Corporate Production GIS Metadata

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Layer Name: Roads

General Information

Layer Name:	Roads
# of Features:	6312
Status:	ACTIVE
Layer Source:	GIS_DATA.ROADSEGMENT
Layer Quality:	Good
Feature Accuracy:	911 STANDARDS
Type:	POLYLINE
Description:	Single line representing the centre of each street within the city. Each segment is broken at each intersection or street name change.
Projection:	NAD 83 UTM Zone 17N (EPSG 26917)
Disclaimer:	The City of Kitchener assumes no responsibility for the accuracy of the provided data. Any use of this information is done so at the users risk. Good survey practices must be applied when utilizing this information. The City of Kitchener and its partners have created this data for information purposes on an as-is and as available basis and is under no circumstances a substitute for a Legal Survey. The City does not make any representations or warranty, express or implied, concerning the accuracy, quality, likely results, or reliability of the use of the data. The City of Kitchener assumes no responsibility for any errors and is not liable for any damages of any kind resulting from the use of, or reliance on, the information and material contained in this layer. All information should be verified independently before being used or relied on. Users are encouraged to contact the City of Kitchener to ensure the accuracy of the information provided by Kitchener.

Source and Contraints

Source Map Label:	Street Network: Corporate Services - Technology Innovation and Services - Geospatial Data and Analytics (Current to date of printing)
History:	Based on the 1997 Ortho Imagery a Co-op student was hired in January of 1998 to redraw the SLSN which was originally supplied from the Region of Waterloo. Each roadsegment was digitized in the direction of increasing addresses and when possible followed the centre line of the road. When completed the attribute information was transferred from the old SLSN to the new Street Network. The original geo-ids created by the region were maintained but the attribute field name was changed to roadsegmentid. In early 1999, Kitchener GIS began to maintain the kitchener portion of the SLSN and provide updates to the Region to keep them up-to-date. Many additional attributes have been added over the years but the process with the Region continues. This was the first layer to be fully maintained by the GIS section. 2020 - move traffic and operations fields on to the roadsegment layer to simplify editing of the data.
Original Source:	CS - Planning
Original Source Process:	
Maintenance:	Road segments are added at In Circulation and Draft Approved stages in the Subdivision Application phase as Preliminary or Planned roads respectively. The status of the road segment changes to Registered when the plan is deposited at the Registry Office and when a warrantee letter is received from Engineering the status is changed to Active.
Current Info Source:	In Circulation and Draft Approved , Registered & Reference Plans , Title searches as required
Outstanding Issues:	
Update Frequency:	CONTINUOUS

Data Fields & Domain Information

Roads

Column Name	Alias	Data Type	Comments	Domain Name	Default value	Domain Values
OBJECTID	OBJECTID	NUMBER	ESRI system maintained integer field used to uniquely identify rows in tables in a geodatabase. Note that OBJECTIID values change upon export or import of the data and should not be used as a primary field for searching or identifying records.			
ROADSEGMENTID	Roadsegmentid	NUMBER	Database maintained field that permanently assigns a unique value for each record. This ID value should be the one referred to when identifying a record.			
STREET	Street	VARCHAR2	Street name of the feature based on the STREET MASTER Table.			
FROM_STREET	From Street	VARCHAR2	Cross street the road segment runs from			
TO_STREET	To Street	VARCHAR2	Cross street the road segment runs to			

