

## GATIS Extensions and Tables

### LRS Extension

*Optional extension; JSON format*

Name	Description	Type	Required	Listed Values
gatis_id	The identification number within GATIS for this piece of infrastructure.	Text	Required	
geometry_type	The type of geospatial feature within GATIS of the infrastructure.	Enum	Optional	edge, node, point, zone
Type	The type of infrastructure. Valid values are any edge, node, point or zone types within GATIS.	Enum	Optional	sidewalk, footway, crossing, ramp, traffic island, steps, elevator, escalator, bikeway, multi_use_path, trail, virtual_link, generic, curb_ramp, object, sign, transit_stop, issue, counter, bike_parking, open, traffic_calming
reference_ids	The identification number or other identifier of the related road segment within the linear referencing system. Can be the identification number within a government, commercial or third-party LRS. If multiple LRS segments align with a piece of infrastructure mapped in GATIS, provide all IDs within a properly formatted list.	Text	Optional	
lrs_source_url	The URL where the linear referencing system referenced in reference_ids can be found.	Fully qualified URL	Optional	
lrs_starting_milepoint	The milepoint on the LRS segment at which this specific infrastructure begins.	Text	Optional	

Irs_ending_milepoint	The milepoint on the LRS segment at which this specific infrastructure ends.	Text	Optional	
Irs_side	The side of the LRS segment where this infrastructure appears. This tagging should align with the direction of the LRS segment, with the segment start point appearing at milepoint 0. It may contradict the directionality of the GATIS segment, which is assigned based on the order in which the geometry of the GATIS segment was drawn.	Enum	Optional	left, right, both

## Events Table

*Optional extension; JSON format*

Name	Description	Type	Required	Listed Values
event_id	The unique identifier for the event. If the event already has an ID assigned within another dataset, such as an agency asset management dataset, use that ID here as well.	Text	Required	
event_datetime	The date on which the event occurred. Include time if available; if not, fill in time with zeroes.	Datetime	Optional	
event_type	The type of event that occurred. If multiple events occurred on the same day, break each out into a separate row.	Text	Optional	maintenance inspection, ADA assessment, other assessment, data update, complaint, repair, other maintenance work, construction, redesign, removal, other
gatis_id	The GATIS identification number for the piece of infrastructure, used in the edge, node, point or zone tables.	Text	Optional	
type	The type of infrastructure. Valid values are any edge, node, point or zone types within GATIS.	Enum	Optional	sidewalk, footway, crossing, ramp, traffic island, steps, elevator, escalator, bikeway, multi_use_path,

				trail, virtual_link, virtual_node, curb_ramp, object, sign, transit_stop, issue, counter, bike_parking, open_movement
geometry_type	The type of geospatial feature within GATIS of the infrastructure.	Enum	Optional	edge, node, point, zone
event_location	Geospatial point or edge location where the event occurred. If inspection of a sidewalk, include the full sidewalk edge coordinates. If repair, include the point location where the repair was carried out.	Geometry (Point)	Optional	
location_description	Text description of the location where the event occurred.	Text	Optional	
lrs_segment_id	If the event occurred along a segment represented in the infrastructure owner's linear referencing system, the identification number or other identifier of the LRS segment.	Text	Optional	
lrs_milepoint	If the event occurred along a segment represented in the infrastructure owner's linear referencing system, the milepoint at which the event occurred.	Decimal	Optional	
work_order_id	The identification number of the work order or other identifier within the managing jurisdiction's data systems.	Text	Optional	
owner	The entity that owns this piece of infrastructure. If a department, office or subagency is responsible	Text	Optional	

	for the infrastructure, list that department, office or subagency.			
maintainer	The entity that is responsible for maintaining this piece of infrastructure. It may or may not be the same as owner. If a department, office or subagency is responsible for the infrastructure, list that department, office or subagency.	Text	Optional	
executor_of_work	The entity that carried out any work associated with this event. If multiple, list all in list format. The executor may be a contractor, or it may be the entity listed as owner or maintainer for the infrastructure.	Text	Optional	
inspector	If an inspection, the name or names of the party or parties carrying out the inspection. This may be the name of an individual, a contractor or some other party. If multiple, list all in list format.	Text	Optional	
inspection_method	The method used for inspecting the infrastructure.	Text	Optional	visual inspection, survey/audit, satellite, lidar, other imagery, other
description	A description of the event, to convey further detail of what was done. This may include listing construction or repair work activities and describing materials used, providing the specific ADA standard under which an assessment was carried out and conveying results or planned next steps, or providing information	Text	Optional	

	on redesign- or planning-related activities.			
comments	Any additional remarks or notes provided within the infrastructure owner's asset management dataset related to the event.	Text	Optional	
costs	The total amount spent on carrying out any work or inspections that were part of the event, rounded to the nearest whole number.	Integer	Optional	
downtime	The total amount of time related to the event during which the infrastructure was closed or inaccessible in whole or in part. Provide a value plus units – ex. “2 weeks”, “3.5 days”, “12 hours”.	Text	Optional	
related_issue	The GATIS ID for an issue point related to this event.	ID	Optional	
funding_source	The source of funds for the construction, repair or other action taken as a part of the event.	Text	Optional	

## Relations Table

*Optional extension; JSON format*

Name	Description	Type	Valid	Listed Values
relation_id	The identification number for the relation described in this row.	ID	Required	
from_id	For a relation that is a movement, the GATIS ID for the piece of infrastructure at which the movement begins.	ID	Optional	
to_id	For a relation that is a movement, the GATIS ID for the piece of infrastructure at which the movement completes.	ID	Optional	
signal_id	For a signal relation, the GATIS ID for the signal point. If multiple (ex. at the west and east ends of a crossing), provide all IDs in a list.	ID	Optional	
crossing_id	For a signal relation, the GATIS ID for the crossing edge that is affected when the signal point under signal_id is interacted with by a traveler. If multiple, provide all IDs in a list.	ID	Optional	
turning_treatment	For a relation that is a turning movement, any treatments at the intersection that are meant to facilitate the turn for travelers.	Text	Optional	bike box, two-stage turn box, protected intersection, bike signal, bike leading interval, mixing zone, scramble