Land Information Ontario
Data Description

ORN Road Net Element

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LIO Class Description

ORN Road Net Element

Class Short Name: ORNELEM

Version Number: 2

Class Description:

The basic centreline road network features, which forms the spatial framework for the ORN. Road net elements are bound by a junction on each end, except for cul-de-sacs (loops) where there is only one junction. The ORN is segmented at real-world intersections (junctions) on the ground.

Abstract Class Name: SPSLINEM

Abstract Class Description:

Spatial Single-Line With Measures: An object is represented by ONE and ONLY ONE line. All vertices along the arc have measures (values for x, y, m). Measures are required for dynamic segmentation/linear referencing. Example: Ontario Road Network road segments.

Metadata URL:

ORN Road Net Element

ORN_ROAD_NET_ELEMENT_FT

The basic centreline of road network features, which forms the spatial network of roads, composed of three types of road net elements, road element, ferry connection and virtual road. The ORN is segmented at real-world intersections or junctions on the ground and road net elements are bound by a junction on each end, except for cul-de-sacs where there is only one junction. Where there are grade-separated crossings, the bisecting road elements do not share a junction. If a junction is present at the location of the grade separation, it is either connected to the lower set of road elements or to the higher but never to both. Proposed roads and roads underconstruction are not are not represented in the ORN. Turning lanes separated by a median longer than 10 metres in length are represented in the ORN.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER(13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
FROM_JUNCTION_ID	NUMBER(13,0)	Yes	FROM_JCT	
The beginning junction for a road element or ferry connection.				
TO_JUNCTION_ID	NUMBER(13,0)	Yes	TO_JCT	
The end junction for a road element or ferry connection.				
ROAD_ABSOLUTE_ACCURACY	NUMBER(7,2)	Yes	ACCURACY	
A statement that identifies the positional accuracy of the ORN road geometry, in metres.				
NATIONAL_UUID	VARCHAR2(32)	Yes	NID	
A unique national identifier assigned to a road net element, junction and selected event data such as Toll Point, Blocked Passage and Structure which are required to support the National Road Network (NRN).				
LENGTH	NUMBER(9,3)	Yes	LENGTH	
The measured planimetric length of a road net element in metres.				
DIRECTION_OF_TRAFFIC_FLOW	VARCHAR2(8)	Yes	DIRECTION	'Both', 'Negative', 'Positive' (See ORN_DIR_OF_TRAFFIC_FLOW_LIST table)
The direction(s) of vehicular or motor traffic flow. All road elements must have a direction of traffic flow assigned. Valid values: See table ORN_DIR_OF_TRAFFIC_FLOW_LIST in Appendix for list of valid values.				
EXIT_NUMBER	VARCHAR2(10)	No	EXIT_NUM	
The number of an exit on or off a freeway, expressway or highway, assigned by an administrating body and is represented by a valid number or character.				
ROAD_ELEMENT_TYPE	VARCHAR2(20)	Yes	ELEM_TYPE	'FERRY CONNECTION', 'ROAD ELEMENT', 'VIRTUAL ROAD' (See ORN_ROAD_ELEMENT_TYPE_LIST table)
An attribute describing the type of road net element. Valid values: See table ORN_ROAD_ELEMENT_TYPE_LIST in Appendix for list of valid values.				
TOLL_ROAD_IND	VARCHAR2(3)	Yes	TOLL_ROAD	'Yes','No
Indicates if the road net element is a toll road.				
ACQUISITION_TECHNIQUE	VARCHAR2(25)	Yes	ACQTECH	'AERIAL PHOTO', 'COMPUTED', 'DIGITAL ELEVATION MODEL ', 'FIELD COMPLETION', 'GPS', 'NONE', …

The type of data source or technique used to create or revise the road net element.

Column Name	Column Type	Mandatory	Short Name	Valid Values
CREATION_DATE	DATE	Yes	CREDATE	

The date the road net element was originally created.

REVISION_DATE	DATE	No	REVDATE	

The date the road net element was last revised or updated.

GEOMETRY_UPDATE_DATETIME	DATE	No	GEO_UPD_DT	

Date/time the geometry was created or last modified in the source database.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

SHAPE	SDO_GEOMETRY	No	SHAPE	

Geometry attribute.

ORN_ACQUISITION_TECHNIQUE_LIST

List of valid acquisition techniques.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ACQUISITION_TECHNIQUE	VARCHAR2 (25)	Yes	ACQTECH	

The data source or technique used to create or revise the road net element.

ACQUISITION_TECHNIQUE_DESCR	VARCHAR2 (100)	Yes	ACQTECH_D	

A description of the acquisition technique.

NRN_ACQUISITIONTECHNIQUE	NUMBER (3,0)	No	NRN_CODE	

Acquisition technique assigned to support the National Road Network (NRN).

