

## 2020 NFIRS FILES

### Data Quality Notes

These notes reflect the full, all-incident PDR files.

#### Basic Incident File

- 1) **INC\_NO**—there are records with negative values and hyphens in INC\_NO; there are also incident numbers with character values. The NFIRS Complete Reference Guide (CRG) states that the INC\_NO is numeric only.
- 2) **INC\_TYPE**—there are 312 records with INC\_TYPE='110' (4.1 conversion code); there are 200 records with a missing value (required field).
- 3) **AID**—there are 200 records with a missing value (required field). These are the same 200 records as those with missing values in the INC\_TYPE field.
- 4) **ALARM**—there is one record with an alarm date of 1930; there is one record with an alarm date of 2001, there is one record with an alarm date of 2017; there are 12 records with an alarm date of 2019; and there are 55 records with an alarm date of 2021.
- 5) **ARRIVAL**—there is one record with an arrival date of 1930; there is one record with an arrival date of 2001, there is one record with an arrival date of 2017; there are ten records with an arrival date of 2019; and there are 477 records with an arrival date of 2021 (407 of these records have an arrival date of 1/01/2021 with an incident date of 12/31/2020).
- 6) **INC\_CONT**—there is one record with an incident-controlled date of 1930; there is one record with a controlled date of 2001; there is one record with a controlled date of 2017; there are ten records with a controlled date of 2019; and there are 122 records with a controlled date of 2021 (97 of these records have a controlled date of 1/01/2021).
- 7) **LU\_CLEAR**—there are 1,850 records with a last unit cleared date of 2021 (1,725 of these records have a last unit cleared date of 1/01/2021); there is one record with last unit cleared date of 1930; there is one record with a last unit cleared date of 2001; there is one record with a last unit cleared date of 2017; there are 12 records with a last unit cleared date of 2019; there are 18 records that have a last unit cleared date greater than 2021 (e.g., 2022, 9202).
- 8) **ALARMS**—many records have character values in this field (ALARMS is the actual number of alarms transmitted for the incident).
- 9) **ACT\_TAK1**—there are 132 records with a value of 'UU' (not a CRG option); there are 79 records with other invalid values such as '35' and 'ex' (not CRG options); and there are 12,523 records with a missing value where AID='N' with INC\_TYPE ranging from '100' to '911'. These records should have a value in ACT\_TAK1.
- 10) **ACT\_TAK2**—there are 2,650 records with a value of '-'; there are 273 records with a value of 'UU'; there are 192 other records with invalid values such as '35' and 'es' (not CRG options).
- 11) **ACT\_TAK3**—there are 50 records with a value of '-'; there are 22 records with a value of '35'; there is one record with a value of '4'; there are 76 records with a value of '94'; there is one record with a value of 'CI'; there are 23 records with a value of 'UU' (not CRG options).

12) **THREE ACT\_TAK FIELDS—**

- there are 13,670 records where ACT\_TAK1 equals ACT\_TAK2.
- there are 3,125 records where ACT\_TAK1 equals ACT\_TAK3.  
there are 7,636 records where ACT\_TAK2 equals ACT\_TAK3.
- there are 2,061 records where all three ACT\_TAK values are equal.

13) **SUP\_APP, EMS\_APP, OTH\_APP—**for each of these fields, there are records with thousands of apparatus that responded. For **SUP\_APP**, there is one record with a negative value. For **EMS\_APP**, there are two records with negative values. For **OTH\_APP**, there is one record with a negative value.

14) **SUP\_PER, EMS\_PER, OTH\_PER—**for each of these fields, there are records with extremely high values of personnel. For **SUP\_PER**, there are three records with negative values. For **EMS\_PER**, there are two records with negative values.

15) **PROP\_LOSS—**there are 28 records with PROP\_LOSS of \$20 million or more.

16) **CONT\_LOSS—**there are ten records with CONT\_LOSS of \$20 million or more.

17) **PROP\_VAL—**there are 11 records with a value of \$999,999,999.

18) **CONT\_VAL—**there are six records with a value of \$999,999,999.

19) **FF\_DEATH—**although this is a required field, there are 59,793 records with a missing value (all other records have a value of 0 to 6).

