\_M2 equals ON\_SITE\_M3
  - There are 7 records where all three fields have the same value
- 5) **AREA\_ORIG**—although a required field, there are 10 records with missing values
- 6) **HEAT\_SOURC**—although a required field, there are 10 records with missing values
- 7) **FIRST\_IGN**—although a required field, there are 10 records with missing values
- 8) **TYPE\_MAT**—there is one record with a value of "9"
- 9) **CAUSE\_IGN**—there are 10 records with a missing value (although a required field)
- 10) **FACT\_IGN\_1**—there are 14 records with a missing value (although a required field)
- 11) **FACT\_IGN\_1 & 2**—there are 40 records where FACT\_IGN\_1 equals FACT\_IGN\_2
- 12) **AGE**—there is one record with a value of "999"
- 13) **SUP\_FAC\_1**—there are 6 records with a value of UUU (not a valid option)
- 14) **SUP\_FAC FIELDS:**
  - There are two records where SUP\_FAC\_1 equals SUP\_FAC\_2
- 15) **BLDG\_ABOVE**—there are 58 records with stories above 200
- 16) **BLDG\_BELOW**—there are 47 records with value of "-1"
- 17) **BLDG\_WIDTH**—there is one record with a value of "1E4"; there are 962 records with a value of 0
- 18) **BLDG\_LGTH**—there are 959 records with a value of 0
- 19) **TOT\_SQ\_FT**—there are 3,923 records with a value of 0
- 20) **FIRE\_ORIG**—a couple of records with high values (999) and three records with "\*\*\*" values
- 21) **ST\_DAM\_MIN, ST\_DAM\_SIG, ST\_DAM\_HVY, ST\_DAM\_XTR**—there are a couple of records in these fields with negative values
- 22) **ITEM\_SPRD**—there are 880 records with a value of "99" (not a valid option)
- 23) **MAT\_SPRD**—there are 2,010 records with a value of "99" (not a valid option)

## **Civilian Fire Casualty File**

- 1) **AGE**—There are 24 records with an value of “114” or older (this includes five records with a value of “999”)
- 2) **INJ\_DT\_TIM**—there are three records that have the year 2000 instead of 2014. There are also 12 records with a year of 1970.
- 3) **FACT\_INJ1**—there are five records with values of “UU” (not a valid option)
- 4) **FACT\_INJ fields:**
  - There are 25 records where FACT\_INJ1 equals FACT\_INJ2
  - There are five records where FACT\_INJ1 equals FACT\_INJ3
  - There are six records where FACT\_INJ2 equals FACT\_INJ3
  - There are five records where all three records are the same
- 5) **PRIM\_SYMP**—there are 60 records with a value of “NN” (not a valid option).
- 6) **BODY\_PART**—there are nine records with a value of “0” and one record with a value of “U” (not valid options)
- 7) **CC\_DISPOS**—there are 141 records with a value of “N” (while the rest of the records have a value of “1” or null).

## **Fire Service Casualty File**

- 1) **AGE**—there are 125 records with a value of “0.” There are 44 records with an age somewhere from “1” to “10.” There are seven records with a value over “100” (this includes 2 with a value of “999”).
- 2) **RESPONSES**—there is one record with a value of “99.”
- 3) **SEVERITY**—there is one record with a missing value (required field). There are four records with a value of “U” (not a valid option)
- 4) **SYMPTOM**—there are 175 records with a value of “NN” (not a valid option)
- 5) **LOCATION**—there are 56 records with a value of “NN” (not a valid option)

## **Fire Service Equipment Failure File**

- 1) **EQUIP\_ITEM**—there are five records with missing values.
- 2) **EQP\_PROB**—there are 23 records with a value of “NN” (not a valid option)

