

# Mid-America Regional Council 9-1-1 Program



## Voluntary Addressing Guidelines for Local Governments



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# Kansas City Regional 9-1-1 System Voluntary Addressing Guidelines

## Introduction

The emergency telephone number system in operation in the metropolitan Kansas City area is an enhanced system that automatically displays the address of a caller at an emergency call answering center. If a caller is hysterical, becomes unconscious, or hangs up, the answering center will know where to send help, provided the address displayed is accurate. This is also true if the caller does not speak English or is unfamiliar with his or her location, such as an out-of-state visitor.

The primary goal of the E9-1-1 addressing process is to link each telephone number to a permanent, unique address that clearly identifies where a caller is physically located. This requires the creation of a physical address for any property that currently has a telephone, might have one installed, or might be occupied by someone using a wireless phone. The most important reason for creating physical addresses is for the quick location of properties by law enforcement, fire, and emergency medical services. In creating new addresses, a community should assign each property a single address that can be used for emergency service, mail delivery, private delivery services, municipal records, utilities, etc. The creation of physical addresses is the responsibility of municipalities and/or counties. Street name and address assignment is a basic function of local government and it is often perceived as a relatively mundane task until something goes wrong and a problem arises. Unfortunately, the current address assignment process has created a number of problems in the past. The purpose of this document is to provide address assignment standards throughout Kansas City metropolitan region for those agencies in the region that participate in the regional 9-1-1 system.

Many of the current problems stem from the fact that addressing is generally performed without consistent guidelines and with no or little communication with other addressing entities in the region. This has led to:

- Duplicate street names being used for different streets in different cities;
- Duplicate addresses (street number and name) being assigned in different cities;
- Multiple street names being used for the same street;
- Inconsistent use of street direction and street type (i.e., Avenue, Road, Drive, etc.);
- Address numbers out of sequence; and
- Address updates that are not communicated to all affected parties.

A main objective of this addressing project is to minimize the response times for emergency services. Although addressing problems are often just a minor inconvenience, they can in some circumstances be of paramount importance.

In response to these problems, the regional 9-1-1 system participants initiated an interagency committee with representatives from each of the cities and counties in the MARC region. This committee is charged with establishing procedures to ensure the efficiency of the regional 9-1-1 addressing database.

The objectives of this committee are:

- Develop voluntary addressing and street naming standards that would be used by participating agencies as guidelines for addressing new development.
- Improve the lines of communication between all of the agencies involved; and
- Coordinate local addressing standards with the GIS addressing recommendations currently under development.

# Kansas City Regional 9-1-1 System Voluntary Addressing Guidelines

## Address Format

Street addresses can be formatted in many different ways. However, there are significant advantages that could be realized if all addressing entities in the region followed the same address formatting rules. A standardized format, for example, would reduce the opportunity for errors when addresses for an emergency service request are being reported and entered into a computerized dispatch system. It would also reduce confusion and misinterpretation by responding emergency services providers. There are other advantages such as sending mail and simplifying the maintenance, exchange and interpretation of computerized address files in both the public and private sectors of the region's business community.

### **1. Component Order**

Components of a street address should always be in the following order: address number, directional prefix (if any), street name, street type, directional suffix (if any), and unit number.

For example: 12345 W 119 St Apt 24

### **2. Address Numbers**

Where possible, address numbers should consist entirely of numbers. Where that is not possible, an alpha-character added to the end of the address (without any separating space) is preferable to a fraction. As a general rule, characters other than letters and whole numbers should be avoided in all parts of the address (even hyphens should be avoided).

For example: 2456A is preferable to 2456 1/2;

### **3. Directional Prefixes**

The general pattern in the region is that east-west streets use "east" or "west" as the directional prefix and north-south streets use "north" or "south" as the directional prefix. The common abbreviations used are N, S, W and E. This pattern should be followed unless there is a clear, localized pattern to the contrary. Dual directionals such as northwest or southeast are used in some jurisdictions, but as a rule, should be avoided in future addressing. The appropriate abbreviations are NW, NE, SW and SE.

