**Kentucky Route and Milepoint representations.**

Here is an overview of how KYTC populates its unique route IDs

**Route ID:**

The Route ID (in most HIS shapefiles it is the column RT_UNIQUE not LRS_ID) consists of 17 characters that signify a route in Kentucky. Route IDs are unique to a route and a county. That is, if a route crosses a county line, there will be a new route ID to represent that part of the route. The characters are laid out as follows:

<table>
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<tr>
<td>county number, right justified, zero filled</td>
<td>route prefix, interstate is “-I -” (I” then a space)</td>
<td>route number, right justified, zero filled</td>
<td>route suffix, left justified, filler spaces</td>
<td>section ID, right justified, zero filled</td>
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The initial three characters represent the county number. If a road like an interstate crosses a county line, then the county ID will change, even if the route does not. This set of numbers is always zero filled (county # 8 will be represented as “008” and county # 37 will be represented as “037”) and never truncated.

The fourth character is always a dash.

The fifth and sixth characters are the route prefix. If it is an Interstate, then it is “I “ (an “I” followed by a space). The following prefixes are used in Kentucky:

- AU: Audubon Parkway
- BG: Bluegrass Parkway
- CR: County Road
- CS: City Street
- EB: Edward T. Breathitt Parkway
- FD: Federally owned route (national park, military base)
- HR: Hal Rodgers Parkway
- I : Interstate Highway (Always an “I” followed by a space)
IC: Inter-Agency Charge Road
JC: Julian M. Carroll Parkway
KY: Kentucky state-maintained road
  KY-9000 = Bert T Combs-Mountain Parkway
  KY-9009 = Bert T Combs-Mountain Parkway Extension
LA: Local Public Agency Road (Local parks, schools)
LN: Louie B Nunn Parkway
PR: Privately owned and maintained route open to public use
PS: Privately owned development (trailer park, private subdivision, recreational development, etc.) that is open to public use
PV: Private Drive that is not open to public use (factory entrance, driveway, etc.)
ST: State Agency Road
US: US signed highway
WK: Western Kentucky Parkway
WN: William H. Natcher Parkway
XX: Temporary route designation

The seventh character is always a dash.
The eighth through eleventh characters are the road number. Like the county, the road numbers are always zero-filled (60 becomes “0060” and 421 becomes “0421”)
The twelfth and thirteenth characters are the route suffix. Most routes will not have a suffix. Where there is no suffix for a route, two spaces are used instead. The ones that do have a suffix are left justified, with one space filling in where applicable.

  A = Alternate
  B = Bypass
  C = Connector
  E = East
  EB = East Bypass
  EX = East Business
  S = Spur
  T = Truck
W = West
WB = West Bypass
WX = West Business
X = Business

For example, US 31 W in Hardin County is represented as: 047-US-0031W-000
Notice the space after the W.

For the US 31 W Bypass, the route is represented as: 047-US-0031WB-000
If the route in question had no suffix, it would be represented as: 047-US-0031-000
There would instead be two spaces after the 31. Most routes have no suffix and will have two spaces for the 12th and 13th characters.

The fourteenth character is always a dash.

The fifteenth through the seventeenth characters are the route section. If the section ID is “000”, then the road is the cardinal mainline. If the road is split by direction in the Kentucky Highway Information System (HIS), with separate lines for each direction, then the non-cardinal direction will be represented by “010”. For all other section IDs, the routes are associated with the mainline of another road in some way. A list of section ranges is listed below:

“000” Mainline. If a road is not divided by direction (ie: no non-cardinal link) then the mainline will represent all directions of a road.

“001” to “009” Non-cardinal couplets. Examples would be US 60 in Shelbyville where it splits into two separate one-way roads as well as US 25 in Lexington that splits into Main Street and Vine Streets.

“010” Non-Cardinal side of divided highway.

“011” to “019” Collector-Distributor Roads

“020” to “029” Y intersections. Used for roads that fork into two or more roadways just before an intersection to facilitate easier turning or merging onto a road.

“030” to “069” Crossovers or short roads that connect both sides of a divided highway.

“070” to “079” Connectors.

“080” to “097” Bays, Cul-de-sacs, spurs, frontage roads, etc.

“98” Roadway Belonging to an Adjacent State

“*01 to*10” Rest areas, weigh stations, scenic views in conjunction with interstates and parkways. (Where * is between 1 and 9)

“*11 to *99” Interchange Ramps (where * is between 1 and 9)
Milepoints:

Milepoints for a route are represented as a decimal number, calculated to three decimal places (thousandths of a mile) or just over 5 feet.

For interstate highways and state parkways, the 0.000 milepoint starts at the beginning of a route, whether it be at a state line or the beginning of the actual route, and continues to increase in the cardinal direction (usually north and/or east) across all county lines until it crosses another state border or ends. When a new route ID begins at a county line, the new route has a beginning milepoint equivalent to the maximum milepoint of the county it just crossed. Thus some interstate and parkway route IDs will not have a beginning milepoint of 0.000.

For all other routes, the 0.000 milepoint begins at a state or county boundary and increases in the cardinal direction until it reaches the end of the county. When a route crosses a county line, another route ID is generated with a beginning milepoint of 0.000.

When a road has a non-cardinal route associated with it, the non-cardinal route will have a beginning milepoint that is larger than the ending milepoint but the cardinal route will still have a normal beginning and ending milepoint.

Route Topology (feel free to skip this section if you are not versed in GIS):

All routes in HIS have a topology or inherent direction associated with them in the Highway Information System. This property is created when a route is entered into HIS and can be visualized when the route layer is opened in a GIS program.

For divided highways, topology is always in the direction of flow. A cardinal route’s topology is always in the cardinal direction whereas a non-cardinal route’s topology is always in the non-cardinal direction.

For other routes aside from dead ends, the topology is usually in the cardinal direction, unless the route begins from a “higher” signed route, in which case the topology is pointing away from the other route. An example would be a county road’s topology always pointing away from a US or KY signed route and a KY.

A road’s milepoints are always increasing in the direction of topology, which is why non-cardinal routes have beginning milepoints that are higher than their ending milepoints.

An example of road topology in HIS with the arrows representing the direction of topology:
Gov_Level:

Government Level is a two-digit code that represents who has ownership and maintains a road. The codes are:

- 01 State Maintained Roads
- 02 County Maintained Roads
- 04 City Maintained Roads
- 11 State Park & State Forest Roads
- 12 Local Park or Forest Roads
- 21 Other State Agency Roads
- 25 Other Local Agency Roads
- 26 Private Roads
- 40 Other Public Instrumentality Roads
- 60 Other Federal Agency Roads
- 64 U S Forest Service Roads
- 66 National Park Service Roads
- 70 Corps of Engineers Roads
- 74 Army Roads
- 88 Open, old road bed, undetermined owner
- 89 Open, new road bed, undetermined owner
- 98 Route belongs to adjacent state
- 99 New Location: Proposed or Under Construction
Type_OP:
This is Type of Operation for a route or parts of a route. The codes are:

1  One-Way
2  Two-Way
D  Divided

Status:
This is the adoption status by the owning agency. The codes are:

ACCEPTED  Accepted by Owner
NOT ACCEPTED  Not Accepted by Owner
PENDING  Pending
UNKNOWN  Not Known at Current Time
O.O. PENDING  Pending Official Order
NOT OPEN  Road Exists but is not Open to Traffic

Local Key:
This is a randomly generated number that uniquely identifies each intersection-to-intersection centerline feature.