20) **FF\_INJ—**although this is a required field, there are 59,803 records with a missing value (all other records have a value of 0 to 82; most of the records with high numbers of ff injuries had SEVERITY=1 on the Fire Service Casualty file).

21) **DET\_ALERT—**there are 6,582 confined fire incident records that have a missing value (CRG indicates this is a required field for confined fires).

22) **PROP\_USE—**there are 229 records with a value of '250'; there is one record with a value of '4 -' and one record with a value of '5 -' (not CRG options). Although a required field, there are 1,354,668 records with a missing value. Of these records, 713,496 have AID = 3, 4 so property use is not required; there are 640,966 records with missing values that have INC\_TYPE = 611 (dispatched and canceled en route) and do not require property use; there are seven records where INC\_TYPE = 138, 140, 143, 311, 324 where property use is required; and there are 199 records with a missing value in INC\_TYPE.

23) **CENSUS—**there are records with data that do not appear to be census tracts.

## **Basic Incident Address File**

- 1) **LOC\_TYPE**—there are 846 records with missing values (required field).
- 2) **NUM\_MILE**—there are records with street names, street types, and apartment numbers in this field.
- 3) **STREET\_PRE**—there is one record with a value of ‘So’ (not a CRG option).
- 4) **STREETNAME**—there are records with entire street addresses including house numbers, street types, and city names.
- 5) **STREETTYPE**—there are 22 records with a value of ‘WAYS’ (not a CRG option).
- 6) **STREETSUUF**—there are six records with a value of ‘ST’ (not a CRG option).
- 7) **APT\_NO**—includes names, street names, city names, etc.
- 8) **CITY**—there are numbers, street addresses, zip codes, etc. in this field.
- 9) **STATE\_ID**—there are two records with a value of ‘TR’ (not a CRG option).
- 10) **ZIP5** includes invalid zip codes (some are less than five digits, include character values, etc.).
- 11) **ZIP4** includes invalid zip codes (some are less than four digits, include character values, etc.).

## **Basic Incident Aid Given or Received File**

- 1) **FDIDRECAID**—there are at least 6,195 records with invalid FDIDs.
- 2) **FDIDSTREC**—there are eight records with invalid state codes (i.e., ‘QC,’ ‘TR,’ ‘YT,’ ‘09,’ ‘32’).
- 3) **INC\_NOFDID**—there are 26,842 records with an incident number of 0; there are records that have invalid incident numbers (e.g., unknown, unable). This field should contain numeric values only.

## **Fire Incident File**

- 1) **NUM\_UNIT**—there are 616 records with a value of -1; there are 285,419 records with a value of 0; and there are two records with a value of 9,000 or greater.
- 2) **BLDG\_INVOL**—there are 69 records that have a value of -1; there are nine records with a value of 999 or greater.
- 3) **ACRES\_BURN**—there are 26 records with a value of -1; there are three records with a value of 999,999 or greater.
- 4) **AREA\_ORIG**—there are 46 records with a value of '57' (not a CRG option); there are 408 records with a missing value. Of these, 405 have INC\_TYPE=110, 113-118, 150-155, 200-911 or AID=3 or 4 for which AREA\_ORIG is not required. Therefore, there are three records with a missing value where it is a required field.
- 5) **HEAT\_SOURC**—there are 406 records with a missing value. Of these, 404 have INC\_TYPE=110, 113-118, 150-155, 200-911 or AID=3 or 4 for which HEAT\_SOURC is not required. Therefore, there are two records with a missing value where it is a required field.
- 6) **FIRST\_IGN**—there are 16 records with a value of '80'; there are 11 records with a value of '90' (not CRG options); there are 408 records with a missing value. Of these, 405 have INC\_TYPE=110, 113-118, 150-155, 200-911 or AID=3 or 4 for which FIRST\_IGN is not required. Therefore, there are three records with a missing value where it is a required field.
- 7) **TYPE\_MAT**—there is one record with a value of '4'; there is one record with a value of '5'; and there are three records with a value of '9' (not CRG options).
- 8) **CAUSE\_IGN**—there are 411 records with a missing value. Of these, 405 have INC\_TYPE=110, 113-118, 150-155, 200-911 or AID=3 or 4 for which CAUSE\_IGN is not required. Therefore, there are six records with a missing value where it is a required field.
- 9) **FACT\_IGN\_1**—there are 2,093 records with a missing value. Of these, 914 have INC\_TYPE=110, 113-118, 150-155, 200-911 or AID=3 or 4 or CAUSE\_IGN=0 for which FACT\_IGN\_1 is not required. Therefore, there are 1,179 records with a missing value where it is a required field.
- 10) **FACT\_IGN\_1 & 2**—there are 10 records where FACT\_IGN\_1 is equal to FACT\_IGN\_2.
- 11) **HUM\_FAC\_8**—there are no records with a value of '8'.
- 12) **HUM\_FAC\_1...HUM\_FAC\_8**—there are 15,731 records where the human factor fields have no values. Of these, 8,707 have INC\_TYPE=110, 113-118, 150-155, 200-911 or AID=3 or 4 or CAUSE\_IGN=0 for which the human factor fields are not required. Therefore, there are 7,024 records that should have values in the human factor fields.
- 13) **AGE**—there is one record with a value of 124; and there is one record with a value of 1,012.
- 14) **SUP\_FAC\_1**—there are 153 records with a value of 'UUU' (not a CRG option).
- 15) **MOB\_TYPE**—there are 164 records with a value of 'UU' (not a CRG option).
- 16) **MOB\_MAKE**—there are 20 records with a value of 'HE' (not a CRG option).
- 17) **MOB\_MODEL**—there are 44 records with values of zero(s); there are records with 'unknown' responses.