## **Wildland Fire File**

- 1) **AREA\_TYPE**—there is one record with a missing value (required field).
- 2) **FIRE\_CAUSE**— there is one record with a missing value (required field).
- 3) **HUM\_FACT8** – This field consists of only null values.
- 4) **FACT\_IGN1**—there are three records with a missing value (required field).
- 5) **FACT\_IGN fields**—there are 17 records where FACT\_IGN1 equals FACT\_IGN2.
- 6) **HEAT\_SOURC**—there are two records with missing values (required field)
- 7) **ACRES\_BURN** – there is one record with a negative value.
- 8) **CROP\_BURN1, CROP\_BURN2, CROP\_BURN3** – There are some records with numerical values in these fields as opposed to listing the type(s) of crops. There are 95 incidents where CROP\_BURN1=CROP\_BURN2; 88 incidents where CROP\_BURN1=CROP\_BURN3; 90 incidents where CROP\_BURN2=CROP\_BURN3; and 88 incidents where CROP\_BURN1=CROP\_BURN2=CROP\_BURN3.
- 9) **WIND\_SPEED** – there are two records with negative values.
- 10) **REL\_HUMID**—there is one record with a relative humidity of over 100 (i.e., 616).
- 11) **FUEL\_MOIST**—there is one record with a value of -6.
- 12) **AGE**—there are 11 records with values of 999.
- 13) **ELEVATION**—there is one record with a negative value.
- 14) **FLAME\_LGTH**—there is one record with a negative value and there are three records with a value of “\*\*”
- 15) **SPREAD\_RAT**—there is one record with a value of 2E3.

## **EMS File**

- 1) **PROVIDER\_A**—there are two records with missing values (required field).
- 2) **SITE\_INJ1**—there are 17 records with a value of “N” (not a valid option).
- 3) There are nine records where **SITE\_INJ1=SITE\_INJ2**; there are three records where **SITE\_INJ1 = SITE\_INJ3**; there is one record where **SITE\_INJ1=SITE\_INJ5**; there are four records where **SITE\_INJ2=SITE\_INJ3**; there is one record where **SITE\_INJ2=SITE\_INJ4**; there are two records where **SITE\_INJ3=SITE\_INJ4**; and there is one record where **SITE\_INJ3=SITE\_INJ5**.
- 4) **PROC\_USE6, PROC\_USE7, PROC\_USE8, PROC\_USE10, PROC\_USE11, and PROC\_USE20** – these fields contain all null values.
- 5) **SAFE\_EQP6, SAFE\_EQP7, and SAFE\_EQP8** – these fields contain all null values. Additionally, there are no values of ‘N’ in the first field **SAFE\_EQP1**.
- 6) **IL\_CARE**—there are 1,283 records with missing values (required field).

## **Hazardous Material File**

- 1) **AFFEC\_MEAS**—there is one record with a negative value
- 2) **AFFEC\_UNIT**—there were 9,852 records with a numeric value in the **AFFEC\_MEAS** field. Of those, only 5,762 records in the **AFFEC\_UNIT** field that actually defines the unit of measurement.
- 3) **EVAC\_UNIT**—there were 6,341 records with a numeric value in **EVAC\_MEAS** field. Of those, only 1,924 records in the **EVAC\_UNIT** that actually defines the unit of measurement.
- 4) **PEOP\_EVAC**—there was one record with a value of “-1”
- 5) **HAZ\_ACT fields:**
  - There are six records where **HAZ\_ACT1** equals **HAZ\_ACT2**
  - There are two records where **HAZ\_ACT2** equals **HAZ\_ACT3**
- 6) **CAUSE\_REL**—there are 264 records with a missing value (required field)

## **Hazardous Material Chemical File**

- 1) **DOT\_CLASS**—there are four records with a value of “10” (not a valid option)
- 2) **CHEM\_NAME**—there are 437 records with missing values (required field)3)
- 3) **AMOUNT\_REL**—there are 450 records with missing values (required field)

## **Hazardous Material Mobile Property Type File**

- 1) **MP\_YEAR**—There are 13 records with a value somewhere from “4” to “199”.

## **Hazardous Material Equipment Involved File**

- 1) **EQ\_YEAR**—There is one record with a negative value.

## **Arson File**

- 1) There are no values in the **GRP\_INVOL3** field.
- 2) There are two incidents where **MOT\_FACTS1 = MOT\_FACTS2**; three incidents where **MOT\_FACTS1 = MOT\_FACTS3**; four incidents where **MOT\_FACTS2 = MOT\_FACTS3**; and two incidents where **MOT\_FACTS1 = MOT\_FACTS2 = MOT\_FACTS3**.

## **Arson Juvenile Subject File**

- 1) There are 2,280 records with values greater than 17 in the **AGE** field. AGE should only be filled out on the juvenile firesetter module if the person involved in ignition was under age 18. There are 1,365 records with an AGE of 0.
- 2) **RISK\_FACT1** has 57 records with an invalid value of 'Z'.

## **Fire Department Header File**

- 1) **STATE** —There is one record with a state code of US.
- 2) **FD\_FIP\_CTY** — there are many invalid values for the FIPS county codes (some include letters and others are less than three digits).