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_ADDRESS_INFO

The essential components of a street address. Address information is collected and stored relating to left or right side of the street or road element. Addressing is collected and maintained by an authoritative source such as the municipality, county or region for the purposes of assisting in the delivery of "911" services. Addresses are typically directly related to road names, but there are cases where an address does not directly link to a road and the address information is linked to a road net element attribute called road element type - virtual road, i.e. cottage or country roads where access is across water bodies (islands) or along shorelines not accessed by road.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

System generated identifier, unique at the application level.

FROM_MEASURE	NUMBER (9,3)	Yes	FROM_MEAS	

The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

TO_MEASURE	NUMBER (9,3)	Yes	TO_MEASURE	

The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

ELEMENT_ORDER_NUMBER	NUMBER (5,0)	Yes	ORDER_NUM	

This is a sequential number starting at 1 for each event, which determines the order in which the event records combine to form the address range.

FIRST_HOUSE_NUMBER	NUMBER (7,0)	No	FIRST_NUM	

The first house number of the address range.

LAST_HOUSE_NUMBER	NUMBER (7,0)	No	LAST_NUM	

The last house number of the address range.

HOUSE_NUMBER_STRUCTURE	VARCHAR2 (10)	No	NUM_STRUCT	'Even', 'Irregular', 'Mixed', 'None', 'Odd' (See ORN_HOUSE_NUM_STRUCTURE_LIST table)

The type of house or property numbering system that is applied to the address range. See ORN_HOUSE_NUMBER STRUCTURE_LIST in Appendix for a list of valid values.

STREET_SIDE	VARCHAR2 (10)	No	ST_SIDE	'Both', 'Left', 'Right' (See ORN_STREET_SIDE_LIST table)

The side of the street for which the addressing applies. The street side is determined by the traversal from the "From Measure" to the "To Measure" of the road element. See table ORN_STREET_SIDE_LIST in Appendix for list of valid values.

FULL_STREET_NAME	VARCHAR2 (100)	Yes	FULL_NAME	

This attribute is derived from the individual street name components where present, namely directional prefix, street type prefix, street name body, street type suffix and directional suffix and is stored in upper case text.

ORIGINAL_STREET_NAME	VARCHAR2 (100)	No	ORIG_ST	

The street name provided by source agencies, which is stored as is regardless of spelling or abbreviations.

STANDARD_MUNICIPALITY	VARCHAR2 (100)	Yes	STD_MUNIC	'Abitibi 70', 'Agency 1', 'Agency 30', 'Akwesasne 59', 'Alderville First Nation', 'Assabaska', … (See ORN_STANDARD_MUNICIPALITY_LIST table)

Standardized municipality names as maintained by the Ministry of Municipal Affairs and Housing (MMAH), and Official Indian Reserve Names as maintained by the Federal Government.

ORIGINAL_MUNICIPALITY	VARCHAR2 (100)	Yes	ORIG_MUNIC	

The municipality name provided by source agencies, which is stored as is, regardless of spelling or abbreviations.

It may contain former municipality names or may contain local municipal names such towns or village names.

| AGENCY_NAME | VARCHAR2 (100) | No | AGENCY | 'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table) |

The name of the agency.

| EFFECTIVE_DATETIME | DATE | Yes | EFF_DATE | |

Date/time the record was created or last modified in the source database.

ORN_AGENCY_NAME_LIST

The name of the source agency providing geometry or attribute information. This is represented by either a Municipal Name, a Provincial Ministry (i.e. Ministry of Health, Ministry of Transport or the Ministry of Natural Resources) or a Federal Agency (i.e. Natural Resources Canada or Statistics and Elections Canada) and is subject to change.

Column Name	Column Type	Mandatory	Short Name	Valid Values
AGENCY_NAME	VARCHAR2 (100)	Yes	AGENCY	

The name of the agency.

| AGENCY_TYPE | VARCHAR2 (10) | Yes | AGENCY_T | |

The type of agency. Valid value: See table ORN_AGENCY_TYPE_LIST in Appendix for list of valid values.

| AGENCY_DESCR | VARCHAR2 (250) | Yes | AGENCY_D | |

A description of the type of agency.

| EFFECTIVE_DATETIME | DATE | Yes | EFF_DATE | |

Date/time the record was created or last modified in the source database.

| EXPIRY_DATETIME | DATE | No | EXP_DATE | |

Date/time that the record was expired from use.