Column Name	Alias	Data Type	Comments	Domain Name	Default value	Domain Values
FROM_LEFT_ADDRESS	From Left Address	NUMBER	Minimum address found on the left side of the road segment			
TO_LEFT_ADDRESS	To Left Address	NUMBER	Maximum address found on the left side of the road segment			
FROM_RIGHT_ADDRESS	From Right Address	NUMBER	Minimum address found on the right side of the road segment			
TO_RIGHT_ADDRESS	To Right Address	NUMBER	Maximum address found on the right side of the road segment			
RIGHT_SIDE_PARITY	Right Side Parity	VARCHAR2	Whether the right side of the road is EVEN or ODD numbering base on standing at the minimum address on the street and looking towards the higher addresses			
REGIONAL_ROAD	Regional Road	VARCHAR2	Regional Road number of the street is applicable			
HIGHWAY	Highway	VARCHAR2	Highway number of the street if applicable			
MUNICIPALITY	Municipality	VARCHAR2	Municipality that the feature is in. The value is either manually entered or generated from a spatial join process.			
GENERAL_GRID_ID	General Grid Id	VARCHAR2	Mapping grid the street is in as determind by a spatial join with GRID_STANDARD, used for creating atlases			
LANES	Lanes	NUMBER	Number of lanes the street has.			
SEQUENCE	Sequence	NUMBER	Sequence of the street numbered base on standing at the minimum address on the street and looking towards the higher addresses and counting each segment of street up from 1			
STATUS_DATE	Status Date	DATE	Database maintained field. Updates to the current date/time when the STATUS field value is changed.			
OWNERSHIP	Ownership	VARCHAR2	Asset Owner: Who owns the feature, Generally Government agencies such as CITY, REGION and MTO and private citizens and businesses shown as PUBLIC. This usually relates to the property the asset sits on.	RoadsOwnership		KIT; MTO; PRIVATE; REG; WAT
PLOW_ROUTE	Plow Route	VARCHAR2	Plow route the road is part of as determined by a spatial join with PLOW_ROUTE layer			
MEDIAN_TYPE	Median Type	VARCHAR2	Indicates if the street has a median or not	RoadMedian		Median Exists; No Median Exists
STREET_NAME	Street Name	VARCHAR2	Steet name			
STREET_TYPE	Street Type	VARCHAR2	Street name type			
STREET_DIRECTION	Street Direction	VARCHAR2	Compass direction of the street name			
PLOW_PRIORITY	Plow Priority	NUMBER	Snow plow priority of the street with 1 being the highest priority and 3 the lowest. Field is maintained by operations staff through an application.	PlowPriority		0 - Plowed by other agency or not plowed; 1 - Priority 1 (Main or arterial roads); 2 - Priority 2 (Hills, curves & GRT routes); 3 - Priority 3 (Balance of backstreets); 4 - Priority 4 (Laneways)
LEAF_ROUTE	Leaf Route	VARCHAR2	ID of the leaf route the street is on as determined by a spatial join with LEAF_ROUTE_AREA			
CREATE_DATE	Create Date	DATE	Database maintained field. Updates to the current data/time. Update takes place when the feature is created.			
LEFT_MUNICIPALITY	Left Municipality	VARCHAR2	Municipality to the right of the road			
RIGHT_MUNICIPALITY	Right Municipality	VARCHAR2	Municipality to the left of the road			
CREATE_BY	Create By	VARCHAR2	Database maintained field. Updates to the user name that created the feature. Update takes place when the feature is created.			
UPDATE_DATE	Update Date	DATE	Database maintained field. Updates to the current data/time when an attribute or the geometry of the feature is changed. Update takes place when the feature is created and/or changed.			
UPDATE_BY	Update By	VARCHAR2	Database maintained field. Updates to the user name that most recently updated either an attribute or the geometry of the feature. Update takes place when the feature is created and/or changed.			
SOURCE_DATE	Source Date	DATE	GIS maintained field. Date of the source document or information.			

Column Name	Alias	Data Type	Comments	Domain Name	Default value	Domain Values
SOURCE	Source	VARCHAR2	GIS maintained field. Source EDRA (Electronic Document Registration Application) document number, or name of department or specific staff member that the information came from.			
REVISION_NOTES	Revision Notes	VARCHAR2	In house GIS revision notes			
CATEGORY	Category	VARCHAR2	Primary mapping field of the layer. Valid category values are:BULB,HIGHWAY,RAMP,ROAD,ROUNDABOUT,STICK	RoadCategory		BULB; HIGHWAY; RAMP; ROAD; ROUNDABOUT
SUBCATEGORY	Subcategory	VARCHAR2	Secondary mapping field of the layer.Valid subcategory values are:HIGHWAY,LANE,LOCAL,MAJOR,MINOR	RoadSubcategory		
STATUS	Status	VARCHAR2	Indicates the status of feature. A pick list is used for this field - contact GIS for pick list values.	RoadStatus		ACTIVE; CLOSED; PLANNED; PRELIMINARY; REGISTERED; TO INPUT; UNKNOWN
PAVEMENT_WIDTH	Pavement Width	NUMBER	Width of the paved surface in metres			
ROW_WIDTH	Row Width	NUMBER	Width of the right of way in metres			
QUARTER_GRID_ID	Quarter Grid Id	VARCHAR2	ID of the quarter grid, used for atlas creation as determind by a spatial join with GRID_STANDARD_QUARTER			
WARDID	Wardid	NUMBER	Reference Ward that the feature is located in. The value is either manually entered or generated from a spatial join process.			
TAG1	Tag1	VARCHAR2	Temporary location to store short term data for mapping purposes only.			
TAG2	Tag2	VARCHAR2	Temporary location to store short term data for mapping purposes only.			
PLANNINGCOMMUNITYID	Planningcommunityid	NUMBER	GIS maintained field. Reference Planning Community that the feature is located in. The value is either manually entered or generated from a spatial join process.			
STR_ROADSEGMENTID	Str Roadsegmentid	VARCHAR2	String value of the roadsegment ID (No longer needed)			
FIRERESPONSEZONEID	Fireresponsezoneid	NUMBER	ID of the fire responze zone as determind by a spatial join with FIRE_RESPONSE_ZONE			
PARCELID	Parcelid	NUMBER	Reference Parcel ID that the feature is located in. The value is either manually entered or generated from a spatial join process.			
SHOULDER	Shoulder	VARCHAR2	Whether the road has a paved shoulder	RoadShoulder		GRAVEL; NONE; PARTIALLY GRAVEL; PAVED; UNKNOWN
SHAPE	Shape	ST_GEOMETRY	ESRI system maintained field. Stores the geometry type and geometry of the feature.			
MAINTENANCE	Maintenance	VARCHAR2	Type of maintenace operations performs on the road, Yearly or Winter only. Field is maintained by operations staff through an application.	RoadMaintenance		NONE; WINTER ONLY; YEAR ROUND
FLOW_DIRECTION	Flow Direction	VARCHAR2	Traffic flow direction on one way and two way freets. Used for network analysis.	RoadFlowDirection		FromTo; ToFrom; TwoWay
CARTO_CLASS	Carto Class	VARCHAR2	Mapping classes that match the Region of Waterloo's mapping classes	RoadCartoClass		Alleyway / Lane; Arterial; Cul-de-Sac; Expressway / Highway; Freeway; Local Street; Private; Ramp; Roundabout; Stick
OPERATIONS_CLASS	Operations Class	VARCHAR2	Used for Operations mapping indicating either CITY, WATERLOO or CONTRACTOR for shared services for operations. This field is used to determine if the the plow route or the cul de sac route will be in the PLOW_ROUTE field using an nightly script.Field is maintained by operations staff through an application.	RoadOperationsClass	CITY	CAMBRIDGE; CITY; CONTRACTOR; MTO; PRIVATE; REGION; WATERLOO
SALT_SAND_ROUTE	Salt Sand Route	VARCHAR2	Salting route the road is part of as determined by a spatial join with SALT_ROUTE layer			
STARTX	Startx	NUMBER	Start point X coordinate of the roadsegment in UTM			

