

Sugar Roadway Network Metadata

Background

A Roadway network is an important aspect for analyzing accessibility. In order to conduct a true multi-modal analysis, an accurate and complete roadway network must be used.

Here

Formerly known as Nokia Maps or NAVTEQ Location and Commerce, Here provides roadway maps for navigation systems. Here data has also been used by several Citilabs' customers as a roadway network data source. These Here networks are now available for purchase from Citilabs in NET+SHP or Cube GDB formats.

Link Attributes

Field	Definition	Description
OBJECTID	ID number	ID number for each link from the original shapefile.
A	A Node	Node that signifies the beginning of the link
B	B Node	Node that signifies the end of the link
SHAPE_Length	Length	Length of link as defined in geo layer
LINK_ID	ID of Link	Unique identifier for the link specific to Here Network. A specific link ID is required under this attribute name, regardless of network type.
A_ID	Here A Node	A Node ID specific to Here Network. Informational only, not used in accessibility analysis.
B_ID	Here B Node	B Node ID specific to Here Network. Informational only, not used in accessibility analysis.
SPDFLAG	Speed data identifier	Created attribute based on the presence of Here traffic data. Informational only, not used in accessibility analysis.
SPD_LIMIT	Speed Limit	Here Posted Speed Limit.
LANES	Lanes per direction	Computed based on Here Lane attributes.
ST_NAME	Street Name	Name of street. Informational only, not used in accessibility analysis.
FEAT_ID	Feature ID	Unique identifier for the feature.
FUNC_CLASS	Functional Class	Functional Class defines a hierarchical network used to determine a logical and efficient route for a traveler. Highways are defined as a '1', and does not allow direct connections from zones. Whereas local non-arterial streets and trails are

		defined as a '5'. The analysis does not delineate between other values.
DIVIDER	Divider	This attribute identifies the presence of a physical traffic blocking divider. Informational only, not used in accessibility analysis.
DIR_TRAVEL	Link Direction	Here attribute describing direction of travel (F, T, B) from, towards or both relative to the A & B node
AR_AUTO	Access Automobiles	Identifies if automobiles are allowed on a link.
AR_BUS	Access Buses	Identifies if buses are allowed on a link.
AR_PEDEST	Access Pedestrians	Identifies if pedestrians are allowed on a link.
AR_TRAFF	Access Through Traffic	Identifies if through traffic is allowed on a link. This attribute determines whether automobiles can connect to and use the link during accessibility analysis.
PAVED	Paved Road	Describes roads that are made of materials which create a solid surface. Informational only, not used in accessibility analysis.
PRIVATE	Private Road	Identifies roads not maintained by an organization responsible for maintenance of public roads. Private roads are not made to be through routes within Sugar.
RAMP	Ramp	Ramps are connectors that provide access between roads that do not cross at grade. Ramps are not connected to through Centroid Connectors.
TOLLWAY	Tollway	This attribute identifies a link for which a fee must be paid to use the road. Informational only, not used in accessibility analysis.
POIACCESS	Points of Interest Access Road	POI Access Roads connect Points of Interest (POIs) to the road network. These roads provide the only means of entrance or exit from a POI to a public road.
CONTRACC	Controlled Access	Controlled Access identifies roads with limited entrances and exits that allow uninterrupted high speed traffic flow. Controlled access roads are not connected to through Centroid Connectors.
PUB_ACCESS	Public Access	The Public Access attribute indicates whether or not the Link allows public access. Informational only, not used in accessibility analysis.
DISTANCE	Distance	The length of the link in miles.
TMC	Traffic Monitor Code	Here link ID code. Informational only, not used in accessibility analysis.
BIKE	Bike Allowance Attribute	Binary, takes on own value. Determines whether bike can be used on link.
BIKE_FACIL	Bike Facility Type	Acceptable values: 0,1,2 corresponding to No facility, bike lane, protected bike lane (default value 0)
AM_SPD	AM Link Speed	Average hourly link speed (7-9 am)
MD_SPD	Midday Link Speed	Average hourly link speed (11-1 pm)
PM_SPD	PM Link Speed	Average hourly link speed (4-6 pm)
OP_SPD	Off Peak Link Speed	Average hourly link speed (12-2 am)

Node Attributes

Field	Definition	Description
OBJECTID	ID number	ID number for each node from the original shapefile.
N	Node Number	Assigned Node ID in roadway network. Automatically created with node creation.
STOP_ID	Transit Stop ID	Designates this node as a transit node from original transit network. This field is automatically updated in accessibility analysis from transit network. No Updating necessary.
STOP_NAME	Transit Stop Name	Name of transit stop associated with this node from original transit network. Informational only, not used in accessibility analysis.
STOP_LAT	Transit Stop Latitude	Latitude of transit stop associated with this node from original transit network.
STOP_LON	Transit Stop Longitude	Longitude of transit stop associated with this node from original transit network
NID	Here Node ID	Original Here node ID. Informational only, not used in accessibility analysis
LINK_CNT	Link Count	Here Native attribute, signifies how many different streets are attached to this node. Informational only, not used in accessibility analysis
WALK	Walk Allowance	Binary, takes on AR_PEDEST link attribute value. This attribute will Automatically be updated on the backend when the accessibility analysis is ran.
BIKE	Bike Allowance	Binary, takes on BIKE link attribute value. This attribute will Automatically be updated on the backend when the accessibility analysis is ran.
BUS	Bus Allowance	Binary, takes on AR_Bus link attribute value. This attribute will automatically be updated on the backend when the accessibility analysis is ran.