ORN_AGENCY_TYPE_LIST

List of valid agency types

Column Name	Column Type	Mandatory	Short Name	Valid Values
AGENCY_TYPE	VARCHAR2 (10)	Yes	AGENCY_T	

The type of agency.

| AGENCY_TYPE_DESCR | VARCHAR2 (35) | Yes | AGENCY_T | |

A description of the type of agency.

| NRN_ACQUISITIONPROVIDER | NUMBER (3,0) | No | NRN_CODE | |

Acquisition provider assigned to support the National Road Network (NRN).

| EFFECTIVE_DATETIME | DATE | Yes | EFF_DATE | |

Date/time the record was created or last modified in the source database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_ALTERNATE_STREET_NAME

An event identifying an alternate street name and may be associated with a bilingual name. A language code shall be used to specify the applied language which resides in the Street_Name_Parsed Table.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

System generated identifier, unique at the application level.

Column Name	Column Type	Mandatory	Short Name	Valid Values
FROM_MEASURE	NUMBER (9,3)	Yes	FROM_MEAS	

The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

Column Name	Column Type	Mandatory	Short Name	Valid Values
TO_MEASURE	NUMBER (9,3)	Yes	TO_MEASURE	

The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

Column Name	Column Type	Mandatory	Short Name	Valid Values
FULL_STREET_NAME	VARCHAR2 (100)	Yes	FULL_NAME	

This attribute is derived from the individual street name components where present, namely directional prefix, street type prefix, street name body, street type suffix and directional suffix and is stored in upper case text.

Column Name	Column Type	Mandatory	Short Name	Valid Values
AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table)

The name of the agency.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

ORN_BLOCKED_PASSAGE

A point event on a road element identifying the existence of an access barrier or an obstruction, either man-made or natural, which controls or limits access to a road element.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

System generated identifier, unique at the application level.

AT_MEASURE	NUMBER (9,3)	Yes	AT_MEASURE	

At measure represents a location or point of interest along a linear feature. At measure is expressed as a distance in metres from the beginning of the road net element.This measure is related to planimetric distance not actual driven distance.

BLOCKED_PASSAGE_TYPE	VARCHAR2 (10)	Yes	BLOCKED_T	'Permanent', 'Removable' (See ORN_BLOCKED_PASSAGE_TYPE_LIST table)

A man-made or natural barrier or access restriction placed on a road net element to control or limit access to a road net element. Valid Values: See table ORN_BLOCKED_PASSAGE_TYPE_LIST in Appendix for list of valid values.

AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table)

The name of the agency.

NATIONAL_UUID	VARCHAR2 (32)	Yes	NID	

A unique national identifier assigned to a road net element, junction and selected event data such as Toll Point, Blocked Passage and Structure which are required to support the National Road Network (NRN).

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

ORN_BLOCKED_PASSAGE_TYPE_LIST

List of valid blocked passage types

Column Name	Column Type	Mandatory	Short Name	Valid Values
BLOCKED_PASSAGE_TYPE	VARCHAR2 (10)	Yes	BLOCKED_T	

The type of man-made or natural barrier or access restriction placed on a road element to control or limit access to a road net element.

BLOCKED_PASSAGE_TYPE_DESCR	VARCHAR2 (750)	Yes	BLOCKED_D	

A description of the blocked passage type.

NRN_BLOCKEDPASSAGETYPE	NUMBER (3,0)	No	NRN_CODE	

Blocked passage type assigned to support the National Road Network (NRN).

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_DIR_OF_TRAFFIC_FLOW_LIST

List of valid direction of traffic flows

Column Name	Column Type	Mandatory	Short Name	Valid Values
DIRECTION_OF_TRAFFIC_FLOW	VARCHAR2 (8)	Yes	DIRECTION_	

The direction(s) of vehicular or motor traffic flow. All road elements must have a direction of traffic flow assigned.

DIR_OF_TRAFFIC_FLOW_DESCR	VARCHAR2 (100)	Yes	DESCR	

A description of the direction of traffic flow.

NRN_DIRECTIONOFTRAFFICFLOW	NUMBER (3,0)	No	NRN_CODE	

Direction of traffic flow assigned to support the National Road Network (NRN).

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_HOUSE_NUM_STRUCTURE_LIST

List of valid house number structures

Column Name	Column Type	Mandatory	Short Name	Valid Values
HOUSE_NUMBER_STRUCTURE	VARCHAR2 (10)	Yes	NUM_STRUCT	

The type of house or property numbering system that is applied to the address range.

HOUSE_NUMBER_STRUCTURE_DESCR	VARCHAR2 (500)	Yes	NUM_STR_D	

A description of the house number structure.

NRN_HOUSENUMBERSTRUCTURE	NUMBER (3,0)	No	NRN_CODE	

House number structure assigned to support the National Road Network (NRN).

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_JUNCTION

A unique national identifier assigned to a road net element, junction and selected event data such as Toll Point, Blocked Passage and Structure which are required to support the National Road Network (NRN).

Column Name	Column Type	Mandatory	Short Name	Valid Values
JUNCTION_ID	NUMBER (13,0)	Yes	JCT_ID	

System generated identifier, unique at the application level.

