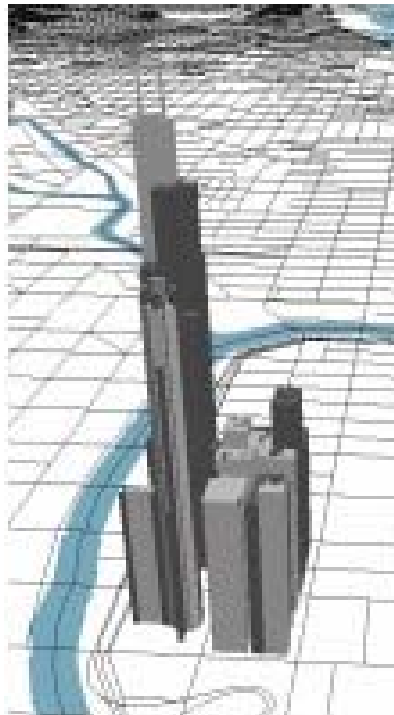




*City of Chicago*  
Department of Business and Information Services  
**GIS Division**

# Chicago GIS Addressing Standards 1.1

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**1 Technical Mapping Specifications**

Chicago GIS (Geographic Information Systems) Data conforms to the standards below:

- Datum:** NAD 83
- Projection:** State Plane Illinois East
- FIPS Zone:** 1201
- Units:** US Foot
- Precision:** 1:10,000 *(1:1,000 is acceptable for most uses)*

When providing spatial data formats to the City, please provide your specifications for Datum, Projection, FIPS Zone, Units, and Precision.

**2 Address Data**

Address data exchanged between the City of Chicago and any other entity should follow the standard below for basic addressing. Wherever possible, the City of Chicago follows the naming conventions established by the United States Postal Service. Refer to <http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf>

The components of address fields are as follows:

<b>Field</b>	<b>Size</b>	<b>Type</b>	
Address Number	6	Long integer	<i>Used for discrete, non-range, addresses.</i>
From Address Number	6	long integer	<i>Min address in range – Many large buildings have range addresses.</i>
To Address Number	6	long integer	<i>Max address in range – Many large buildings have range addresses.</i>
Direction or Pre_Dir	1	Text	<i>N, S, E, W</i>
Street Name <sup>1</sup>	50	Text	<i>Chicago can provide a list of valid street names &amp; associated types</i>
Street-Type	5	Text	<i>Ave, Blvd, St, etc...</i>
Suffix-Direction	5	Text	<i>NB, SB, IB, etc...</i>
Zipcode	5	Text	<i>Primary Zipcode</i>
Zip4	4	Text	<i>Extended portion of a zipcode</i>

Note that systems will use either a single Address Number or a From-To range, and not all three fields.

<sup>1</sup> A current list of standard Chicago street names can be downloaded from the “GIS Data” section of the <http://www.CityofChicago.org/gis> website.

## GIS Address Standards

### 2.1 Street Addresses

Street addresses estimate a location along the centerline of the roadway. The City of Chicago maintains both actual and logical address ranges for a block. For example, the logical range for the “200” block of N. State St may be 200 – 299; whereas the actual addresses are from 210 to 233. Street addresses follow the standard above with these minimum fields:

<b>Field</b>	<b>Size</b>	<b>Type</b>
Address Number	6	Long integer
Pre_Dir	1	Text
Street Name	50	Text
Street-Type	5	Text
Suf_Dir	5	Text

### 2.2 Building Addresses

Building Addresses refer to a specific addressable structure along a roadway or parcel. Multi-unit structures frequently use range addresses. In the case of a large campus of structures that have all been assigned the same address, the “unit name” distinguishes one building from another (eg: Building A vs Building B). Building addresses follow the standard above with these minimum fields:

<b>Field</b>	<b>Size</b>	<b>Type</b>
From Addr	6	long integer
To Addr	6	long integer
Pre_Dir	1	Text
Street Name	50	Text
Street-Type	5	Text
Suf_Dir	5	Text
Unit_Name <i>(Buildings only)</i>	8	Text

### 2.3 Parcel Addresses

All Chicago properties are wholly contained within Cook County, Illinois. The City of Chicago can translate any Street or Building address to the appropriate parcel. Addresses provided by the county are formatted with the structure below:

