

9-1-1 Database Work

MSAG and Map Clean-Up Projects

Master Street Address Guide (MSAG)

- The MSAG is a tabular listing of all streets with the low and high address ranges that fall within a specified community and a unique ESN (emergency service number)
- Used for 9-1-1 database verification

MSAG Responsibility

- Streets and addresses belong to each local government, it is the responsibility of that jurisdiction to ensure information is correct with phone companies that provide service in your area.
- Each jurisdiction should have a dedicated person to help with addressing/mapping questions. This person is referred to as the “MSAG Coordinator”.
- In some cases, authorization is given for an MSAG Coordinator to cover multiple jurisdictions.

Creation of the 9-1-1 Database

- All customer records are loaded to the master 9-1-1 database by each phone company
- Each telephone company still maintains own database for internal purposes (911, directory, billing, service, etc.)
- Records must “FIT” the MSAG
 - (point of validation)



National Standards for Addressing

Standards are in place for addressing. When using street directional and type (suffix) is important to follow standards.

Helpful documents:

NENA- Synchronizing GIS with MSAG & ALI- 71-501 v1

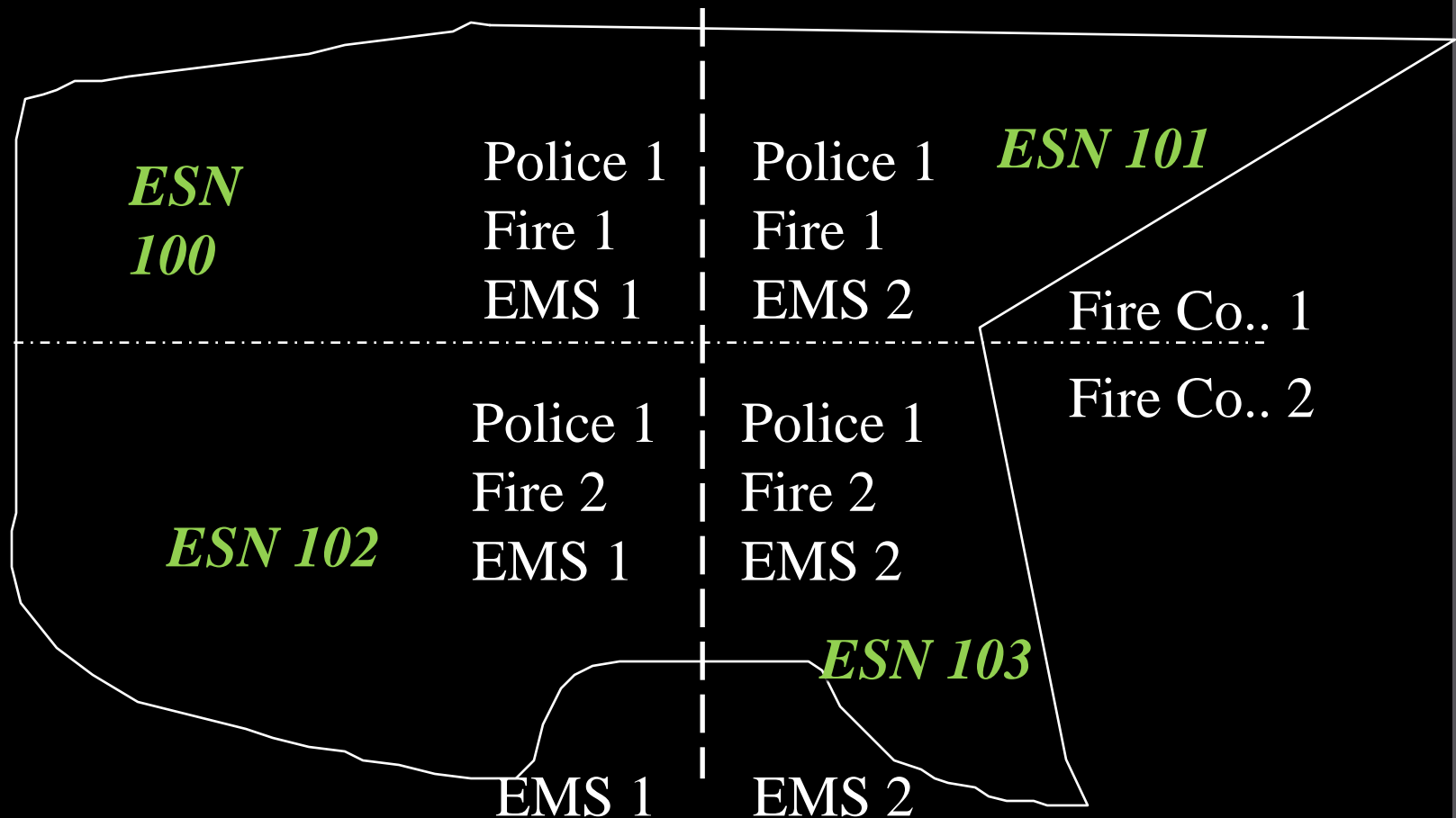
https://www.nena.org/?page=synch_gis_msag_ali