LATITUDE_DECIMAL_DEGREES	NUMBER (10,7)	Yes	LATITUDE	

The latitude in decimal degrees.

LONGITUDE_DECIMAL_DEGREES	NUMBER (10,7)	Yes	LONGITUDE	

The longitude in negative decimal degrees.

JUNCTION_TYPE	VARCHAR2 (15)	Yes	JCT_TYPE	'Boundary', 'Dead End', 'Ferry', 'Intersection' (See ORN_JUNCTION_TYPE_LIST table)

The classification of a junction is based on the valency of the junction. The number of road elements or ferry connections joining at a junction is termed the valency of a junction. Valid values: See table ORN_JUNCTION_TYPE_LIST in Appendix for list of valid values.

EXIT_NUMBER	VARCHAR2 (10)	No	EXIT_NUM	

The number of an exit on or off a freeway, expressway or highway, assigned by an administrating body and is represented by a valid number or character.

NATIONAL_UUID	VARCHAR2 (32)	Yes	NID	

A unique national identifier assigned to a road net element, junction and selected event data such as Toll Point, Blocked Passage and Structure which are required to support the National Road Network (NRN).

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

OGF_ID	NUMBER (13,0)	Yes	OGF_ID	

System generated identifier, unique at the application level.

ORN_JUNCTION_TYPE_LIST

List of valid junction types

Column Name	Column Type	Mandatory	Short Name	Valid Values
JUNCTION_TYPE	VARCHAR2 (15)	Yes	JCT_TYPE	

The classification of a junction is based on the valency of the junction. The number of road elements or ferry connections joining at a junction is termed the valency of a junction. For example a junction that connects a total of two road elements is called a two valent junction. There are four types of junctions. These are: 1. Intersection - intersection of three or more road elements at the same grade level, therefore they have a valency of greater than two 2. Dead-end - at the end of a dead-end road segment, or where a road further continues as a virtual road 3. Ferry - intersection of a road element and a ferry connection 4. Boundary - intersection of a road element or ferry connection with a provincial or international boundary. A two valent junction.

JUNCTION_TYPE_DESCR	VARCHAR2 (100)	Yes	JCT_TYPE_D	

A description of the junction type.

NRN_JUNCTIONTYPE	NUMBER (3,0)	No	NRN_CODE	

Junction type assigned to support the National Road Network (NRN).

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_JURISDICTION

Identifies jurisdictional, or custodianship responsibility of the road

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	
System generated identifier, unique at the application level.				
ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	
System generated identifier, unique at the application level.				
FROM_MEASURE	NUMBER (9,3)	Yes	FROM_MEAS	
The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.				
TO_MEASURE	NUMBER (9,3)	Yes	TO_MEASURE	
The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.				
STREET_SIDE	VARCHAR2 (10)	Yes	ST_SIDE	'Both', 'Left', 'Right' (See ORN_STREET_SIDE_LIST table)
The side of the street for which the addressing applies. The street side is determined by the direction of the traversal from the "From Measure" to the "To Measure" of the road element. Valid values: See table ORN_STREET_SIDE_LIST in Appendix for list of valid values.				
JURISDICTION	VARCHAR2 (100)	Yes	JURIS	
An indication of who has the jurisdictional, or custodianship responsibility for a road net element. The custodian would have the responsibility to ensure maintenance occurs, but is not necessarily the one who undertakes the maintenance directly.				
AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table)
The name of the agency.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

ORN_JURISDICTION_LIST

List of valid road jurisdictions as maintained by the Municipality, Provincial Ministries, and Federal Agencies and is subject to change. Jurisdiction may be based on street side.

Column Name	Column Type	Mandatory	Short Name	Valid Values
JURISDICTION	VARCHAR2 (100)	Yes	JURIS	
An indication of who has the jurisdictional, or custodianship responsibility for a road net element. The custodian would have the responsibility to ensure maintenance occurs, but is not necessarily				

the one who undertakes the maintenance directly.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE

Date/time that the record was expired from use.

ORN_NUMBER_OF_LANES

A linear event indicating the number of lanes.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

System generated identifier, unique at the application level.

FROM_MEASURE	NUMBER (9,3)	Yes	FROM_MEAS	

The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

TO_MEASURE	NUMBER (9,3)	Yes	TO_MEASURE	

The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

NUMBER_OF_LANES	NUMBER (2,0)	Yes	NUM_LANES	

The number of lanes of a road.

AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table)

The name of the agency.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

ORN_OFFICIAL_LANGUAGE_LIST

List of valid Official Languages - official language code

Column Name	Column Type	Mandatory	Short Name	Valid Values
OFFICIAL_LANGUAGE	VARCHAR2 (3)	Yes	OFF_LANG	

A code identifying the official language. Valid values: See table ORN_OFFICIAL_LANGUAGE_LIST in Appendix for list of valid values.

