# **Community Transit GTFS Documentation**

#### **Document Fields:**

- GTFS Spec:
  - **Required:** The field must be included in the dataset, and a value must be provided in that field for each record. Some required fields permit an empty string as a value (denoted in this specification as empty). To enter an empty string, just omit any text between the commas for that field.
  - **Conditionally required:** The field or file is required under certain conditions, which are outlined in the field or file description. Outside of these conditions, this field or file is optional.
  - **Optional:** The field may be omitted from the dataset. If an optional column is included, some of the entries in that field may be empty strings. To enter an empty string, just omit any text between the commas for that field. Note that an omitted field is equivalent to a field that is entirely empty.
  - **Experimental:** Not part of GTFS specifications, but included in Community Transit GTFS
- Status:
  - Included: This field is included in the dataset and populated with values.
  - Included: This field is included in the dataset, but is only populated for some entries
  - Included (empty): This field is included in the dataset, but is empty for all entries
  - Not included: Part of GTFS specifications, but not included in Community Transit GTFS

## GTFS Files

Table Name	GTFS Spec	Status	Notes
agency.txt	Required	Included	
calendar.txt	Conditionally Required	Included	Community Transit includes and populates the calendar.txt file, but fills the day of week fields with zeros for each service_id, so only the range of service is defined in calendar.txt and the specific days that a service_id is active are defined in calendar_dates.txt.
calendar_dates.txt	Conditionally Required	Included	Community Transit uses the calendar_dates.txt file to define which days a service_id

			is active (exception_type = 1) for the duration of that service_id.
direction_name_exceptions.txt	Experiment al	Included	
fare_attributes.txt	Optional	Not included	
fare_rules.txt	Optional	Not included	
feed_info.txt	Optional	Included	
frequencies.txt	Optional	Not included	
routes.txt	Required	Included	
shapes.txt	Optional	Included	
stops.txt	Required	Included	
stop_times.txt	Required	Included	
transfers.txt	Optional	Included (empty)	
trips.txt	Required	Included	

## Agency.txt

Field Name	GTFS Spec	Status	Notes
agency_id	Optional	Included	Community Transit agency_id = 29. This is Community Transit's National Transit Database (NTD) number.
agency_name	Required	Included	
agency_url	Required	Included	
agency_timezone	Required	Included	
agency_lang	Optional	Included	
agency_phone	Optional	Included	
agency_fare_url	Optional	Included	

agency_email	Optional	Included	
--------------	----------	----------	--

#### Calendar.txt

Field Name	GTFS Spec	Status	Notes
service_id	Required	Included	
monday	Required	Included	Always 0 in Community Transit GTFS
tuesday	Required	Included	Always 0 in Community Transit GTFS
wednesday	Required	Included	Always 0 in Community Transit GTFS
thursday	Required	Included	Always 0 in Community Transit GTFS
friday	Required	Included	Always 0 in Community Transit GTFS
saturday	Required	Included	Always 0 in Community Transit GTFS
sunday	Required	Included	Always 0 in Community Transit GTFS
start_date	Required	Included	
end_date	Required	Included	

### Calendar\_dates.txt

Field Name	GTFS Spec	Status	Notes
service_id	Required	Included	
date	Required	Included	
exception_type	Required	Included	Because Community Transit does not define which days of the week a sevice_id is active in calendar.txt, exception_type = 1 is used here to do so.

### Feed\_info.txt

Field Name	GTFS Spec	Status	Notes
feed_publisher_name	Required	Included	
feed_publisher_url	Required	Included	
feed_lang	Required	Included	
feed_start_date	Optional	Included	
feed_end_date	Optional	Included	
feed_version	Optional	Included	
feed_contact_email	Optional	Not included	
feed_contact_url	Optional	Not included	