Column Name	Alias	Data Type	Comments	Domain Name	Default value	Domain Values
STARTY	Starty	NUMBER	Start point Y coordinate of the roadsegment in UTM			
ENDX	Endx	NUMBER	End point X coordinate of the roadsegment in UTM			
ENDY	Endy	NUMBER	End point Y coordinate of the roadsegment in UTM			
ROAD_PATROL	Road Patrol	VARCHAR2	Whether the road is eligable for road patrol. Field is maintained by operations staff	YesNoOnly	N	No; Yes
OPERATIONS_MTO_CLASS	MTO Class (Operations)	VARCHAR2	MTO operations class override to create a consistent MTO class flow to roads. Field is maintained by operations staff through an application.	MTOClasses	3	1 - 3 times every 7 days; 2 - 2 times every 7 days; 3 - once every 7 days; 4 - once every 14 days; 5 - once every 30 days; 6 - patrolling not required
LAST_ROAD_PATROL_DATE	Last Road Patrol Date	TIMESTAMP(6)	Date the road was last patrolled. Maintained through an script from the road patrol application.			
NEXT_ROAD_PATROL_DUE	Next Road Patrol Due	TIMESTAMP(6)	The next date the road should be patrolled. Maintained through an script from the road patrol application.			
SURFACE_LAYER_TYPE	Surface Layer Type	VARCHAR2	Road surface layer material		PAVED	
OFFICIAL_ROAD_CLASSIFICATION	Official Road Classification	VARCHAR2	Official classification from the Municipal Pan Transportation Map (no longer used)		6	
SPEED_LIMIT_KM	Speed Limit Km	NUMBER	Speed limit of the road in KM. Field is maintained by traffic staff through an application.		50	
TRUCK_ACCESS	Truck Access	VARCHAR2	Truck access to the road. Field is maintained by traffic staff through an application.	RoadTruckAccess	NO ACCESS	24HR; 7-7 SUN EXCL; MON-FRI; MON-SUN; NO ACCESS
BUS_ROUTE	Bus Route	VARCHAR2	If the road is on a bus route.Field is maintained through a script from updates from the Region.	YesNoOnly	N	No; Yes
AADT	Aadt	NUMBER	Annual Average Daily Traffic counts. It is the total volume of vehicle traffic of a highway or road for a year divided by 365 days. Field is maintained by traffic staff through an application.		1000	
AADT_YEAR	Aadt Year	VARCHAR2	Year AADT was taken. Field is maintained by traffic staff through an application.			
AADT_TYPE	Aadt Type	VARCHAR2	Type of AADT count added. Field is maintained by traffic staff through an application.	RoadAADTType	ESTIMATE	24 HR AADT; 8 HR TMC; ESTIMATE
CALCULATED_MTO_CLASS	Calculated Mto Class	NUMBER	Calculated MTO class from traffic data of AADT and Speed Limit.		5	
SERVICE_YEAR	Service Year	VARCHAR2				
BIKE_ACCESS	BIKE_ACCESS	VARCHAR2	If the road has bike access. Field is used to export data to Google	RoadBikeAccess		Bike Lane; Disallowed; None; Recommended; Trail; Wide Shoulder
SALT_PRIORITY	SALT_PRIORITY	NUMBER	Salting priority of the street with 1 being the highest priority and 3 the lowest. Operations staff informs GIS yearly of changes.		3	
SNOWLOAD_ROUTE	Snowload route	VARCHAR2		SnowLoadRoute	None	Bucket List; Days Priority 4; Days Priority 5; Nights CW Priority 1; Nights CW Priority 2; Nights CW Priority 3; Nights DT Priority 1; Nights DT Priority 2; None
LAST_STREET_SWEEP_DATE	LAST_STREET_SWEEP_DATE	TIMESTAMP(6)	Date of last street sweep. Road is assumed to be swept if one of the street sweepers travel over the road at 15 km/hr as recorded in GeoTab			