OFFICIAL_LANGUAGE_DESCR	VARCHAR2	Yes	OFF_LANG_D	

(10)

A description of the official language.

Column Name	Column Type	Mandatory	Short Name	Valid Values
NRN_OFFICIALLANGUAGE	NUMBER (3,0)	No	NRN_CODE	

Official language assigned to support the National Road Network (NRN).

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_OFFICIAL_STREET_NAME

An event identifying an official street name and may be associated with a bilingual name. A language code shall be used to specify the applied language which resides in the Street_Name_Parsed Table.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

System generated identifier, unique at the application level.

FROM_MEASURE	NUMBER (9,3)	Yes	FROM_MEAS	

The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

TO_MEASURE	NUMBER (9,3)	Yes	TO_MEASURE	

The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

FULL_STREET_NAME	VARCHAR2 (100)	Yes	FULL_NAME	

This attribute is derived from the individual street name components where present, namely directional prefix, street type prefix, street name body, street type suffix and directional suffix and is stored in upper case text.

AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table)

The name of the agency.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

ORN_PAVEMENT_STATUS_LIST

List of valid road surface types.

Column Name	Column Type	Mandatory	Short Name	Valid Values
PAVEMENT_STATUS	VARCHAR2 (10)	Yes	PAVEMENT_S	
The surface type of a road element.				
PAVEMENT_STATUS_DESCR	VARCHAR2 (100)	Yes	PAVEMENT_D	
A description of the surface type.				
NRN_PAVEMENTSTATUS	NUMBER (3,0)	No	NRN_CODE	
Pavement status assigned to support the National Road Network (NRN).				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				
EXPIRY_DATETIME	DATE	No	EXP_DATE	
Date/time that the record was expired from use.				

ORN_ROAD_CLASS

A linear event identifying the class of road based on a functional classification schema.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	
System generated identifier, unique at the application level.				
ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	
System generated identifier, unique at the application level.				
FROM_MEASURE	NUMBER (9,3)	Yes	FROM_MEAS	
The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.				
TO_MEASURE	NUMBER (9,3)	Yes	TO_MEASURE	
The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.				
ROAD_CLASS	VARCHAR2 (25)	Yes	ROAD_CLASS	'Alleyway / Laneway', 'Arterial', 'Collector', 'Expressway / Highway', 'Freeway', 'Local / Strata', … (See ORN_ROAD_CLASS_LIST table)
The classification of a road.				
AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table)

The name of the agency.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

ORN_ROAD_CLASS_LIST

List of valid road classes.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ROAD_CLASS	VARCHAR2 (25)	Yes	ROAD_CLASS	

The classification of a road. Valid values: See table ORN_ROAD_CLASS_LIST in appendix for a list of valid values.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ROAD_CLASS_DESCR	VARCHAR2 (250)	Yes	ROAD_CLASS	

A description of the road class.

Column Name	Column Type	Mandatory	Short Name	Valid Values
NRN_ROADCLASS	NUMBER (3,0)	No	NRN_CODE	

Road class assigned to support the National Road Network (NRN).

Column Name	Column Type	Mandatory	Short Name	Valid Values
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_ROAD_ELEMENT_TYPE_LIST

List of valid road element types.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ROAD_ELEMENT_TYPE	VARCHAR2 (20)	Yes	ELEM_TYPE	

An attribute describing the type of road net element. Valid values: See table ORN__ROAD_ELEMENT_LIST for a list of valid values.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ROAD_ELEMENT_TYPE_DESCR	VARCHAR2 (750)	Yes	ELEM_TYP_D	

A description of the road element type.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_ROAD_NET_ELEMENT_SOURCE

The source agency, Municipality, Provincial Ministry, Federal Agency or other organization that provided the road net element.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

System generated identifier, unique at the application level.

FROM_MEASURE	NUMBER (9,3)	Yes	FROM_MEAS	

The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

TO_MEASURE	NUMBER (9,3)	Yes	TO_MEASURE	

The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table)

The name of the agency.

EXTERNAL_IDENT	VARCHAR2 (32)	No	EXT_IDENT	

A unique identifier assigned to the source agency.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

ORN_ROAD_SURFACE

The surface type of a road element.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

System generated identifier, unique at the application level.

FROM_MEASURE	NUMBER (9,3)	Yes	FROM_MEAS	

The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

TO_MEASURE	NUMBER (9,3)	Yes	TO_MEASURE	

The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

PAVEMENT_STATUS	VARCHAR2 (10)	Yes	PAVEMENT_S	'Paved', 'Unpaved' (See ORN_PAVEMENT_STATUS_LIST table)

The surface type of a road element. Valid values: See table ORN_PAVEMENT_STATUS_LIST in Appendix for

list of valid values.