#### Routes.txt

Field Name	GTFS Spec	Status	Notes
route_id	Required	Included	Merged data sets may include _merged_ tags for data elements experiencing changes across the unique service ranges.
agency_id	Optional	Included	Community Transit agency_id = 29
route_short_name	Conditionally Required	Included	
route_long_name	Conditionally Required	Included	Origin/Destination description of Route
route_desc	Optional	Included (empty)	
route_type	Required	Included	
route_url	Optional	Included (empty)	
route_color	Optional	Included	

route_text_color	Optional	Included	
route_sort_order	Optional	Not included	

### Shapes.txt

Field Name	GTFS Spec	Status	Notes
shape_id	Required	Included	
shape_pt_lat	Required	Included	
shape_pt_lon	Required	Included	
shape_pt_sequence	Required	Included	
shape_dist_traveled	Optional	Included	Distance recorded in meters.
ct_shape_id	Experimental	Included	The GIS shape_id that corresponds to a given GTFS shape.

## Stops.txt

Field Name	GTFS Spec	Status	Notes
stop_id	Required	Included	Merged data sets may include _merged_ tags for data elements experiencing changes across the unique service ranges.
stop_code	Optional	Included (some records)	Populated for all non-parent stops, the same as stop_id.
stop_name	Required	Included	
stop_desc	Optional	Included (empty)	
stop_lat	Required	Included	
stop_lon	Required	Included	
zone_id	Optional	Included (empty)	

stop_url	Optional	Included (empty)	
location_type	Optional	Included	0 for distinct boarding location, 1 for parent station
parent_station	Optional	Included (some records)	
stop_timezone	Optional	Included (some records)	Not included for stops with a parent station.
wheelchair_boarding	Optional	Included	

### Stop\_times.txt

Field Name	GTFS Spec	Status	Notes
trip_id	Required	Included	Community Transit's internal trip_id concatenated with service_id.
arrival_time	Required	Included	
departure_time	Required	Included	
stop_id	Required	Included	Merged data sets may include _merged_ tags for data elements experiencing changes across the unique service ranges.
stop_sequence	Required	Included	
stop_headsign	Optional	Included (empty)	
pickup_type	Optional	Included	
drop_off_type	Optional	Included	
shape_dist_traveled	Optional	Included	Distance recorded in meters.
timepoint	Optional	Included	
CT_map_indicate	Experimental	Included (some records)	Matches stops to the letters and numbers used to identify timepoints in Community

	Transit's printed schedule
1	

#### Transfers.txt

Field Name	GTFS Spec	Status	Notes
from_stop_id	Required	Included (empty)	
to_stop_id	Required	Included (empty)	
transfer_type	Required	Included (empty)	
min_transfer_time	Optional	Included (empty)	

## Trips.txt

Field Name	GTFS Spec	Status	Notes
route_id	Required	Included	Merged data sets may include _merged_ tags for data elements experiencing changes across the unique service ranges.
service_id	Required	Included	
trip_id	Required	Included	Community Transit's internal trip_id concatenated with service_id.
trip_headsign	Optional	Included	<ul> <li>Formats:</li> <li>Destination (e.g. Bellevue)</li> <li>Destination via Street or Landmark (e.g. Everett Station via Lynnwood)</li> </ul>
trip_short_name	Optional	Included (empty)	
direction_id	Optional	Included	

block_id	Optional	Included	
shape_id	Optional	Included	
wheelchair_accessible	Optional	Included	
bikes_allowed	Optional	Included	
CT_cardinal_direction	Experimental	Included	Community Transit does not have a single, standard 'inbound/outbound' definition for direction_id. This added field defines trip direction (N, S, E and W) based on the bearing between the first and last stops on the route. Exceptions: routes 115 and 220 (identified as E/W routes, travel in a NE/SW direction).

