RSM TO WZDX TRANSLATOR FIELD MAPPINGS AND UNUSED FIELDS

Update Date: 3/31/2020

Contents

RSM to WZDx Translator Mappings

Table	Field	Source	Value(s)	Notes
Road Event Feed Info	**feed_info_id**	-	Generated GUID	Primary Key
	feed_update_date	current time	[YYYY-MM-DDTHH:MM:SSZ]	-
	metadata	-	-	Not available in RSM
	version	-	2.0	-
Road Events	**road_event_id**	-	Generated GUID	Primary Key
	feed_info_id	RoadEventsFeedInfo.feed_info_id	GUID	Foreign Key
	subidentifier	-	-	Not available in RSM
	geometry_type	-	'LineString'	Chosen value
	geometry	rszContainer..rsmLanes..nodePoint..node-3Dabsolute..[lat, long]	[lat, long] in degrees	Converted from 1/10 micro degrees
	road_name	-	-	Not available in RSM
	road_number	-	-	Not available in RSM
	direction	rszContainer..rsmLanes..nodePoint..node-3Dabsolute..[lat, long] for first and last nodePoints	Enum ['northbound', 'eastbound', 'southbound', 'westbound']	Calculated as direction between first and last points
	beginning_cross_street	-	-	Not available in RSM
	ending_cross_street	-	-	Not available in RSM
	beginning_milepost	-	-	Not available in RSM
	ending_milepost	-	-	Not available in RSM
	beginning_accuracy	-	'Estimated'	Not available in RSM
	ending_accuracy	-	'Estimated'	Not available in RSM
	start_date	startDateTime	[YYYY-MM-DDTHH:MM:SSZ]	-
	end_date	endDateTime	[YYYY-MM-DDTHH:MM:SSZ]	-
	start_date_accuracy	-	'Estimated'	Not available in RSM
	end_date_accuracy	-	'Estimated'	Not available in RSM
	event_status	-	-	Not available in RSM
	total_num_lanes	length of list of rsmLanes	Int	-
	vehicle_impact	rszContainer..rsmLanes..nodePoint..nodeAttributes..laneClosed	Enum ['all-lanes-open', 'some-lanes-closed', 'all-lanes-closed']	-
	workers_present	rszContainer..roadwayGeometry..nodePoint..nodeAttributes..peoplePresent	Bool [true, false]	-
	reduced_speed_limit	rszContainer..roadwayGeometry..nodePoint..nodeAttributes..speedLimit.speed	Bool [true, false]	-
	restrictions	-	-	Not available in RSM
	description	-	-	Not available in RSM
	issuing_organization	-	-	Not available in RSM
	creation_date	-	-	Not available in RSM
	update_date	-	-	Not available in RSM

Types of Work	**types_of_work_id**	-	Generated GUID	Private Key
	road_event_id	RoadEvents.road_event_id	GUID	Foreign Key
	type_name	-	'roadside-work'	CauseCodes do not give further information
	is_architectural_change	-	'false'	Not available in RSM
Lanes	**lane_id**	-	Generated GUID	Primary Key
	road_event_id	RoadEvents.road_event_id	GUID	Foreign Key
	lane_edge_reference	-	'left'	Not available in RSM
	lane_number	rszContainer..roadwayGeometry..rsmLanes..lanePosition	Int	-
	lane_status	rszContainer..rsmLanes..nodePoint..nodeAttributes..[taperLeft, taperRight, laneClosed]	Enum ['open', 'closed', 'merge-left', 'merge-right']	Closed takes priority over merge-left and merge-right
	lane_type	rszContainer..roadwayGeometry..rsmLanes..lanePosition and Lanes.lane_edge_reference	Enum ['right-lane', 'middle-lane', left-lane']	Evaluated from lane_edge_reference and lane_number
Lane Restrictions	**lane_restriction_id**	-	Generated GUID	Primary Key
	Lane_id	Lanes.lane_id	GUID	Foreign Key
	Restriction_type	-	-	Not available in RSM
	Restriction_value	-	-	Not available in RSM
	Restriction_units	-	-	Not available in RSM

Bold field = required
Unbolded field = optional

RSM to WZDx Translator Unused Information From RSM

Field Name	Values	Importance	Potential Uses	Notes
version	Int	LOW		
eventInfo.eventRecurrence	Start and end date/time, days of week	MEDIUM	Inform when work zone is active	Describes schedule in which work zone is active
eventInfo.subCauseCode	Int	LOW	Could distinguish between workzone types	Not given from CAMP tool
regionInfo.applicableHeading.heading	Heading	LOW	unknown	-
regionInfo.referencePoint	lat, long, elevation	LOW	unknown	-
regionInfo.speedLimit	Speed limit before work zone	LOW	Capture speed limits before work zone begins	-
regionInfo.approachRegion..scale		LOW	unknown	Scale factor
regionInfo.approachRegion..nodePoint	lat, long, elevation	MEDIUM	Increase knowledge of approach region	-
rszContainer..rsmLanes..nodePoint	elevation	HIGH	Distinguish between vertical interchanges	-
rszContainer..rsmLanes..nodeAttributes.speedlimit	Minimum speed limits	LOW	Minimum speed limit values	-
rszContainer..rsmLanes..connectsTo	Lane IDs	MEDIUM	Determine if lanes are disconnected	-

Fields Missing in CAMP Tool Generated RSM Messages

Field Name	Importance	Notes	Collected in CAMP Tool?
rszContainer.laneStatus	MEDIUM	The majority of this information is contained elsewhere	Yes
rszContainer.roadClosureDescription	MEDIUM	-	No
rszContainer.roadWorkDescription	MEDIUM	-	No
rszContainer.flagman	LOW	-	No
rszContainer.trucksEnteringLeaving	LOW	-	No
curveContainer	HIGH	There is a massive amount of information here	No

These fields were found in the Connected Vehicle Message Builder Document located here:

https://github.com/TonyEnglish/V2X-manual-data-collection/blob/master/CAMP%20Tools/CVMsgBuilder%20v1.4%20distribution/ConnectedVehicleMessageBuilder%20User%20Guide%20v1.4%20June%202018%20Final.pdf