Column Name	Column Type	Mandatory	Short Name	Valid Values
SURFACE_TYPE	VARCHAR2 (10)	No	SURFACE_T	'Blocks', 'Dirt', 'Flexible', 'Gravel', 'Rigid' (See ORN_SURFACE_TYPE_LIST table)

A linear event indicating the surface type of a road element. Valid values: See table ORN_SURFACE_TYPE_LIST in Appendix for list of valid values.

| **AGENCY_NAME** | VARCHAR2 (100) | No | AGENCY | 'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table) |

The name of the agency.

| **EFFECTIVE_DATETIME** | DATE | Yes | EFF_DATE | |

Date/time the record was created or last modified in the source database.

ORN_ROUTE_NAME

The name attached to a road net element as defined by a Municipality, Provincial Ministry, or Federal Agency and is associated to an established and/or maintained route.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

| **ORN_ROAD_NET_ELEMENT_ID** | NUMBER (13,0) | Yes | ELEMENT_ID | |

System generated identifier, unique at the application level.

| **FROM_MEASURE** | NUMBER (9,3) | Yes | FROM_MEAS | |

The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

| **TO_MEASURE** | NUMBER (9,3) | Yes | TO_MEASURE | |

The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

| **ROUTE_NAME_ENGLISH** | VARCHAR2 (75) | No | NAME_ENG | |

The English name that is attached to a road net element as defined by a Municipality, Provincial Ministry, or Federal Agency and is associated to an established and/or maintained route.

| **ROUTE_NAME_FRENCH** | VARCHAR2 (75) | No | NAME_FRE | |

The French name that is attached to a road net element as defined by a Municipality, Provincial Ministry, or Federal Agency and is associated to an established and/or maintained route.

| **AGENCY_NAME** | VARCHAR2 (100) | No | AGENCY | 'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF |

BURLINGTON', …
(See
ORN_AGENCY_NAME_LIST
table)

The name of the agency.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

ORN_ROUTE_NUMBER

The route number attached to a road net element as defined by a Municipality, Provincial Ministry, or Federal Agency and is typically associated with provincial highways, secondary highways, county roads and regional roads.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

System generated identifier, unique at the application level.

FROM_MEASURE	NUMBER (9,3)	Yes	FROM_MEAS	

The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

TO_MEASURE	NUMBER (9,3)	Yes	TO_MEASURE	

The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

ROUTE_NUMBER	VARCHAR2 (5)	Yes	ROUTE_NUM	

The route number assigned to a road typically associated with provincial highways, secondary highways, county roads and regional roads and is represented by a numeric and/or an alpha-numeric character. A road can be assigned multiple route numbers.

SHIELD_TYPE	VARCHAR2 (60)	No	SHIELD_T	'DISTRICT, COUNTY, REGIONAL OR MUNICIPAL ROAD SHIELD', 'PRIMARY, KINGS OR 400 SERIES HIGHWAY SHIELD', 'SECONDARY HIGHWAY SHIELD', 'TERTIARY HIGHWAY SHIELD', 'TOLL HIGHWAY SHIELD' (See ORN_SHIELD_TYPE_LIST table)

The shield type assigned to a route by a road authority. Valid Values: See table ORN_Shield_Type_List in Appendix for list of valid values.

AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST

The name of the agency.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

ORN_SHIELD_TYPE_LIST

The shield types that may be assigned to a route by a road authority and is used for cartographic purposes.

Column Name	Column Type	Mandatory	Short Name	Valid Values
SHIELD_TYPE	VARCHAR2 (60)	Yes	SHIELD_T	

The shield type assigned to a route by a road authority.

SHIELD_TYPE_DESCR	VARCHAR2 (750)	Yes	SHIELD_T_D	

A description of the shield type.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_SPEED_LIMIT

The maximum speed limit assigned to a road element in kilometres per hour in accordance with Municipal By-Laws or Provincial Law. In cases where a road element has more than one speed limit value, the speed limit of the longest portion of the road element is supplied.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

System generated identifier, unique at the application level.

FROM_MEASURE	NUMBER (9,3)	Yes	FROM_MEAS	

The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

TO_MEASURE	NUMBER (9,3)	Yes	TO_MEASURE	

The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

SPEED_LIMIT	NUMBER (3,0)	Yes	LIMIT	

The maximum speed limit assigned to a road element in kilometres per hour in accordance with Municipal By-Laws or Provincial Law.

AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF

BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', …
(See ORN_AGENCY_NAME_LIST table)

The name of the agency.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE

Date/time the record was created or last modified in the source database.

ORN_STANDARD_MUNICIPALITY_LIST

List of valid standard municipalities.

