

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

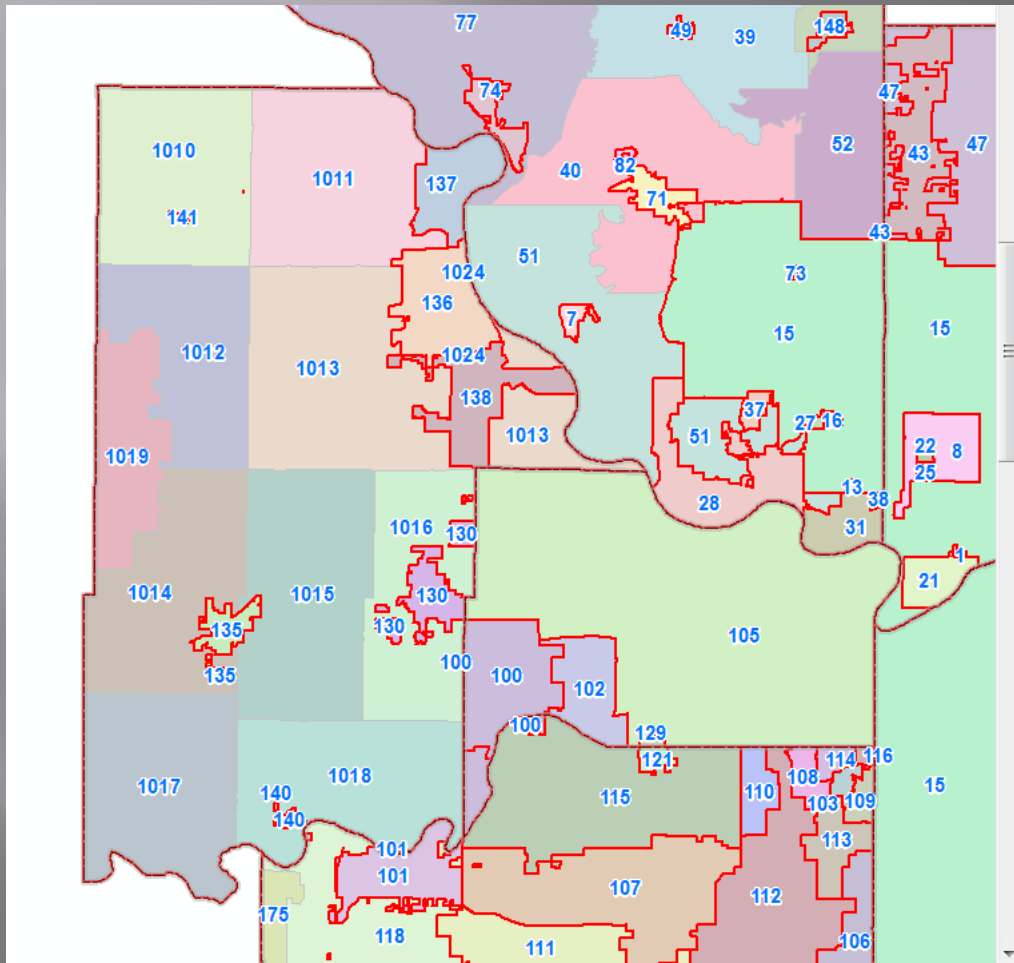
KC MO FD

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

Table

Roads Johnson

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

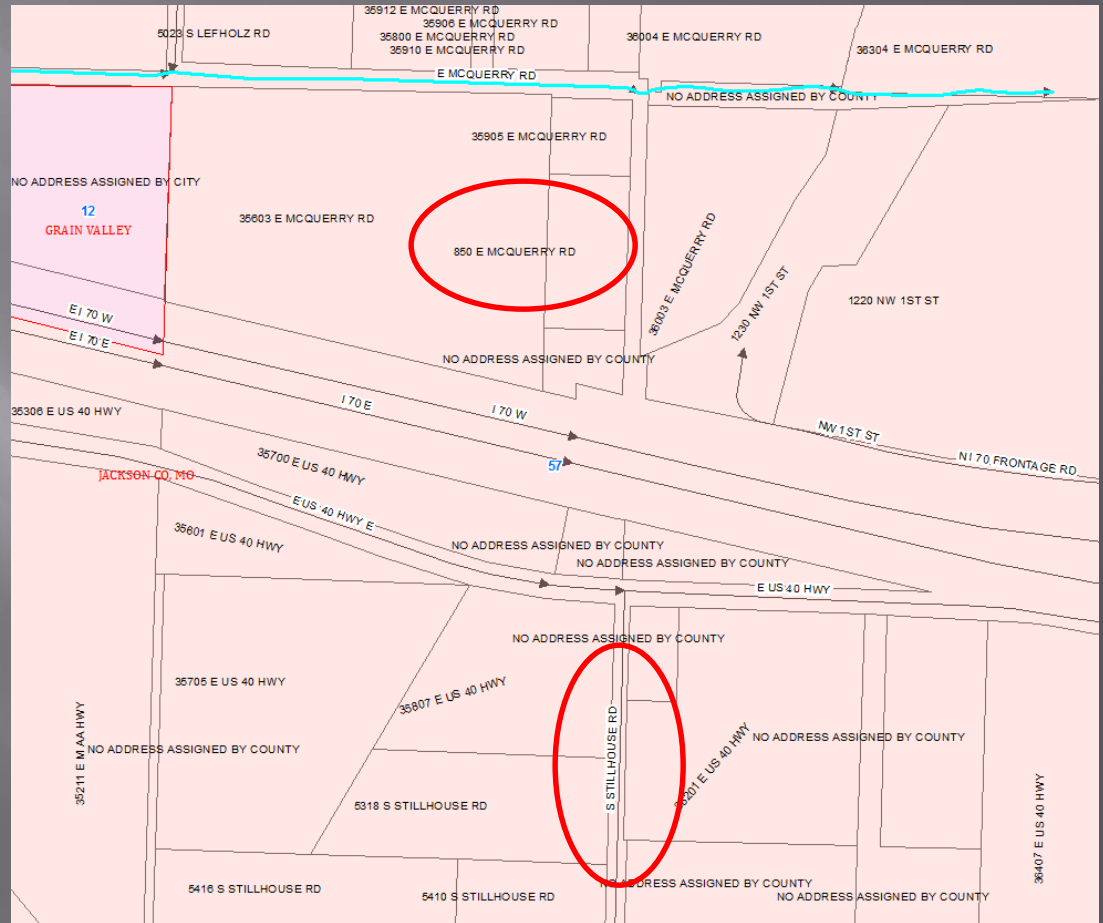
Community: BONNER SPRINGS County: 091 State: KS

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

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

ESN does not match in MSAG and Map data

Example of MSAG to GIS errors



MSAG Record

Pre-Dir	Street	St. Sfx.	Post-Dir
N	STILLHOUSE RD		
Community	JACKSON COUNTY	County	State
		095	MO
TN Comment	MSAG Comment		
	ADD COUNTY CODE PER SARALYN/MARC		
O/E/B	Lo House #	Hi House #	ESN
B	850	850	57
			Exchg.
			OKGV

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		
	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.
Change Request

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		
	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