USPS- Addressing Guidelines

<http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf>

Creating the MSAG

City PD covers entire city



Sample MSAG

| STREET | LOW RANGE | HIGH RANGE | ODD/EVEN | COMMUNITY | ESN | EXCHANGE |
|---------------------|-----------|------------|----------|--------------|-----|----------|
| N 1ST STREET CT | 1600 | 1873 | B | BLUE SPRINGS | 5 | BLS |
| E 2TH ST | 1705 | 3099 | B | BLUE SPRINGS | 5 | BLS |
| E 4TH ST | 100 | 199 | B | BLUE SPRINGS | 3 | BLS |
| E 40 HWY | 22600 | 23609 | B | BLUE SPRINGS | 5 | BLS |
| E 40 HWY | 23611 | 24399 | B | BLUE SPRINGS | 5 | BLS |
| E 40 HWY | 26000 | 29999 | B | BLUE SPRINGS | 5 | BLS |
| E 40 HWY | 29405 | 29405 | O | BLUE SPRINGS | 5 | GRV |
| E AA HWY | 100 | 1245 | B | BLUE SPRINGS | 5 | BLS |
| E NEW 40 HWY | 22401 | 25999 | O | BLUE SPRINGS | 5 | BLS |
| E PINK HILL RD | 104 | 649 | B | BLUE SPRINGS | 5 | BLS |
| E SOUTH AVE | 200 | 499 | B | BLUE SPRINGS | 5 | BLS |
| E WALNUT ST | 100 | 126 | E | BLUE SPRINGS | 5 | BLS |
| RD MIZE RD | 1100 | 1174 | B | BLUE SPRINGS | 5 | BLS |
| MAIN ST | 1744 | 1766 | B | BLUE SPRINGS | 5 | BLS |
| NE ADAMS DAIRY PKWY | 701 | 701 | B | BLUE SPRINGS | 5 | BLS |
| N 1ST STREET CT | 100 | 535 | B | BLUE SPRINGS | 3 | BLS |
| NE BAY CT | 206 | 376 | B | BLUE SPRINGS | 5 | BLS |
| NE KNOX PL | 1000 | 1099 | B | BLUE SPRINGS | 5 | BLS |



9-1-1 Community is the jurisdiction- within a city or unincorporated county

ALI Delivery

Deliver Customer Record Plus the Agency File:

Customer: 816-555-1234 (time) (date)