Column Name	Column Type	Mandatory	Short Name	Valid Values
STANDARD_MUNICIPALITY	VARCHAR2 (100)	Yes	STD_MUNIC	

Standardized municipality names as maintained by the Ministry of Municipal Affairs and Housing (MMAH), and Official Indian Reserve Names as maintained by the Federal Government.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_STREET_DIRECTION_LIST

List of valid street directions

Column Name	Column Type	Mandatory	Short Name	Valid Values
STREET_DIRECTION	VARCHAR2 (10)	Yes	STREET_DIR	

The direction of the street.

OFFICIAL_LANGUAGE	VARCHAR2 (3)	Yes	OFF_LANG	

A code identifying the official language.

CPC_DIRECTION_CODE	VARCHAR2 (2)	Yes	CPC_DIRECT	

The short form of the street direction as defined by Canada Post Corporation (CPC).

NRN_DIRECTION	NUMBER (3,0)	No	NRN_DIRECT	

Direction assigned to support the National Road Network (NRN).

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_STREET_NAME_PARSED

A lookup table containing standardized and abbreviated official and alternate street names. This table also contains the official and alternate parsed components of the street name and must have a street name body, but may or may not have a directional prefix/suffix or street type

prefix/suffix.

Column Name	Column Type	Mandatory	Short Name	Valid Values
FULL_STREET_NAME	VARCHAR2 (100)	Yes	FULL_NAME	
This attribute is derived from the individual street name components where present, namely directional prefix, street type prefix, street name body, street type suffix and directional suffix and is stored in upper case text.				
DIRECTIONAL_PREFIX	VARCHAR2 (10)	No	DIR_PREFIX	'East', 'Est', 'Nord', 'Nord Est', 'Nord Ouest', 'North', … (See ORN_STREET_DIRECTION_LIST table)
A geographic direction, which is part of the official or alternate street name which precedes the street name body and, if appropriate, the street type prefix.				
STREET_TYPE_PREFIX	VARCHAR2 (20)	No	ST_TYPE_P	'Abbey', 'Access', 'Acres', 'Aire', 'Alley', 'Allée', … (See ORN_STREET_TYPE_LIST table)
A geographic direction, which is part of the official or alternate street name which precedes the street name body and, if appropriate, the street type prefix.				
STREET_NAME_BODY	VARCHAR2 (50)	Yes	NAME_BODY	
The identifying named component of an official or alternate street name. A street name must have a street name body and street name body can never be abbreviated.				
STREET_TYPE_SUFFIX	VARCHAR2 (20)	No	ST_TYPE_S	'Abbey', 'Access', 'Acres', 'Aire', 'Alley', 'Allée', … (See ORN_STREET_TYPE_LIST table)
A part of the official or alternate street name identifying the street type which follows the street name body.				
DIRECTIONAL_SUFFIX	VARCHAR2 (10)	No	DIR_SUFFIX	'East', 'Est', 'Nord', 'Nord Est', 'Nord Ouest', 'North', … (See ORN_STREET_DIRECTION_LIST table)
A geographic direction, which is part of the official or alternate street name which follows the street name body and, if appropriate, the street type suffix.				
OFFICIAL_LANGUAGE	VARCHAR2 (3)	Yes	OFF_LANG	'ENG', 'FRE' (See ORN_OFFICIAL_LANGUAGE_LIST table)
A code identifying the official language.Valid Values: See table ORN_OFFICIAL_LANGUAGE_LIST in Appendix for list of valid values.				
ABBREVIATED_STREET_NAME	VARCHAR2 (100)	Yes	ABBR_NAME	
This attribute is composed of the individual street name components, where present, including directional prefix, street type prefix, street name body, street type suffix and directional suffix. Street name components are abbreviated with the exception of street name body.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				
EXPIRY_DATETIME	DATE	No	EXP_DATE	
Date/time that the record was expired from use.				

ORN_STREET_SIDE_LIST

List of valid street sides

Column Name	Column Type	Mandatory	Short Name	Valid Values
STREET_SIDE	VARCHAR2 (10)	Yes	ST_SIDE	
The side of the street for which the addressing applies. The street side is determined by the traversal from the "From Measure" to the "To Measure" of the road element.				
STREET_SIDE_DESCR	VARCHAR2 (10)	Yes	ST_SIDE_D	
A description of the street side.				
NRN_STREETSIDE	NUMBER (3,0)	No	NRN_CODE	
Street side assigned to support the National Road Network (NRN).				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				
EXPIRY_DATETIME	DATE	No	EXP_DATE	
Date/time that the record was expired from use.				