- 18) **MOB\_YEAR**—there are six records with a value of 1874 or earlier; there is one record with a value of 2113.
- 19) **EQ\_BRAND**—there are some records with numeric values instead of brand names.
- 20) **EQ\_MODEL**—there are 42 records with values of zero(s); there are records with ‘unknown’ responses.
- 21) **EQ\_SER\_NO**—there are 72 records with values of zero(s); there are records with ‘unknown’ responses as well as information other than serial numbers.
- 22) **EQ\_YEAR**—there are two records with a value of zero.
- 23) **FIRE\_SPRD**—there are 390,143 records with a missing value; this is acceptable as all of these records have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 or STRUC\_TYPE=0, 3-8 or missing for which FIRE\_SPRD is not required.
- 24) **STRUC\_TYPE**—there are 386,085 records with a missing value. Of these, 386,060 have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 for which STRUC\_TYPE is not required. Therefore, there are 25 records with a missing value where it is a required field; of these records, 20 have INC\_TYPE = 111, 121, or 122 and should have a value in this field. The remaining five records had a missing value in INC\_TYPE.
- 25) **STRUC\_STAT**—there are 390,184 records with a missing value; this is acceptable as all of these records have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 or STRUC\_TYPE=0, 3-8 or missing for which STRUC\_STAT is not required.
- 26) **BLDG\_ABOVE**—there are 66 records with stories at or above 110 (eight of these records have a value of 999). There are 388,922 records with a missing value; this is acceptable as all of these records have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 or STRUC\_TYPE=0, 3-8 or missing for which BLDG\_ABOVE is not required.
- 27) **BLDG\_BELOW**—there are 14 records with value of -1; there are 51 records with stories below grade of 35 or more (27 of these records have a value of 99). There are 389,058 records with a missing value; this is acceptable as all of these records have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 or STRUC\_TYPE=0, 3-8 or missing for which BLDG\_BELOW is not required.
- 28) **BLDG\_LGTH**—there are 545 records with a value of 0; there are four records with a value of 9999 or greater. There are 512,969 records with a missing value; of these records, 404,929 have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 or STRUC\_TYPE=0, 3-8 or missing for which BLDG\_LGTH is not required. The remaining 108,040 records with a missing value in BLDG\_LGTH have a value in TOT\_SQ\_FT.
- 29) **BLDG\_WIDTH**—there are 552 records with a value of 0; there are six records with a value of 9999 or greater. There are 512,969 records with a missing value; of these records, 404,929 have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 or STRUC\_TYPE=0, 3-8 or missing for which BLDG\_WIDTH is not required. The remaining 108,040 records with a missing value in BLDG\_WIDTH have a value in TOT\_SQ\_FT.