### **4. Directional Suffixes**

The use of a directional suffix (e.g. 4550 Lake Rd West or 4550 Lake Rd East) is strongly discouraged. A better solution is to use either a directional prefix or separate street names (e.g., 4550 Bayside Rd or 4550 Cliffside Rd). If necessary, directional suffixes will be listed as part of the street name.

## 5. Street Types

Every street should be assigned one (and only one) street type. Preferably, each street name should have a street type that is used consistently or have a street type that is based on a logical pattern of street types. The exception to this rule is where street type is needed to distinguish between two streets in the same area with the same name (e.g., Maple St and Maple Ct).

Where a street has two street types (e.g., 87th Street Parkway), the first "type" should be considered part of the street name and the second should be the official street type (e.g., "87th Street" is the street name and "Parkway" is the street type).

## 6. Abbreviations

It is recommended that directionals and street types always be abbreviated, but that street names never be abbreviated. This will help to reduce confusion where street names could be mistaken for a directional or type. For example, 12345 W 125th Ter is preferred over 12345 West 125th Terrace. As a more complicated example, 10600 East Metcalf Frontage Rd is better than 10600 E Metcalf Frontage Road because "East Metcalf Frontage" is the street name and "Rd" is the street type.

Unless there are strong reasons for doing otherwise, it is recommended that the standard Postal Service abbreviations be used.

### Standard Street Type Abbreviations

Alley	Aly	Avenue	Ave	Boulevard	Blvd
Center	Ctr	Circle	Cir	Corner	Cor
Court	Ct	Cove	Cv	Drive	Dr
Expressway	Expy	Extension	Ext	Freeway	Fwy
Gateway	Gtwy	Highway	Hwy	Junction	Jct
Parkway	Pkwy	Road	Rd	Route	Rt
Street	St	Terrace	Ter	Trafficway	Trfy
Trail	Trl	Valley	Vly	Way	Way

## Secondary Unit Designator

APARTMENT	APT	BASEMENT	BSMT
BUILDING	BLDG	DEPARTMENT	DEPT
FLOOR	FL	FRONT	FRNT
HANGAR	HNGR	LOBBY	LBBY
LOT	LOT	LOWER	LOWR
OFFICE	OFC	PENTHOUSE	PH
PIER	PH	REAR	REAR
ROOM	RM	SIDE	SIDE
SLIP	SLIP	SPACE	SPC
STOP	STOP	SUITE	STE
TRAILER	TRLR	UNIT	UNIT
UPPER	UPPR		

## 7. Numeric Street Names

Numeric street names (e.g., 75th) should be written using numbers rather than spelled out. For example, "1st St" is preferable to "First St". In addition, numeric street names should include the "th", "rd", "st" or "nd" characters as part of the street name (e.g., 9900 W 120th St is preferable over 9900 W 120 St).

# Kansas City Regional 9-1-1 System Voluntary Addressing Guidelines

## Street Naming

One of the most basic components of an address is the street name (including both the name itself and also the street type). Several streets with the same or similar names should be avoided so that the street name is not confusing. The following standards are intended to provide guidance for street naming decisions so that the result will be as coherent and understandable as possible. They should be applied to all public streets and to any private streets or drives that are used for addressing or which carry a significant amount of public traffic.

### **1. East-West Street Names**

Streets that run primarily east and west should use the numeric street name grid that is commonly used throughout most of the region. The spacing of numeric street names should be based on the current pattern of 8 numeric names per mile. Where additional names are needed, street types such as Terrace or Place should be used in conjunction with the numeric street grid (for example, 98th Street, 98th Terrace, 98th Place, 99th Street).

### **2. North-South Street Names**

Whenever possible, streets that run primarily north and south should use a unique acceptable name. The spacing of named streets should be based on the current pattern of 16 names per mile.

New street names cannot be duplicates of existing street names. Once a new street name is adopted, all future streets at the same east-west location should use that name even if they are not directly connected.

### **3. Vanity Street Names**

Vanity street names and addresses (i.e., names or addresses that are related to a particular business, developer or property owner) should never be used in place of the primary street address. They may, however, be used as a supplemental address in compliance with U.S. Post Office standards.

