

# Sugar Transit Network Metadata

## Background

A transit network allows users to explore public transportation's role in providing accessibility. A transit network can keep valuable information such as headways and run times in addition to the physical attributes of the network.

## General Transit Feed Specification (GTFS)

A GTFS feed is composed of a series of text files collected in a ZIP file. Each file models a particular aspect of transit information: stops, routes, trips, and other schedule data. GTFS files are imported into Sugar Access for the use of accessibility analysis. Important attributes such as the location of the stops are linked to the underlying roadway network in Sugar Access to allow for a complete multi-modal accessibility analysis.

## Line Attributes

Field	Definition	Description
OBJECTID	ID number	ID number for each link from the original shapefile.
NAME	Name of Line	Unique string identifier for a transit line.
LONGNAME	Second Name	Second unique string identifier for a transit line.
MODE	Transit Mode	Integer indicating mode of transit line. Valid values range from 1-999. Does not affect accessibility analysis.
OPERATOR	Operator of Line	<i>Optional.</i> Integer indicating operator of the transit line. Valid values range from 1 to 999.
ONEWAY	One Way Indicator	<i>Optional.</i> Flag indicating whether line is one way. T – Coded line is a one-way line. F – Coded line is a two-way line. The reverse direction is treated as a separate line for processing.
CIRCULAR	Circular Indicator	<i>Optional.</i> Flag indicating whether a line is circular or linear. T - Program makes all nodes into stop nodes. F – Program uses node designation.
HEADWAY_1	AM Peak Headway	AM peak headway specified from GTFS file, averaged between 7-10 AM.
HEADWAY_2	PM Peak Headway	PM peak headway specified from GTFS file, averaged between 4-8 PM.
HEADWAY_3	Midday Headway	Midday headway specified from GTFS file, averaged between 10 AM-4 PM.
HEADWAY_4	Evening Headway	Off peak headway specified from GTFS file, averaged between 8 PM-1 AM.
HEADWAY_5	Daily Average Headway	Daily headway specified from GTFS file, average across entire day.

XYSPEED	Line Speed	<i>Optional.</i> Speed on qualified links in this transit line. Valid values range from 1 to 300. Defaulted to 20 for Sugar Access.
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Transit line attributes that are not listed above are not imported from the GTFS feed. For more information about these attributes and their potential role in Sugar Access, please see the Sugar Network Editor help menu.

## Link Attributes

Field	Definition	Description
OBJECTID	ID number	ID number for each node from the original shapefile.
A	A Node	Start node of transit link, references same node number as roadway network.
B	B Node	End node of transit link, references same node number as roadway network.
LINEID	Associated Line	Link's associated transit line.
SEQNO	Sequence Number	Sequence of link in transit line relative to the links in the line.

Transit link attributes that are not listed above are not imported from the GTFS feed. For more information about these attributes and their potential role in Sugar Access, please see the Sugar Network Editor help menu.

## Node Attributes

Field	Definition	Description
OBJECTID	ID number	ID number for each node from the original shapefile.
LINEID	Associated Line	Node's associated transit line.
SEQNO	Sequence Number	Sequence of node in transit line relative to the nodes in the line.
STOPNODE	Stop Indicator	Indicator for whether node is a stop or not. Check box to allow access to the transit line. Not checking the box will indicate that transit line does not stop at this node.
NODES	Node Number	Transit node number, references the same node number as the roadway network.
RT	Run Time	<i>Optional.</i> Intermediate run time from the line's first node to the most recently coded node. Valid values are numbers greater than or equal to 1.

Transit node attributes that are not listed above are not imported from the GTFS feed. For more information about these attributes and their potential role in Sugar Access, please see the Sugar Network Editor help menu.