- 30) **TOT\_SQ\_FT**—there is one record with a value of -500; there are 2,226 records with a value of 0; there are two records with a value of 99,999,999. There are 419,377 records with a missing value; of these, 393,346 records have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 or STRUC\_TYPE=0, 3-8 or missing for which TOT\_SQ\_FT is not required. The remaining 26,031 records with a missing value in TOT\_SQ\_FT have values in BLDG\_LGTH and BLDG\_WIDTH.
- 31) **FIRE\_ORIG**—there are 85 records with values greater than 99 (46 of these have a value of 999). There are 389,509 records with a missing value; this is acceptable as all of these records have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 or STRUC\_TYPE=0, 3-8 or missing for which FIRE\_ORIG is not required.
- 32) **ST\_DAM\_MIN**—there are four records with a value of -1; and there is one record with a value of 1,001.
- 33) **ST\_DAM\_HVY**—there are two records with a value of -1.
- 34) **ITEM\_SPRD**—there are four records with a value of '80'; there are three records with a value of '90'; and there are 402 records with a value of '99' (not CRG options).
- 35) **MAT\_SPRD**—there are seven records with a value of '28' and there are 1,037 records with a value of '99' (not CRG options).
- 36) **DETECTOR**—there are 391,024 records with a missing value; this is acceptable as all of these records have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 or STRUC\_TYPE=0, 3-8 or missing for which DETECTOR is not required.
- 37) **AES\_PRES**—there are 390,786 records with a missing value; this is acceptable as all of these records have INC\_TYPE=100, 110, 113-118, 130-911 or AID=3 or 4 or STRUC\_TYPE=0, 3-8 or missing for which AES\_PRES is not required.
- 38) **NO\_SPR\_OP**—there is one record with a value of 1,110; and there is one record with a value of 1,000,000,000.

## **Civilian Fire Casualty File**

- 1) **AGE**—there are 24 records where age is greater than 105 (this includes one record with an age of 999); there are 177 records where age is 0; and there is one record with a missing value (required field).
- 2) **AFFILIAT**—there is one record with a value of 'U' (not a CRG option).
- 3) **CAUSE\_INJ**—there is one record with a value of 'N' (not a CRG option).
- 4) **INJ\_DT\_TIM**—there is one record with an injury date year of 2000 and one with 2019.
- 5) **FACT\_INJ1**—there are nine records with a value of 'UU' (not a CRG option).
- 6) **FACT\_INJ2**—there are three records with a value of 'UU' (not a CRG option).
- 7) **FACT\_INJ3**—there is one record with a value of 'UU' (not a CRG option).
- 8) **FACT\_INJ fields**—there are two records where FACT\_INJ2=FACT\_INJ3.
- 9) **PRIM\_SYMP**—there are 77 records with a value of 'NN' (not a CRG option).
- 10) **BODY\_PART**—there are four records with a value of '0'; there are seven records with a value of 'U' (not CRG options).
- 11) **CC\_DISPOS**—there are 163 records with a value of 'N'; the rest of the records where CC\_DISPOS was reported have a value of '1'.

## **Fire Service Casualty File**

- 1) **AGE**—there are 914 records with a value of 0; there are 177 records with an age ranging from 1 to 9; there are 28 records with an age over 90 (one of these has an age of 999).
- 2) **RESPONSES**—there is one record with a value of -2; there is one record with a value of 40 and one record with a value of 65.
- 3) **ASSIGNMENT**—there are two records with a value of ‘U’ (not a CRG option).
- 4) **SEVERITY**—there are 99 records with a value of ‘U’ (not a CRG option).
- 5) **TAKEN\_TO**—there are 51 records with a value of ‘U’ (not a CRG option).
- 6) **SYMPTOM**—there are 13,475 records with a value of ‘NN’ (not a CRG option).
- 7) **PABI**—there are six records with a value of ‘30’; there are ten records with a value of ‘60’; there are eight records with a value of ‘70’ (not CRG options).
- 8) **FACTOR**—there is one record with a value of ‘9’ (not a CRG option).
- 9) **LOCATION**—there are 313 records with a value of ‘NN’ (not a CRG option).
- 10) **VEHICLE**—there is one record with a value of ‘U’ (not a CRG option).