<b>Field</b>	<b>Size</b>	<b>Type</b>
House_No	10	Text
Street_Direction	2	Text
Street Name	22	Text
Street Suffix	5	Text
City	30	Text
State	2	Text
Zip	12	Text

*Range addresses are not maintained for buildings here.*

*Similar to Street-Type at the City*

### 3 Standard Field Names

#### 3.1 GIS Standard

All GIS databases using address data will use the following format:

<b>Pre_Dir</b>	Pre-Direction
<b>Street_Name</b>	Root Name of Street
<b>Street_Type</b>	Street Suffix Type
<b>Suf_Dir</b>	Suffix Direction or Secondary Direction

When creating point or polygon instance addresses, the following address fields should be used. If the address of a building or object is not a range, both the Low/From and High/To addresses should have the same value.

<b>F_Addr or L_Addr</b>	From or Low Address of the range
<b>T_Addr or H_Addr</b>	To or High Address of the range.

When addressing street segments, both sides of the street should be addressed.

<b>L_F_Addr</b>	Left Side From-Address
<b>L_T_Addr</b>	Left Side To-Addr
<b>R_F_Addr</b>	Right Side From-Addr
<b>R_T_Addr</b>	Right Side To-Addr

The GIS Definition of “Left” and “Right” is based on facing in the direction of the Pre-Dir assigned to the street name.

Street Pre-Dir	Left	Right
N (North)	Even Numbered	Odd Numbered
S (South)	Odd Numbered	Even Numbered
E (East)	Even Numbered	Odd Numbered
W (West)	Odd Numbered	Even Numbered

#### 3.2 Geolookup / City Database Standard

The City Database contains a tabular representation of the GIS street network. This data is used by applications that use the Intelligent Dispatcher to verify and cleanse addresses. Standard field names from the City Database are below.

Field	XML Tag	Description
<b>LowAddress</b>	<LOW_ADDRESS>	Low / From Address
<b>HighAddress</b>	<HIGH_ADDRESS>	High / To Address
<b>Direction</b>	<PRIMARY_DIR>	Pre-Direction
<b>Root</b>	<ROOT>	Root Name of Street
<b>StreetName_Type_Code</b>	<STREET_TYPE>	Street Suffix Type
<b>SecDir</b>	<SECONDARY>	Suffix Direction or Secondary Direction

## GIS Address Standards

### 4 Domains / Valid Values

#### 4.1 Pre-Direction Valid Values

The Pre-Direction contains the direction portion of the address. In the City of Chicago, street directions are defined by their position relative to the intersection of STATE and MADISON streets. Diagonal streets take the value of their primary direction rather than using a compound direction. Common field names include: Direction, Dir, Pre\_Dir, Street\_Dir, and Street\_Direction.

Pre-Direction Description	Chicago Standard Value
North	<b>N</b>
South	<b>S</b>
East	<b>E</b>
West	<b>W</b>

#### 4.2 Street Name Valid Values

New Street Names are defined by the Division of Maps & Plats. A list of current street names can be found on the GIS public website at <http://www.cityofchicago.org/gis> in the “GIS DATA” section, listed under the “Transportation Data” category

#### 4.3 Street Type Valid Values

The Street Type is typically defined as a 8-character field. Its common field names include Street\_Type and ST\_Type. In most cases, the standard Street Type used by the City Database, Chicago GIS, and the US Postal Service are the same. Variations are noted in the chart below. Also note that the City Database maintains multiple translations of Street Type for systems that require a 2-character or 3-character translation.

Description	Chicago Standard	Variations
Airport	<b>AIRPORT</b>	The Intell Dispatcher (City Database) system is the only user
Avenue	<b>AVE</b>	
Boulevard	<b>BLVD</b>	
Circle	<b>CIR</b>	The Intell Dispatcher (City Database) system is the only user
Circle Drive	<b>CIRCLE DR</b>	The Intell Dispatcher (City Database) system is the only user
Court	<b>CT</b>	
Crescent	<b>CRES</b>	
Drive	<b>DR</b>	
Expressway	<b>EXPY</b>	
Expressway Ramp	<b>RAMP</b>	The Intell Dispatcher (City Database) system is the only user
Expressway Entrance Ramp	<b>ER</b>	
Expressway Exit Ramp	<b>XR</b>	
Field	<b>FLD</b>	
Highway	<b>HWY</b>	
Lane	<b>LN</b>	
Market	<b>MKT</b>	<b>MARKET</b> - The Intell Dispatcher (City Database) system that uses this format
Parkway	<b>PKWY</b>	
Place	<b>PL</b>	
Plaisance	<b>PLAISANCE</b>	The Intell Dispatcher (City Database) system is the only user