JOHN Q. PUBLIC

600 BROADWAY

KANSAS CITY MO

TELCO ATT

Agency: KC MO PD ESN 015

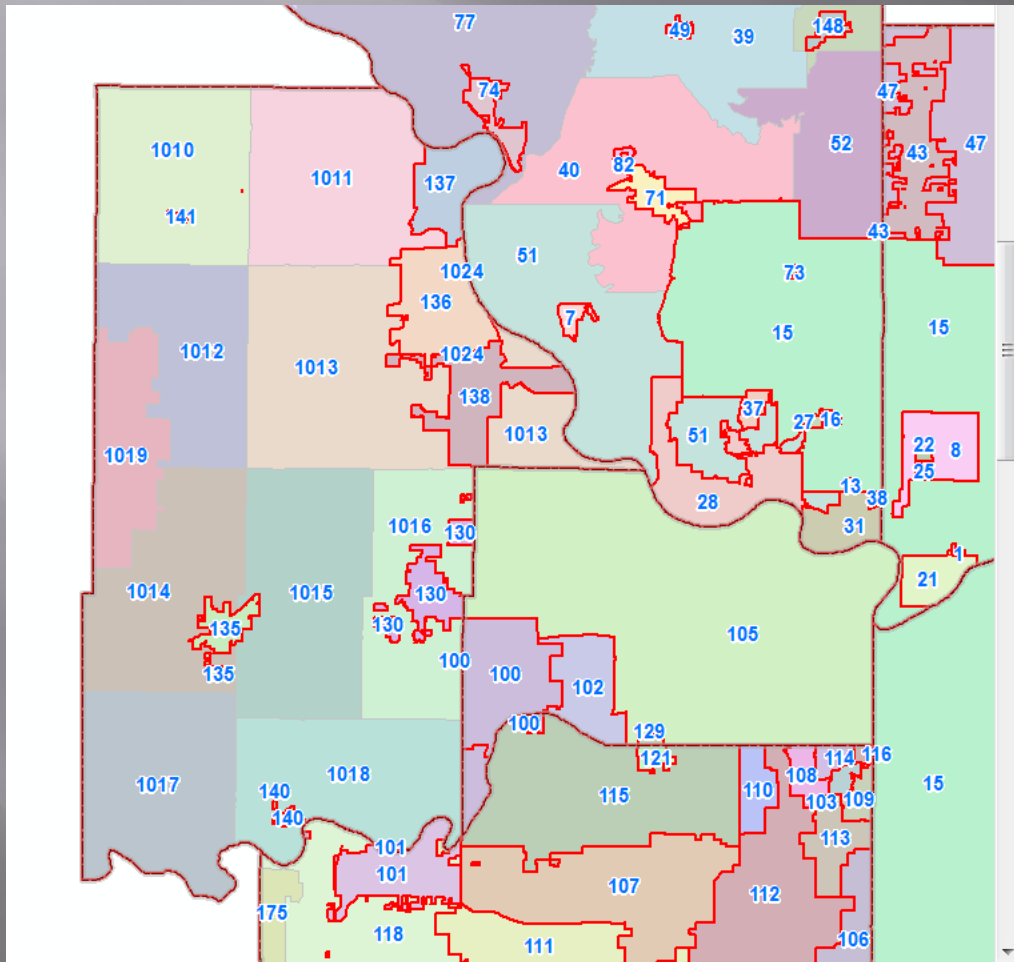
KC MO FD

KC MO EMS

ESN Breakdown

| ESN | COMMUNITY | PSAP | LAW ENFORCEMENT | FIRE | EMS |
|-----|--------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1 | AVONDALE | N KC PD | CLAY COUNTY SHERIFF | AVONDALE FD | KC MO EMS |
| 2 | BIRMINGHAM | CLAY COUNTY SHERIFF | BIRMINGHAM PD | CLAYCOMO FD | CLAYCOMO EMS |
| 3 | BLUE SPRINGS | BLUE SPRINGS PD | BLUE SPRINGS PD | PRAIRIE TOWNSHIP FIRE | PRAIRIE TOWNSHIP FIRE |
| 4 | BELTON | BELTON PD | BELTON PD | BELTON FD | BELTON FD |
| 5 | BLUE SPRINGS | BLUE SPRINGS PD | BLUE SPRINGS PD | CENTRAL JACKSON CO FD | CENTRAL JACKSON CO FD |
| 6 | CLAYCOMO | CLAY COUNTY SHERIFF | CLAYCOMO PD | CLAYCOMO FD | CLAYCOMO FD |
| 7 | FARLEY | PLATTE COUNTY SHERIFF | PLATTE COUNTY SHERIFF | SO PLATTE CO FD | MAST |
| 8 | GLADSTONE | GLADSTONE PD | GLADSTONE PD | GLADSTONE FD | GLADSTONE FD |
| 9 | GLENAIRE | CLAY COUNTY SHERIFF | CLAY COUNTY SHERIFF | PLEASANT VALLEY FD | LIBERTY EMS |
| 10 | GRANDVIEW | GRANDVIEW PD | GRANDVIEW PD | GRANDVIEW FD | GRANDVIEW FD |

Emergency Service Number Map Layer



ESN is the unique set of law enforcement, fire and EMS response based on 911 community (city or unincorporated county) and PSAP.