## **Fire Service Equipment Failure File**

- 1) **EQUIP\_ITEM**—there is one record with a missing value.
- 2) **EQP\_PROB**—there are 20 records with a value of ‘NN’ (not a CRG option).

## **Wildland Fire File**

- 1) **LATITUDE**—there are 4,295 records with a value of 0.00 and there are 56 records with negative values (in the U.S., values of latitude are positive).
- 2) **LONGITUDE**—there are 4,292 records with a value of 0.00 and there are an additional 7,393 records with positive values (in the U.S., values of longitude are negative).
- 3) **TOWNSHIP**—there are 120 records with a value of 0; there are 152 records with a value greater than 36.
- 4) **NORTH\_SOU**—there is one record with a value of ‘R’ (not a CRG option).
- 5) **SECTION**—there are 36 records with a value of 0; there are eight records with a value greater than 36.
- 6) **AREA\_TYPE**—there are 38 records with missing values (required field).
- 7) **FIRE\_CAUSE**—there are 40 records with missing values (required field).
- 8) **HUM\_FACT8**—this field consists of all missing values.
- 9) **HUM\_FACT1...HUM\_FACT8**—there are 3,218 records where the human factor fields have no values (required field).
- 10) **FACT\_IGN1**—there are 2,928 records with missing values (required field).
- 11) **FACT\_IGN fields**—there is one record where **FACT\_IGN1** equals **FACT\_IGN2**.
- 12) **SUPP\_FACT1**—there are 21 records with a value of ‘UUU’ (not a CRG option).
- 13) **SUPP\_FACT1...SUPP\_FACT3**—there is one record where **SUPP\_FACT1** equals **SUPP\_FACT2**.

- 14) **HEAT\_SOURC**—there are 45 records with missing values (required field); and there are 37 records with invalid values of ‘1’, ‘4’ to ‘9’ (CRG specifies a two-digit HEAT\_SOURC code).
- 15) **MOB\_PROP**—there are 26 records with a value of ‘UU’ (not a CRG option).
- 16) **EQ\_INV\_IGN**—there is one record with a value of ‘8 -’ (not a CRG option).
- 17) **NFDRS\_ID**—there are records that have invalid values as they contain less than six characters in the id number and include character values. CRG specifies a six-character ID.
- 18) **WIND\_SPEED**—there are seven records with a value greater than 100 mph.
- 19) **AIR\_TEMP**—there is one record with a negative value (-1); there is one record with a value of 858 degrees F.
- 20) **REL\_HUMID**—there are ten records with a relative humidity of over 100%.
- 21) **FUEL\_MOIST**—fuel moisture generally ranges from 0% to 25%; there are 93 records with values ranging from 28 to 90; there is also one record with a value of \*\*.
- 22) **BLDG\_THR**—there is one record with a value of 500,000.
- 23) **FED\_CODE**—there are records with federal agency codes that do not match ones that are options in the CRG (e.g., some with numeric values and others with less than five-character values, etc.).
- 24) **ACRES\_BURN**—there are 44 records with missing values (required field); there is one record with a value of 99,999,999 and one record with a value of 100,000,000.
- 25) **CROP\_BURN1, CROP\_BURN2, CROP\_BURN3**—there are records with numerical values in these fields as opposed to listing the type(s) of crops; there are 104 records where CROP\_BURN1=CROP\_BURN2; 99 records where CROP\_BURN1=CROP\_BURN3; 100 records where CROP\_BURN2=CROP\_BURN3; and 98 records where CROP\_BURN1=CROP\_BURN2=CROP\_BURN3.
- 26) **UNDET\_BURN**—there is one record with a negative value.
- 27) **TAX\_BURN**—there is one record with a negative value.
- 28) **NOTAX\_BURN**—there is one record with a negative value.
- 29) **LOCAL\_BURN**—there is one record with a negative value.
- 30) **COUNTY\_BURN**—there is one record with a negative value.
- 31) **ST\_BURN**—there is one record with a negative value.
- 32) **FED\_BURN**—there is one record with a negative value.
- 33) **FOREI\_BURN**—there is one record with a negative value.
- 34) **MILIT\_BURN**—there is one record with a negative value.
- 35) **OTHER\_BURN**—there is one record with a negative value.
- 36) **AGE**—there are 10,845 records with an age of 0; there are ten records with an age value of 120; there is one record with an age value of 999.
- 37) **ELEVATION**—there is one record with a negative value; there are 7,214 records with a value of 0 feet; there is one record with a value greater than 20,000 feet.
- 38) **FLAME\_LGTH**—there are 7,563 records with a value of 0; there are four records with a value of \*\*.
- 39) **SPREAD\_RAT**—there are 6,839 records with a value of 0.