## GTFS-rt Feeds

Feed Name	GTFS Spec	Status	Notes
Trip Updates	Optional	Included	
Vehicle Positions	Optional	Included	
Service Alerts	Optional	Included	

## Trip Updates

Object	Field Name	GTFS Spec	Status	Notes
header	gtfs_realtime_ version	Required	Included	
header	incrementality	Required	Included	

header	timestamp	Required	Included	
entity	id	Required	Included	
entity.trip_update	timestamp	Optional	Not included	
entity.trip_update	delay	Optional	Not included	
entity.trip_update. trip	trip_id	Conditionally Required	Included	Community Transit's internal trip_id concatenated with service_id.
entity.trip_update. trip	start_date	Conditionally Required	Included	
entity.trip_update. trip	start_time	Conditionally Required	Not included	
entity.trip_update. trip	route_id	Conditionally Required	Included	
entity.trip_update. trip	direction_id	Conditionally Required	Included	
entity.trip_update. trip	schedule_ relationship	Optional	Included	
entity.trip_update. stop_time_update	stop_sequence	Conditionally Required	Included	
entity.trip_update. stop_time_update	stop_id	Conditionally Required	Included	
entity.trip_update. stop_time_update	schedule_ relationship	Optional	Included	
entity.trip_update. stop_time_update. arrival	time	Conditionally Required	Included	Community Transit provides arrival and departure estimates for all downstream stops of a trip.
entity.trip_update. stop_time_update. arrival	delay	Conditionally Required	Not included	

entity.trip_update. stop_time_update. arrival	uncertainty	Optional	Not included	
entity.trip_update. stop_time_update. departure	time	Conditionally Required	Included	Community Transit provides arrival and departure estimates for all downstream stops of a trip.
entity.trip_update. stop_time_update. departure	delay	Conditionally Required	Not included	
entity.trip_update. stop_time_update. departure	uncertainty	Optional	Not included	
entity.trip_update. vehicle	(vehicle) id	Optional	Not included	
entity.trip_update. vehicle	(vehicle) label	Optional	Not included	
entity.trip_update. vehicle	license_plate	Optional	Not included	

#### Vehicle Positions

Object	Field Name	GTFS Spec	Status	Notes
header	gtfs_realtime_ version	Required	Included	
header	incrementality	Required	Included	
header	timestamp	Required	Included	
entity	id	Required	Included	
entity.vehicle	stop_id	Optional	Included	
entity.vehicle	current_stop_ sequence	Optional	Included	
entity.vehicle	current_status	Optional	Included	

entity.vehicle	timestamp	Optional	Included	
entity.vehicle	congestion_level	Optional	Not included	
entity.vehicle	occupancy_status	Optional	Not included	
entity.vehicle.trip	trip_id	Conditionally Required	Included	Community Transit's internal trip_id concatenated with service_id.
entity.vehicle.trip	start_date	Conditionally Required	Included	
entity.vehicle.trip	start_time	Conditionally Required	Not included	
entity.vehicle.trip	route_id	Conditionally Required	Included	
entity.vehicle.trip	direction_id	Conditionally Required	Included	
entity.vehicle.trip	schedule_ relationship	Optional	Included	
entity.vehicle. vehicle	(vehicle) id	Optional	Included	
entity.vehicle. vehicle	(vehicle) label	Optional	Included	
entity.vehicle. vehicle	license_plate	Optional	Not included	
entity.vehicle. position	latitude	Required	Included	
entity.vehicle. position	longitude	Required	Included	
entity.vehicle. position	bearing	Optional	Not included	
entity.vehicle. position	odometer	Optional	Not included	
entity.vehicle. position	speed	Optional	Not included	11

#### Service Alerts

Object	Field Name	GTFS Spec	Status	Notes
header	gtfs_realtime_ version	Required	Included	
header	incrementality	Required	Included	
header	timestamp	Required	Included	
entity	id	Required	Included	
entity.alert	effect	Optional	Included	
entity.alert	cause	Optional	Included	
entity.alert.header_ text.translation	text	Required	Included	
entity.alert.header_ text.translation	language	Conditionally Required	Included	
entity.alert. description_text. translation	text	Required	Included	
entity.alert. description_text. translation	language	Conditionally Required	Included	
entity.alert.active_ period	start	Conditionally Required	Included	
entity.alert.active_ period	end	Conditionally Required	Not included	
entity.alert.informed _entity	agency_id	Conditionally Required	Included	
entity.alert.informed _entity	route_type	Conditionally Required	Included	
entity.alert.informed _entity	route_id	Conditionally Required	Included	