### **4. Location of Street Name Break Points**

The name of a continuous street may change because of a change in the street's east-west vs. north-south orientation, or because of a change in alignment that makes another name more accurate. Such street name breaks should occur at an intersection whenever possible, and preferably at an intersection with a major cross street. Where it is not possible to make the break at an intersection, the break should occur at a point on the curve where the street orientation

changes from primarily north-south to east-west. Street name signs should be used at every street name break to clarify the change.

## **5. Cul-de-sac Street Names**

Cul-de-sacs that have 7 or more lots along their length should be given a street name in the same manner as any other street. Short cul-de-sacs (or "eyebrows") not meeting the above standard should generally be given the same name as the street they get access from (i.e., the street that generally runs perpendicular to the cul-de-sac). This general rule for short cul-de-sacs may not apply, however, in the following circumstances:

1. Where the lots are very large, the number of lots allowed on a cul-de-sac without a distinct name should be reduced.
2. Where the end of the cul-de-sac is not clearly visible from the entrance, then a name different from the street providing access to the cul-de-sac should be used.
3. Where a cul-de-sac is an extension of a street with a street name separate from the perpendicular street, then that name should generally be used.

In the situations described above, the best judgement of each street naming entity should be used to determine the name which would be least confusing.

## **6. Street Name Composition**

When choosing a new street name, names should comply with the following standards:

1. Avoid names that sound like existing street names even if they are spelled differently (e.g., "Roe" and "Row");
2. Avoid names that include directions (e.g., "Southwind") or words commonly associated with street types (e.g., "Melrose Place Drive"); and
3. Avoid names that contain more than two "words" (except that hyphenated words should count as one word).

## **7. Street Type Usage**

Every street should be assigned a street type. Where a street is continuous (or potentially continuous), the same street type should generally be used along its entire length (for example: "Metcalf" should not be "Metcalf Avenue" in some places and "Metcalf Road" in others). Where there is only one street with a particular name, a street type from the list of Primary Street Types should be used. Where there are two or more streets with the same name that are parallel to each other, then the northernmost, easternmost or most continuous street should be given a Primary Street Type and the others should be given a street type from the list of Secondary Street Types.

<b>Primary Street Types</b>	<b>Secondary Street Types</b>
Street	Terrace
Avenue	Place
Boulevard	Lane
Drive	Circle
Road	Court
Parkway	Trail
Highway	

A primary street type should never be used in place of a secondary street type and a secondary street type should never be used in a situation that calls for a primary street type.

### **8. Street Type Sequence**

For numeric street names, street types are generally used in the following sequence: Street, Terrace, Place, and Court. This pattern should be followed whenever possible.

# Kansas City Regional 9-1-1 System Voluntary Addressing Guidelines

## Assigning Address Numbers

Although assigning an address number to each structure on a particular street seems relatively straightforward at first glance, it actually poses some of the most difficult addressing problems. For example, the curvilinear streets and cul-de-sacs found in newer subdivisions create situations which are far harder to address than the traditional rectangular grid pattern of streets. Strip shopping centers and office parks often contain multiple buildings that are not in a clearly ordered sequence and often have the potential for many addresses being assigned in the same address range. As a result, it is likely that meeting all of the addressing standards suggested below will happen in some but not all situations. In the remaining cases, address number assignment will involve compromises between standards. The standards are listed in approximate order of importance, so that where compromise is necessary the standards near the bottom of the list should be the first to be considered for noncompliance.

In general, at least one address should be assigned to each habitable structure that is not clearly accessory to another building or insubstantial in nature (e.g., a detached garage for a single-family residence probably does not need an address but a commercial parking garage should have an address). Where a single building has multiple exterior entrances to separate tenant spaces or separate residential units, then a separate address number should be assigned to each such exterior door. Where a single building has multiple doors leading to a shared hallway or lobby, then only one address should be assigned.

### **1. Numeric Sequence**

Addresses should always be assigned so that they are in numeric sequence. Where two or more buildings addressed off of the same street are located in a "stacked" configuration (one building behind the other), addresses should be kept in sequence within each building (rather than alternating between buildings) to the greatest degree possible. In addition, the stacked building closest to the street should generally have lower address numbers than buildings farther away.