When to submit MSAG/GIS changes

Examples of changes:

- New construction
- Changes to street names, directional, type
- Extending or reducing street ranges
- New political boundaries
- Adjustments to emergency services response areas

How to submit MSAG/GIS changes

MSAG changes may be made:

- Through a secure site online with your database provider
- Mass changes using a spreadsheet

Example of MSAG to GIS errors

Map showing a street grid with a red circle around '21900 W 43RD ST' and a yellow line highlighting a row in the table below.

| STREET | FROMLEFT | TOLEFT | FROMRIGHT | TORIGHT | CO_STREET | ESN_LT | ESN_RT | CITY_LT | CITY_RT |
|---------|----------|--------|-----------|---------|-----------|--------|--------|---------|---------|
| W 43 ST | 0 | 0 | 0 | 0 | W 43RD ST | 115 | 115 | 64500 | 64500 |
| W 43 ST | 21101 | 23099 | 21100 | 23098 | W 43RD ST | 115 | 115 | 64500 | 64500 |
| W 43 ST | 23101 | 23799 | 23100 | 23798 | W 43RD ST | 115 | 115 | 64500 | 64500 |
| W 43 ST | 23801 | 24049 | 23800 | 24048 | W 43RD ST | 115 | 100 | 64500 | 64500 |
| W 43 ST | 24051 | 24699 | 24050 | 24698 | W 43RD ST | 115 | 115 | 64500 | 64500 |
| W 43 ST | 24701 | 25099 | 24700 | 25098 | W 43RD ST | 115 | 115 | 64500 | 64500 |
| W 43 ST | 25101 | 25355 | 25100 | 25240 | W 43RD ST | 115 | 115 | 64500 | 64500 |

MSAG Record

Pre-Dir Street: W 43RD ST St. Sfx. Post-Dir

Community: BONNER SPRINGS County: 091 State: KS

TN Comment: MSAG Comment: CHG COUNTY CODE FROM 209 PER MARIA/EHL

| O/E/B | Lo House # | Hi House # | ESN | Exchg. |
|-------|------------|------------|-----|--------|
| B | 21900 | 24000 | 100 | BON |

ESN does not match in MSAG and Map data

MSAG Record

Addresses being used:
850 N Stillhouse Rd
850 S Stillhouse Rd
850 E McQuerry Rd

Home is not assessable from Stillhouse Rd.

Example of MSAG to GIS errors

| STREET | COMMUNITY | ESN |
|--------------------|--------------|-----|
| 406 N CONCORD CIR | INDEPENDENCE | 14 |
| 508 N CONCORD CIR | INDEPENDENCE | 14 |
| 703 N CONCORD CIR | INDEPENDENCE | 14 |
| 802 N CONCORD CIR | INDEPENDENCE | 14 |
| 805 N CONCORD CIR | INDEPENDENCE | 14 |
| 806 N CONCORD CIR | INDEPENDENCE | 14 |
| 1108 N CONCORD CIR | INDEPENDENCE | 14 |
| 1109 N CONCORD CIR | INDEPENDENCE | 14 |
| 1501 N CONCORD CIR | INDEPENDENCE | 14 |
| 1903 N CONCORD CIR | INDEPENDENCE | 14 |
| 2204 N CONCORD CIR | INDEPENDENCE | 14 |
| 2403 N CONCORD CIR | INDEPENDENCE | 14 |
| 2502 N CONCORD CIR | INDEPENDENCE | 14 |



All records in apartment complex errored because of duplicate line segments in map.

MSAG Record

| | | |
|----------------|----------------------------------|------------|
| Pre-Dir Street | St. Sfx. | Post-Dir |
| N CONCORD CIR | | |
| Community | County | State |
| INDEPENDENCE | 095 | MO |
| TN Comment | MSAG Comment | |
| | ADD COUNTY CODE PER SARALYN/MARC | |
| O/E/B | Lo House # | Hi House # |
| B | 101 | 2707 |
| | ESN | Exchg. |
| | 14 | IND |

Related TN(s)

[Related MSAG CR\(s\)](#)

Phone Company Contacts

AT&T:

Database Manager Jennifer Knight jv2339@att.com

For access to website, contact e911southwest@att.com

CenturyLink:

Database Manager Missy Greer, Missy.Greer@centurylink.com

For access to website, contact cs-centurylink-911@centurylink.com

NG911 contact Michelle Lewis, Michelle.A.Lewis@CenturyLink.com

AT&T secure site

This site works well for submitting a few changes or mass (common) changes

Change desired MSAG fields and click the Submit button.
(* Indicates a required field.)