Column Name	Alias	Data Type	Comments	Domain Name	Default value	Domain Values
STREET_SWEEPING	STREET_SWEEPING	NUMBER	Number of street sweeping passes done by the city. In general, STREET_SWEEPING = '2' where OPERATIONS_CLASS = 'CITY' AND STATUS='ACTIVE' AND (SURFACE_LAYER_TYPE <> 'GRAVEL' OR SHOULDER = 'PAVED') else set it to '0'. Number of passes is 4 if there is a median on a multi-lane road. All values can be overridden by operations.	RoadSweeping	2	0 - Not swept by City; 2 - 2 sweep passes; 4 - 4 sweep passes
SNOWLOAD_PRIORITY	Snowload priority	VARCHAR2		SnowLoadPriority	0	0 - Not snow loaded; 12 - 1 and 2; 14 - 1 and 4; 15 - 1 and 5; 2 - Priority 2 (Minimal Storage, load before next winter event); 23 - 2 and 3; 24 - 2 and 4; 3 - Priority 3 (Some boulevard storage, loading will be required after multiple winter events or more that 15 cm event); 4 - Priority 4 (Bike lanes requiring loading after 30 cm winter event); 5 - Priority 5 (City wide program addressed by day and night crews - areas with limited boulevards or narrow streets)
LANEWAY_WINTER_DESCRIPTION	Laneway winter description	VARCHAR2				
LANEWAY_WINTER_ROUTE	Laneway winter route	VARCHAR2		LanewayWinterRoute	N/A	N/A; R1; R2
LANEWAY_WINTER_ROUTE_ORDER	Laneway winter route order	NUMBER				
LANEWAY_WINTER_NOTES	Laneway winter notes	VARCHAR2				
SPEED_85TH_KM	SPEED_85TH_KM	NUMBER				
MEAN_SPEED_KM	MEAN_SPEED_KM	NUMBER				
DBT	DBT	NUMBER				
PERCENT_BIKES	PERCENT_BIKES	NUMBER				
SNOW_CURB_CUT_PRIORITY	SNOW_CURB_CUT_PRIORITY	VARCHAR2			0	
REGION_GARBAGE_PICK_UP_DAY	REGION_GARBAGE_PICK_UP_DAY	VARCHAR2				
CRITICAL_INFRASTRUCTURE	CRITICAL_INFRASTRUCTURE	VARCHAR2		RoadCriticalInfrastructure	Non-critical Road	Evacuation Centres Road; Exit Road; Freeway; Major Internal; Non-Critical; Railway
CRITICAL_INFRASTRUCTURE	CRITICAL_INFRASTRUCTURE	VARCHAR2		RoadCriticalInfrastructure	Non-critical Road	Evacuation Centres Road; Exit Road; Freeway; Major Internal; Non-Critical; Railway
SNOWLOAD_LEFT_SEQUENCE	Snowload left sequence	NUMBER				
SNOWLOAD_RIGHT_SEQUENCE	Snowload right sequence	NUMBER				

*Layer Quality:
SCHEMATIC - spatial representation of features are not to scale and not in accurate relative position to other features on other layers.
GENERALIZED - position of features are approximate, should not be used in conjunction with base layers (parcel fabric or Ortho-imagery)
GOOD - position of features are usually based on relative position to base layers (Ortho-imagery or parcel fabric)

Note: Dataset may not include all fields: Open Data layers will only include fields approved for sharing as open data

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