### **2. Odd/Even Numbering (Address Parity)**

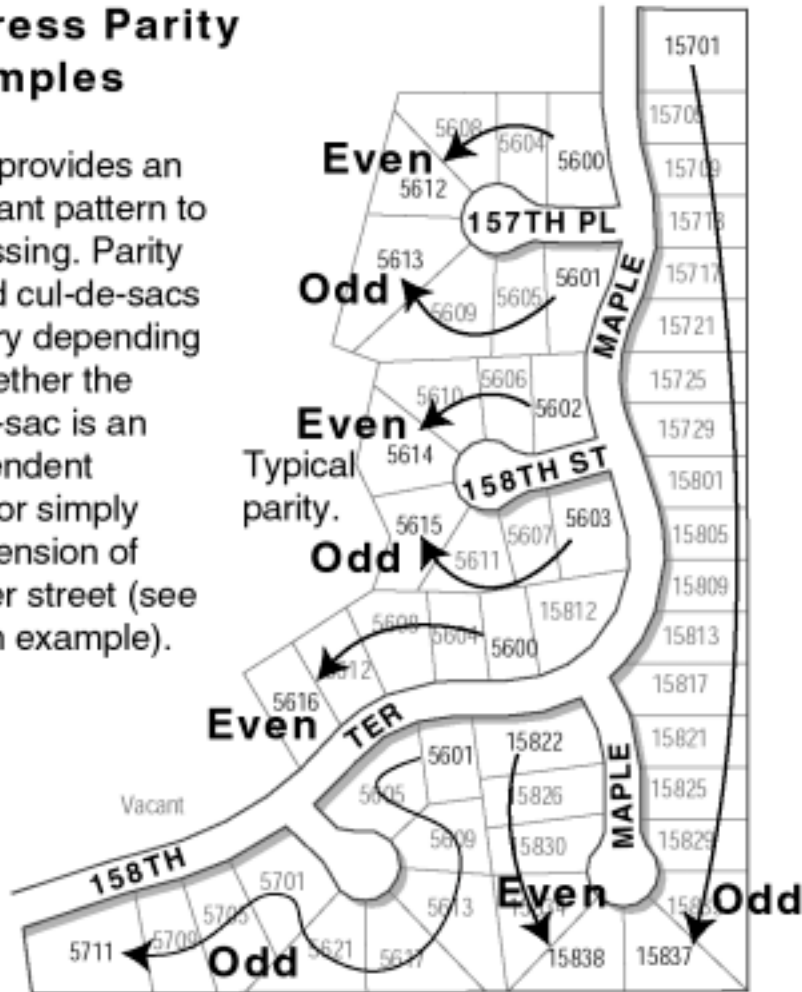
Addresses should be assigned with odd numbers on the south and east sides of the street and even numbers on the north and west sides of the street. Since curvilinear street may change direction for short distances or run at a diagonal, this standard should be applied given the primary direction of the street.

Addresses on very short cul-de-sacs or "eyebrows" that are not given a separate street name should be based on the numbering sequence and parity for the perpendicular street that provides access to the cul-de-sac. This will keep address numbers consistent with this standard with

respect to the perpendicular street that is being used as the basis for addressing, although with respect to the cul-de-sac it may appear that there are odd or even numbers on both sides.

## Address Parity Examples

Parity provides an important pattern to addressing. Parity around cul-de-sacs will vary depending on whether the cul-de-sac is an independent street or simply an extension of another street (see bottom example).



