

# Kansas NG911 Addressing Guidelines

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Version 1.0

Prepared by the GIS Committee on behalf of the Kansas 911 Coordinating Council



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# 1 Introduction

A site address, sometimes called a situs address, serves a simple but crucial purpose. It allows people to find each other. Friends, family, customers, service providers, delivery people, and emergency responders all use the site address to get to the right location.

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 address assignment process can create a number of problems if it is performed without consistent guidelines or with too little communication between local entities. Examples of the kinds of issues that can arise include:

- Duplicate street names being used for different streets in nearby jurisdictions
- Duplicate addresses (street number and name) being assigned in nearby jurisdictions
- 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
- Address updates that are not communicated to all affected parties

The consistency needed to avoid these kinds of issues can be achieved by following generally accepted best practices in address assignment and notification.

## 1.1 Project Purpose

During classes and workshops held by the Kansas 911 Coordinating Council's GIS Committee, some of the most common questions from attendees are about assignment of addresses. Each City or County is the final authority on assigning addresses within their jurisdiction, but there is a need for a reference to help inform those local decisions. The primary purpose of this document is to provide a set of recommendations for address assignment that represent the best practices known to the GIS Committee.

This document is also intended to stand as part of the update to the Kansas Geospatial Data Addressing Standard published in October of 1999. This document is intended to update the portions of that document related to address assignment. The Kansas NG911 GIS Data Model provides updated guidance for database structure and attribution associated with addressing. And the Kansas Guidelines and Best Practices for GIS Road Centerlines document, which is being written as this document is published, will provide guidance on proper geometry for road centerlines.

## 1.2 Applicability and Intended Use

The Kansas NG911 Addressing Guidelines document is intended to support the assignment of addresses by all levels of government. It is not intended to be interpreted as a mandate, but instead as a reference for Kansas communities to use as they evaluate existing addresses and assign new ones.

## 1.3 Addressing Authority

It is the understanding of the GIS Committee that address assignment is the sole purview of the city in incorporated areas and the county in unincorporated areas. The United States Postal Service has no formal authority over address assignment, and there is no Kansas Statute or Administrative Regulation governing address assignment of which the GIS Committee is aware.

## 1.4 Acknowledgements

Several addressing standards were consulted in the creation of these guidelines. The GIS Committee would like to thank Cowley County, Johnson County, and Sedgwick County for the use of their respective addressing standards in the research and preparation of this document.

## 2 Elements of a Site Address

- Address Number
- Address Number Suffix
- Full Street Name
  - Preceding Directional
  - Preceding Type
  - Name
  - Post Type
  - Post Directional
  - Post Modifier
- Sub Address
  - Unit Type
  - Unit Number
- City
- State

Building names are not a part of the address. Only mailing addresses contain ZIP Codes. It is important to realize the site city and the postal city (district) may not be the same.

### 2.1 Address Number and Address Number Suffix

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).

### 2.2 Full Street Name

#### 2.2.1 General Recommendations on Choosing a Street Name

- Avoid names that sound like existing street names (e.g., “Roe” and “Row”)
- Avoid names that include directions (e.g., “Southwind”)
- Avoid words commonly used as street types (e.g., “Melrose Place Drive”)
- Avoid punctuation (e.g., “Elise’s Lane” or “Dean-Cutter Drive”)
- Avoid using Mac instead of Mc as part of a street name (e.g., McDonald is preferable to MacDonald)
- Vanity street names are discouraged. However, if vanity street names are used, their numbering should be consistent with the local address grid. Acme Company should not use “Number One Acme Drive” as their address but must be numbered according to the established address range. In addition, vanity names should not be allowed for only a segment of a street, but if used should be used for the entire street length.
- Keep it simple and short
- If the street name includes a number, use the digits not the words (1<sup>st</sup> instead of First) and include the TH, RD, ST, or ND characters as part of the name (3<sup>rd</sup> ST instead of 3 ST)
- If the street name includes a common word, spell it correctly

- If there is an addressing scheme (like east-west roads being numbered Avenues and north-south roads being named Roads, for example) stick with it.
- Use the legal name for addressing whenever possible. Many streets are known by several different names like highways and streets that cross jurisdiction boundaries. The name appearing on the recorded subdivision map or street name petition is usually considered the legal street name. That name can be changed, but such changes should be approved through the local elected council or commission and filed with the Register of Deeds office before addresses are assigned using the changed name.