Description	Chicago Standard	Variations
Plaza	<b>PLZ</b>	
Reversible Lane	<b>RL</b>	<i>GIS is the only user</i>
Road	<b>RD</b>	
Row	<b>ROW</b>	
Service Road	<b>SR</b>	
Skyway	<b>SKYWAY</b>	The Intell Dispatcher (City Database) system is the only user
Square	<b>SQ</b>	
Street	<b>ST</b>	
Terrace	<b>TER</b>	
Toll Road	<b>TOLL</b>	<i>GIS is the only user</i>
Way	<b>WAY</b>	

**4.4 Suffix Direction Valid Values**

This field is used primarily to distinguish separate roadways that have identical official street names.

Chicago Standard	Description
IB	Inbound (to Central Business District)
OB	Outbound (to Central Business District)
SB	Southbound
NB	Northbound
EB	Eastbound
WB	Westbound
E	East side
W	West side
N	North side
S	South side
OP	Overpass

**5 Street Naming Guidelines**

New streets are named by the Division of Maps & Plats within the Chicago Department of Transportation. New street names must incorporate the city’s grid system in order to allow emergency services to easily find new streets. The list of valid street names is maintained in the GIS Street\_Names table and posted to the internet regularly at <http://www.cityofchicago.org/gis> on the [GIS Data / Transportation](#) page.

In some cases, mostly historical, multiple roadways have been assigned identical street names. GIS must distinguish between the separate roadways, and may append additional information to the official street name.

Category	Description	Naming Standard	Example
<b>Lake Shore Drive</b>	Major roadway that is both a divided highway and contains inner service drives.	Street_Name: Lake Shore Street_Type: DR  The inner drive with addressable property will not have a <b>Suf_Dir</b> populated. The major roadways will have suffixes indicating their traffic direction. <b>(NB, SB)</b>	<i>S Lake Shore Dr S Lake Shore Dr NB S Lake Shore Dr SB</i>
<b>Service Drives</b>	Three parallel roadways where the outer roadways have addressable property on one side, and the center street is the main boulevard.	The <b>Suf_Dir</b> field is populated for the outer roadways indicating their position relative to the central street. <b>(E, W, N, S)</b>	<i>N Humboldt Blvd N Humboldt Blvd E N Humboldt Blvd W</i>
<b>Divided Streets</b>	Two parallel roadways where each roadway is addressable on the outer side.	This is the only case where identical street names are allowed to remain. In these cases – the valid address ranges for the non-populated street side are set to zero. Should either of these sides become addressable, the Service Drive standard.	<i>N Ravenswood Ave N Ravenswood Ave</i>
<b>Tiered Streets</b>	Same-name roadways on multiple vertical levels.	The upper most level will always carry the official name, without a suffix. The second level from the top will have a <b>Street Name</b> with “ <b>Lower</b> ” appended. Third tiers will be labeled as “ <b>Sub</b> ”.	<i>N Columbus Dr N Columbus Lower Dr N Columbus Sub Dr</i>
<b>Overpasses</b>	A special instance of a tiered street where the overpass tier is above the ground (main) level	The <b>Suf_Dir</b> field is populated with “ <b>OP</b> ” for the higher tier.	<i>S Ashland Ave S Ashland Ave OP</i>
<b>Expressways</b>	Expressway roadways are special instances of divided streets.	The <b>Suf_Dir</b> field is populated based on the traffic direction relative to the central business district. <b>(OB, IB)</b>	<i>S Dan Ryan Expy OB S Dan Ryan Expy IB</i>
<b>Expressway Ramps</b>	Names are necessary to reference un-named expressway ramps.	The <b>Street Name</b> will contain the name of the expressway first, with the exit name appended. The <b>Suf_Dir</b> will contain <b>IB or OB</b> to distinguish between the roadways.	<i>N JFK North Ave XR IB N JFK North Ave ER IB N JFK North Ave XR OB N JFK North Ave ER OB</i>