## **EMS File**

- 1) **ARRIVAL**—there are 1,785 records where the date has a year other than 2020; 1,689 of these records have a date of 2019 and 61 records have a date of 2021 (only 16 of these records have a date of 01/01/2021). The remaining records have a date ranging from 1899 to 2062.
- 2) **TRANSPORT**—there are 1,081 records where the date has a year other than 2020; 994 of these records have a date of 2019 and 72 records have a date of 2021 (only 28 of these records have a date of 01/01/2021). There are nine records with a date of 1899, one record with a date of 2018, three records with a date of 2022, one record with a date of 2030 and one record with a date of 5000.
- 3) **PROVIDER\_A**—there are four records with missing values (required field).
- 4) **AGE**—there are 9,549 records where AGE is 0; there are 177 records where AGE is greater than 110 (35 of these records have an AGE greater than 120 and 23 of these have an AGE of 999).
- 5) **GENDER**—there are two records with a value of ‘3’, two with a value of ‘F’, and one with a value of ‘M’ (not CRG options).
- 6) **SITE\_INJ1**—there are 983 records with a value of ‘N’ (not a CRG option).
- 7) **PROC\_USE20**—contains all missing values.
- 8) **SAFE\_EQP7** and **SAFE\_EQP8**—these fields contain all missing values. Additionally, there are no values of ‘N’ in the first field **SAFE\_EQP1**, and there are no values of ‘U’ or ‘0’.
- 9) **ARR\_DES1**—includes values ‘1’ and ‘2’ for both descriptors.
- 10) **ARR\_DES2**—contains all missing values.
- 11) **IL\_CARE**—there are 488,801 records with missing values (required field).

## **Hazardous Material File**

- 1) **REL\_FROM**—there is one record with a value of ‘3’ (not a CRG option).
- 2) **REL\_STORY**—of 4,593 records that reported ‘outside of structure’ (value of ‘2’) in the REL\_FROM field, 1,994 records have a numeric value in the REL\_STORY field (although 1,725 of these have a value of 0).
- 3) **AFFEC\_UNIT**—there are 8,609 records with a numeric value in the AFFEC\_MEAS field. Of these, only 5,836 records contained a value in the AFFEC\_UNIT field that defines the unit of measurement.
- 4) **EVAC\_UNIT**—there are 4,682 records with a numeric value in EVAC\_MEAS field. Of these, only 1,435 records contained a value in the EVAC\_UNIT that defines the unit of measurement.
- 5) **CAUSE\_REL**—there are 1,697 records with a missing value (required field).
- 6) **HAZ\_DISPO**—there are seven records with a missing value (required field).

## **Hazardous Material Chemical File**

- 1) **UN\_NUMBER**—there are two records with a value of 0 and one record with a value of 0000; there are several records with less than four digits (UN\_NUMBER is a four-digit number); there is one record with a value of ‘NA’; there is one record with a value of ‘uu’; and there is one record with a value of ‘UN19’.
- 2) **DOT\_CLASS**—there are four records with a value of ‘20’; one record with a value of ‘50’; one record with a value of ‘60’; and four records with a value of ‘90’ (not CRG options).
- 3) **CAS\_REGIS**—there are three records with a non-numeric value.
- 4) **CHEM\_NAME**—there are 3,889 records with missing values (required field); there are also many records with a numeric value.
- 5) **CAP\_UNIT**—of the 5,316 records with a value in the CONT\_CAP field, there are 2,804 records with a missing value in the CAP\_UNIT field.
- 6) **AMOUNT\_REL**—there are two records with a negative value; there are 4,472 records with missing values (required field).
- 7) **UNITS\_REL**—of the 7,611 records with values in the AMOUNT\_REL field, there are 201 records with a missing value in the UNITS\_REL field.