### 2.2.2 Street Name Break Points

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 or vice-versa. Street name signs should be used at every street name break to clarify the change. When street names change at jurisdiction boundaries, like city or county boundaries, signs should include the hundred block and arrows, particularly if the number scheme changes at the same place.

### 2.2.3 Street Types

While there is no requirement to follow use a particular street type in any given situation, the following are generally accepted definitions of the most common types.

**Road (Rd):** Any road

**Way:** A small side street off another road

**Street (St):** A public road that has buildings on both sides. They run perpendicular to avenues.

**Avenue (Ave):** A public road that has buildings on both sides. They run perpendicular to streets.

**Boulevard (Blvd):** A very wide city street, usually with a median and often with landscaping on both sides.

**Lane (Ln):** A narrow road often found in rural areas

**Drive (Dr.):** A long, winding road that has is routed around local geography like ponds, lakes, or hills.

**Terrace (Ter.):** A road that follows the top of a slope.

**Place (Pl.):** A road that leads to a dead end.

**Court (Ct.):** A road that ends in a circle or loop.

## 3 Address Assignment

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 questions. 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 recommendations below will happen in most but not all situations. In a few cases, address number assignment will involve compromises between recommendations.

### 3.1 Address Ranges

The possible address range of a street segment must be identified. It determines which addresses may be given out along the length of the segment. For example, an address number of

220 cannot be assigned on a block with a potential range of 1000-1099. Usually, the address range is governed by the cross street, meaning that streets running parallel to each other will have the same ranges between the same intersecting streets.

### **3.2 Address Parity**

Addresses should be assigned with odd numbers one side of the street and even numbers on the other. The parity should remain consistent throughout the jurisdiction or vary based on a specific scheme, like reversing at a particular road or intersection.

### **3.3 Numerical Sequence**

Assignment of addresses must be done in numerical sequence along the street. Address numbers should increase as the move away from the origin point of the address grid and should not be assigned out of order. For instance 535 should not fall between 501 and 513.

### **3.4 Address Intervals**

The authority for assigning address numbers must consider both current and future development. Future growth may make it necessary to insert address numbers between those currently being assigned. Planning should include a large enough numbering interval to allow for expansion and growth. In most residential areas, an interval of at least four addresses (310, 314, 318, etc.) should be adequate. Of course, the interval can be larger. An interval of at least eight numbers is recommended as the minimum for commercial or industrial sites.

### **3.5 Duplicate Numbers**

No duplicate numbers shall be assigned on a street. This includes addresses on courts or circles. If there is a 1725 N Rock Rd, then there should not be a 1725 N Rock Road Ct. Similarly, no duplicate numbers should be assigned on streets that cross the grid base line, such as 1725 N Rock Rd and 1725 S Rock Rd.

To avoid duplication on streets that have both North and South or East and West named segments, it may be helpful to plan intervals ahead. For example, setting 101, 105, 109 and 100, 104, 108 as potential addresses on N 1<sup>st</sup> St while 103, 107, 111 and 102, 106, 110 are reserved for S 1<sup>st</sup> St.

### **3.6 Long Blocks**

New subdivision developments often have long blocks with no intersecting streets. Addresses should correspond with the appropriate address range for each section of the block. The block numbers should change in mid-block even if there is no separating street. This will result in two homes side by side numbered as if in two different blocks.

### **3.7 Addressing Consistency**

Addresses located across the street from each other should be assigned so that they are nearly equal. Where there are more addresses on one side of the street, address assigned to the other side will need to be more widely spaced so that addressing consistency is maintained for the addresses across from one another.