Current MSAG Record

| | | | |
|----------------------|----------------------------------|----------------------|----------------------|
| Pre-Dir | Street | St. Sfx. | Post-Dir |
| <input type="text"/> | ADAMS ST | <input type="text"/> | <input type="text"/> |
| Community | County | State | |
| KANSAS CITY | 209 | KS | |
| TN Comment | MSAG Comment | | |
| <input type="text"/> | ADD COUNTY CODE PER SARALYN/MARC | | |
| O/E/B | Lo House # | Hi House # | ESN Exchg. |
| B | 500 | 799 | 105 KCK |

Related TN(s) Preview records found.

[Related MSAG\(s\)](#) Show

[Related MSAG CR\(s\)](#) Show

MSAG Record Change Restore

1 *Select the type of change you wish to make.

2

| | | | |
|----------------------|----------------------------------|----------------------|----------------------|
| Pre-Dir | *Street | St. Sfx. | Post-Dir |
| <input type="text"/> | ADAMS ST | <input type="text"/> | <input type="text"/> |
| *Community | County | *State | |
| KANSAS CITY | 209 | KS | |
| TN Comment | MSAG Comment | | |
| <input type="text"/> | ADD COUNTY CODE PER SARALYN/MARC | | |
| *O/E/B | Lo House # | Hi House # | *ESN Exchg. |
| B | 500 | 799 | 105 KCK |



A log-in and password must be obtained by your database provider to use the site

Mass changes using Excel

When numerous changes are needed, a spreadsheet may be more efficient.

| DIR | STREET | LOW | HIGH | O/E/B | COMMUNITY | ESN | EXCH | COMMENTS |
|-----|-----------------|-----------|-----------|-------|---|------|------|-------------------------------------|
| NE | BURGANDY CT | 1200 1217 | 1499 1321 | B | LEE'S SUMMIT | 19 | LSM | CHANGE LOW & HIGH |
| NE | IVORY LN | 1600 | 1599 1649 | B | LEE'S SUMMIT | 19 | LSM | INCREASE HIGH |
| NE | JADE CT DR | 1525 | 1699 1627 | B | LEE'S SUMMIT | 19 | LSM | CORRECT STREET TYPE & HIGH |
| NE | VALLEY FORGE DR | 920 | 1499 1427 | B | LEE'S SUMMIT | 19 | LSM | INCREASE HIGH |
| NE | WOODS CHAPEL RD | 1500 | 1899 2099 | B | LEE'S SUMMIT | 19 | IND | INCREASE HIGH |
| SW | REGENCY DR | 2545 2543 | 2625 | B | LEE'S SUMMIT | 19 | LSM | CHANGE LOW |
| SW | CLARK RD | 1506 | 1608 | E | BLUE SPRINGS JACKSON COUNTY | 5 55 | BLS | CHANGE COMMUNITY, AND ESN |
| SW | CLARK RD | 1601 1609 | 1609 | O | JACKSON COUNTY BLUE SPRINGS | 55 5 | BLS | CHANGE COMMUNITY, ESN, AND RANGE |



When submitting changes, it's important to be consistent and clear. Be sure to verify any changes you request once the phone company advises the work is complete.

9-1-1 Error Reports

MSAG clean up is important but so are accurate customer records.

ANI/ALI errors should be reported to the 9-1-1 database provider any time there is a problem recognized by call takers.

Examples of problems:

- Record Not Found
- Incorrect address
- Incorrect ESN or community name
- Call misrouted to wrong agency
- Incorrect phone number

Changes with NG 9-1-1

- MSAG & Map data will merge into one file
- Will still need to maintain a list of valid addresses and streets for each jurisdiction
- Emergency response areas
- Your data must be in sync for the databases to merge

9-1-1 Data: we must all work together