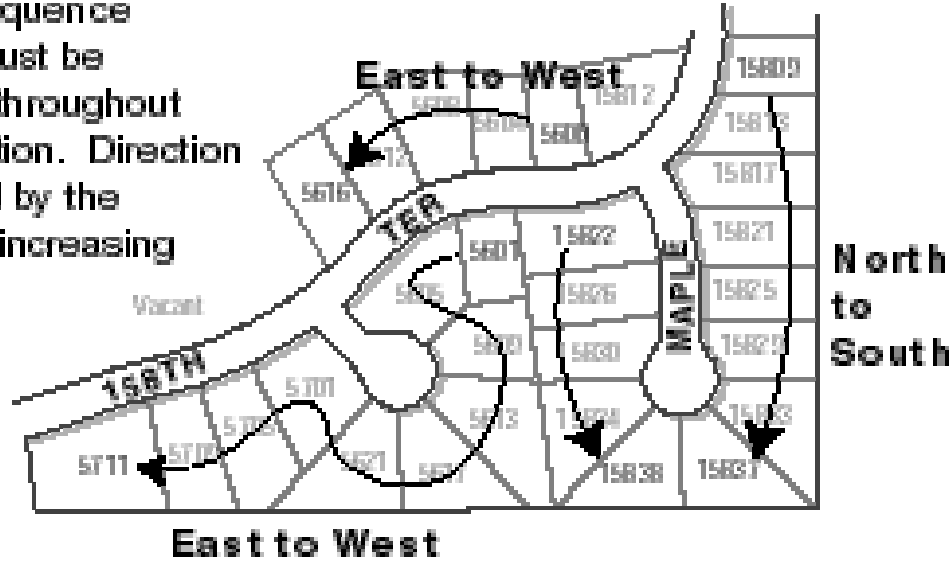
Parity is odd all the way around the cul-de-sac shown immediately above because it is an extension of 158TH TER.

### 3. Sequence Direction

Addresses should get bigger as you travel toward the point of origin. Again however, this standard must be interpreted based on the primary direction of the street. Curvilinear streets may violate this standard for short stretches provided that they are in compliance with respect to the general direction of the full street segment. Where compliance with this standard is difficult or impossible, it may warrant considering a change in the street name at the point where it changes direction.

## Sequence Direction

Address sequence direction must be consistent throughout the jurisdiction. Direction is indicated by the addresses increasing in size.



### 4. Consistency with Cross Streets

Since each street in the street name grid has a "hundred block" designation, addresses should be assigned so that they are consistent with those designations. Quivira Road, for example, is the 11900 block. Thus, addresses on a numbered street that intersects with Quivira should be less than 11900 east of Quivira and greater than 11900 west of Quivira.

### 5. Consistency with Distance-Based Address Grid

Since there are 16 named streets per mile and 8 numbered street names per mile, "hundred block" designations should normally change every 330 feet on an east-west street and every 660 feet on a north-south street. Thus, addresses can be assigned based on the distance south or west from the nearest section line. This standard is particularly useful in areas that are largely undeveloped (and thus don't have many cross streets). This standard should generally be considered to be less important, however, than staying consistent with the address designations of cross streets (see Standard 4 above).

### 6. Avoid Duplicate Address Numbers

Where two streets have the same street name but different street types (e.g., 98th Street and 98th Terrace), the same address number should not be used on both streets. For example, if addresses for a block on 98th Street are assigned as 12700, 12704, 12708, etc, then addresses on the corresponding block of 98th Terrace should be assigned as 12702, 12706, 12710, etc. This may help minimize potential service delivery mistakes if there is some confusion over the street type.



## **9. New Developments and Subdivisions**

All new construction and subdivisions should be named and numbered in accordance with the provisions of local ordinances and as follows:

- a. **New Construction-** Whenever any residence or other structure is constructed or developed, it should be the duty of the new owner to procure an assigned number from their local addressing intity. This should be done at the time of the issuance of the building permit.
- b. **New Subdivisions-** Any prospective subdivider should submit a proposed road name and lot numbering system to the Planning and Zoning intity. Approval by that intity, after consultation with the addressing intity (if different) should constitute the assignment of road names and numbers to the lots in the subdivision.

# Voluntary Addressing Guidelines

## Review of Existing Addresses

Most communities already have existing physical addresses (street or road names and property numbers) for a portion or all of their community. Many of these physical addresses are clear and consistent. Some may not be, however, because they are confusing, inconsistent, or ambiguous. It is important to note that if existing addresses are currently causing problems during the dispatch of emergency responders changes should be considered.

If your community currently has physical addresses for all or a portion of its properties, please review addresses to determine if they meet the recommended E9-1-1 addressing standards.

If a community finds that it currently has inconsistent property numbers or potentially confusing street names, it may wish to consider re-numbering or re-naming certain streets following E9-1-1 addressing standards. In doing so, it is recommended that re-addressing should focus only on problem areas, and not necessarily on the entire community. Only those addresses that really need to be changed should be changed, leaving alone what is clear and consistent.