### **3.8 Corner Parcels**

Structures shall be numbered off a street on which they sit. A request from a business to use a major street as their address, for example, should not be allowed unless the major street borders that property. A property on a corner of two streets is generally addressed from the street where the front door is located. Occasionally, a commercial business may request to be addressed from the busiest street abutting the property. There may be times when it makes more sense to number

a corner lot based on its driveway, especially from an emergency responder perspective. This may be the case for commercial or industrial structures.

### **3.9 Vanity Addresses**

Vanity street names and addresses (i.e., names or addresses that are related to a particular business, developer or property owner) should not be used in place of the primary street address as assigned by the local addressing authority.

### **3.10 Reference Post Addressing**

The Secretary of Transportation has the authority in Kansas to designate the State Highway System (KSA 68-406). The Kansas Department of Transportation petitions AASHTO US Route Numbering Committee and/or the USDOT Federal Highways Administration for changes to route designations involving US and Interstate Routes. Interstate and US Numbered routes generally conform to rule that even-numbered routes travels east and west, odd-numbered routes travel north and south. The remaining designated state routes, designated in Kansas as “K” routes, may not conform to the same directional rules. A K-route may be even-numbered but predominant travel direction (and signage) may indicate south and north directions. Additional designations are assigned by legislative actions and/or state authorization to accept donations for memorial, historical, and scenic byway signage. The Secretary of Transportation uses Rural Resolutions and City Connecting Link Resolutions to communicate changes to the designated state highway system in rural and incorporated areas.

Reference Post markers are provided for reference along the rural highways. They are spaced nominally at 1 mile intervals, but do not indicate either official mileage or distance. Accumulation of reference post value is generally increasing along the highway from the southwest to the northeast. The reference post applies to the highest classification of route with the lowest number, defined as the primary route. Lower classified routes along the same stretch of pavement are referred to as “rider” or “concurrent” routes. For example, one section of highway exists with designations including I-70, US-40, and K-4, the primary route is I-70. Where sections of highway are designated as US-54 and US-400, US-54 is the primary route. It is possible for a concurrent route to accumulate mileage in the opposite direction of the primary route.

In situations where there are not structure addresses, a common convention is to refer to the offset distance and direction from a referent location, for example, “On First Street 200 feet west of Main Street” or “On I-70 0.5 miles east of MM 210”. Good referent locations include Reference Post markers and intersections. Preferred units of measure are feet and miles. Reference locations may also include a bridge, county line, city limit, or other signed area boundary. Referent direction should be provided based on the direction of travel, not the primary direction of accumulation.

## **4 Address Changes**

There are many possible reasons to make an address change. The existing address could be out of sequence or on the wrong side of the road. The principal entrance of a corner property may no longer face the street off of which it is addressed. The address could be found to be too similar to another existing address, or the address may be misleading for some reason.

The change of an existing address can be inconvenient and expensive to the resident of that address. It is important to have a local policy on how these changes take place so the process is transparent and the resident or residents have the opportunity to voice their concerns.

## **4.1 Changing/Correcting one site address**

Address changes and corrections should be handled following local policy. At a minimum, local policy should define the following:

- How a change is requested by the resident/land owner
- How a correction is initiated by agency staff when an address is found to be substantially out of scheme
- Who has final approval of the change and whether an ordinance or resolution is required.
- Who is responsible for notifying all interested parties of the change (owner, USPS, utilities, among others)

## **4.2 Readdressing multiple sites**

Local policy still applies when readdressing is required in a larger area like a subdivision, an entire street, or an area of influence outside a city. However, there are some general recommendations that should be considered.

- The readdressing should take place all at once or in a planned effort dealing with one contiguous section of the region at a time.
- Even if local policy does not require an ordinance or resolution to be passed for such a change, it is recommended that a public hearing be held. The affected residents, the USPS, local utilities, and relevant local government agencies should be informed of the meeting ahead of time so they can bring their concerns up for consideration.
- Once the changes are approved, notifications should be sent out to all interested parties, informing them when the changes will go into effect.