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

**MP\_YEAR**—there are five records with a value of -1; there are 11 records with a value of 0; and there are four records with a value of 97 or less.

## **Hazardous Material Equipment Involved File**

**EQ\_YEAR**—there are five records with a value of -1; and there are ten records with a value of 0.

## **Arson File**

**MOT\_FACTS** fields—there are two records where **MOT\_FACTS1** = **MOT\_FACTS3**; there is one record where **MOT\_FACTS1** = **MOT\_FACTS2** = **MOT\_FACTS3**.

## **Arson Juvenile Subject File**

- 1) **AGE**—there are 623 records where **AGE**=0; there are 1,207 records where **AGE** values are greater than 17 (four of these records have an **AGE** value greater than 100). **AGE** should only be completed on the Juvenile Firesetter Module if the person involved in ignition was under age 18.
- 2) **RISK\_FACT1**—there are 52 records with value of 'Z' (not a CRG option).
- 3) **RISK\_FACT5**—contains all missing values.

## **Arson Agency Referral File**

- 1) **AGENCY\_NAM**—there are some records with invalid agency names (e.g., '20007596', '4 m ranch').
- 2) **AG\_ST\_NUM**—there are a few records with street addresses in this field (e.g., '1685 S', 'Hewitt').
- 3) **AG\_STREET**—there are records that only include the street number in the street name field as well as the full street address with street type (e.g., 1 Bear Valley Road; 1008 W First ST).
- 4) **AG\_APT\_NO**—there are records with building numbers and floor numbers.
- 5) **AG\_CITY**—there are several records with only a zip code and one record with a street address (14 Manning St).
- 6) **AG\_ZIP5**—there are three records with a zip code of '00000' (not a valid zip code).
- 7) **AG\_ZIP4**—there are some invalid zip4 values; one that starts with a '-' and two where zip4 is '0000'.
- 8) **AG\_PHONE**—there are 36 records where the phone number contains all zero values; and there are several records with incomplete phone numbers.
- 9) **AG\_CASE\_NO**—there are 294 records where the case numbers contain all zero values; there are records with responses containing character values rather than numeric case numbers.
- 10) **AG\_ORI**—there are some records that contain character values in this field.
- 11) **AG\_FID**—there are records containing one-character values in this field; CRG indicates the **AG\_FID** is a two-character identification number.
- 12) **AG\_FDID**—there are 48 records with zero values in this field; there are a few records with invalid FDIDs (e.g., CO, UKN, other).

## **Fire Department Header File**

- 1) **FD\_NAME**—this field contains some records that are numbers or FDIDs; some appear to be addresses.
- 2) **FD\_STR\_NO**—there are some records that contain ‘PO BOX’ in the street number field and other invalid street numbers and names.
- 3) **FD\_STREET**—there are records that include the street number in the street name field as well as the full street address; there are also records that include ‘PO BOX’ in this field.
- 4) **FD\_STR\_TYP**—there is one record with a value of ‘30’; there is one record with a value of ‘AVEN’ (not a CRG option); there are other records with invalid street type codes (e.g., ‘Roas’).
- 5) **FD\_CITY**—there are a few records with number values or street addresses.
- 6) **FD\_ZIP**—there are 121 records with zip code values of zero/zeros; there are 135 records with four leading zeros; and there is one record with a zip code of ‘99999’ (not valid zip codes).
- 7) **FD\_PHONE**—there are at least 116 records with invalid phone numbers; others are incomplete or include character values.
- 8) **FD\_FAX**—similar issues as seen with FD\_PHONE field.
- 9) **FD\_EMAIL**—email addresses appear to be invalid (contain no @ symbols or periods).
- 10) **FD\_FIP\_CTY**—there are records with invalid values for the FIPS County Code; some of the codes are less than three digits and include character values. FIPS County Codes are numeric.
- 11) **NO\_PD\_FF**—there are three records with a value of 9999.
- 12) **NO\_VOL\_FF**—there are eight records with a value of 1000 or more.
- 13) **NO\_VOL\_PDC**—there are 15 records with a value greater than 500.