Under some circumstances, a community with existing physical addresses may decide to re-number all streets because of numbering inconsistencies scattered throughout the community. If contemplating either partial or complete re-numbering, please contact the local postmaster to discuss potential issues for postal delivery addresses prior to any re-numbering process.

It should be encouraged if not required that all owners of structures display and maintain in a conspicuous place the assigned numbers in the following manner:

- a. Number on the Structure: Where the structure is within 50 (fifty) feet of the edge of the road right-of-way, the assigned number should be displayed on the front of the structure that is visible from the street.
- b. Number at the Street Line: Where the structure is over 50 (fifty) feet from the edge of the road right-of-way, the assigned number should be displayed on a post, fence, wall, mail box, or on some structure at the property line adjacent to the wall or access drive to the numbered structure.

The size of the number is usually suggested to be a minimum of 4 inches and the color to be of a contrast to its background.

Finally, a community may only wish to modify or establish naming and numbering standards to avoid problems in the future. If so, the E9-1-1 addressing standards outlined in this document can be followed to establish new standards.

## Kansas City Regional 9-1-1 System

# Voluntary Addressing Guidelines

## Entry Into 9-1-1 Database

In the past, addresses have been assigned by the various addressing organizations acting more or less autonomously. Communication has been limited mainly to notification letters that have been sent out to utility companies and other "address users" whenever addresses have been assigned or changed. It is this relatively limited degree of communication that has enabled addressing problems to occur and to go undetected for long periods of time. This section of the addressing standard proposes several actions designed to improve communications to the point where most addressing problems are either avoided entirely or detected almost immediately.

**New or modified street names and address ranges should be reported to the Mid-America Regional Council as soon as possible on the revised MSAG Change Request Form. The MSAG Change Request Form (9-1-1 A Form ) is used to request changes to the Master Street Addressing Guide (MSAG). Potential changes might include:**

- **Correction of an invalid street name**
- **Correction of an invalid address range**
- **Addition of new addresses such as a new subdivision (also provide map)**
- **Deletion of addresses that have annexed into another jurisdiction**
- **Changes to ESN assignments due to a new fire station or police district**

**This form is available on-line at [www.marc.org/911](http://www.marc.org/911), 911 online forms, 911A MSAG request form or can be faxed to MARC at (816) 421-7758.**

**MSAG CHANGE REQUEST FORM  
(9-1-1 A Form)**

## INSTRUCTIONS

Any change in the MSAG should be requested by completing a 9-1-1 A Form. To complete this form, provide information pertinent to the change.

- (1) **TYPE OF REQUEST**: Indicate if the request is a new street (Insert), a deletion, modification, split, or combine. For inserts, you will fill in the "NEW" section only. For deletes, you will complete the "EXISTING" section only. For modifications, complete the "EXISTING" section indicating the current entry and the "NEW" section according to the changes to be made.
- (2) **JURISDICTION**: Your agency or geographical coverage area such as, "City of Liberty."
- (3) **ADDRESSING COORDINATOR**: Name of the address coordinator completing the form and all appropriate contact information.
- (4) **DIRECTIONAL**: The directional (N, NE, S, SW, etc...) is considered part of the street name. Only one street per 911A is permitted. For example, if your jurisdiction has a N Main Street and a S Main Street, a separate 9-1-1 A Form must be filled out for each street.
- (5) **STREET NAME**: This field contains the name of the street with no directional or suffix. Multiple ranges for one street name may be listed on the same 9-1-1 A Form.
- (6) **SUFFIX**: The suffix is ST, RD, DR, AVE, CIR, CT, BLVD, etc.
- (7) **COMMUNITY**: This field contains the name of the city or town the address is in, if applicable. If the address does not reside in a community, enter "Unincorporated \_\_\_\_\_ County."
- (8) **ADDRESS RANGES**: All information blanks in this field must be completed by the addressing authority. The Emergency Service Number (ESN) must be assigned by the local jurisdiction. Each address range must indicate which side of the street the ESN applies to by entering odd (O), even (E), or both (B) and the proper Exchange.
- (9) **COMMENTS**: Indicate any special information such as subdivision name, cross street or remarks for the phone company.
- (10) **SIGNATURE**: Please sign and date the form. *MSAG changes can not be made without a signature.*