ORN_STREET_TYPE_LIST

List of valid street types

Column Name	Column Type	Mandatory	Short Name	Valid Values
STREET_TYPE	VARCHAR2 (25)	Yes	STREET_TYP	
A description of the street type.				
STREET_TYPE_SHORT_FORM_ENGLISH	VARCHAR2 (15)	No	ST_TYPE_EN	
A short form of the street type in English.				
STREET_TYPE_SHORT_FORM_FRENCH	VARCHAR2 (15)	No	ST_TYPE_FR	
A short form of the street type in French.				
NRN_STREETTYPE	NUMBER (3,0)	No	NRN_STREET	
Street type assigned to support the National Road Network (NRN).				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				
EXPIRY_DATETIME	DATE	No	EXP_DATE	
Date/time that the record was expired from use.				

ORN_STRUCTURE

The classification of a structure, that exists on a road element and is managed as a linear event. The types are mutually exclusive.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER	Yes	EVENT_ID	

| | (13,0) | | | |

System generated identifier, unique at the application level.

| **ORN_ROAD_NET_ELEMENT_ID** | NUMBER (13,0) | Yes | ELEMENT_ID | |

System generated identifier, unique at the application level.

| **FROM_MEASURE** | NUMBER (9,3) | Yes | FROM_MEAS | |

The location of the beginning of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

| **TO_MEASURE** | NUMBER (9,3) | Yes | TO_MEASURE | |

The location of the end of the event measured in metres from the beginning of the road element. This measure is related to planimetric distance, not actual driven distance.

| **STRUCTURE_TYPE** | VARCHAR2 (30) | Yes | STRUCT_T | 'Bridge', 'Bridge Covered', 'Bridge Moveable', 'Dam', 'Tunnel' (See ORN_STRUCTURE_TYPE_LIST table) |

The classification of a structure, that exists on a road element and is managed as a linear event. Valid values: See table ORN_STRUCTURE_TYPE_LIST in Appendix for list of valid values.

| **STRUCTURE_NAME_ENGLISH** | VARCHAR2 (75) | No | NAME_ENG | |

The English name provided by a Municipality, Provincial Ministry or Federal Agency. A structure has only one English name.

| **STRUCTURE_NAME_FRENCH** | VARCHAR2 (75) | No | NAME_FRE | |

The French name provided by a Municipality, Provincial Ministry or Federal Agency. A structure has only one French name.

| **AGENCY_NAME** | VARCHAR2 (100) | No | AGENCY | 'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table) |

The name of the agency.

| **NATIONAL_UUID** | VARCHAR2 (32) | Yes | NID | |

A unique national identifier assigned to a road net element, junction and selected event data such as Toll Point, Blocked Passage and Structure which are required to support the National Road Network (NRN).

| **EFFECTIVE_DATETIME** | DATE | Yes | EFF_DATE | |

Date/time the record was created or last modified in the source database.

ORN_STRUCTURE_TYPE_LIST

List of valid structure types

Column Name	Column Type	Mandatory	Short Name	Valid Values
STRUCTURE_TYPE	VARCHAR2 (30)	Yes	STRUCT_T	

The classification of a structure, that exists on a road element and is managed as a linear event.

Column Name	Column Type	Mandatory	Short Name	Valid Values
STRUCTURE_TYPE_DESCR	VARCHAR2 (250)	Yes	STRUCT_T_D	

A description of the structure type.

Column Name	Column Type	Mandatory	Short Name	Valid Values
NRN_STRUCTURETYPE	NUMBER (3,0)	No	NRN_CODE	

Structure type assigned to support the National Road Network (NRN).

Column Name	Column Type	Mandatory	Short Name	Valid Values
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_SURFACE_TYPE_LIST

List of valid surface types.

Column Name	Column Type	Mandatory	Short Name	Valid Values
SURFACE_TYPE	VARCHAR2 (10)	Yes	SURFACE_T	

A linear event indicating the surface type of a road element.

Column Name	Column Type	Mandatory	Short Name	Valid Values
SURFACE_TYPE_DESCR	VARCHAR2 (200)	Yes	SURFACE_D	

A description of the surface type.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_TOLL_POINT

A point event along a road element indicating the presence of a toll point..

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

System generated identifier, unique at the application level.

Column Name	Column Type	Mandatory	Short Name	Valid Values
AT_MEASURE	NUMBER (9,3)	Yes	AT_MEASURE	

At measure represents a location or point of interest along a linear feature. At measure is expressed as a distance in metres from the beginning of the road net element.This measure is related to planimetric distance not actual driven distance.

Column Name	Column Type	Mandatory	Short Name	Valid Values
TOLL_POINT_TYPE	VARCHAR2 (10)	Yes	TOLL_PT_T	'Hybrid', 'Physical', 'Virtual' (See ORN_TOLL_POINT_TYPE_LIST table)

A point event indicating the type of a toll point that may exist along a road element. Toll point type

options are: 1. Physical - A construction along or across a road element where toll can be paid to employees of the organization in charge of collecting the toll or to machines involving electronic methods of payment like credit cards or bank cards 2. Virtual - At a virtual point along a road element, toll will be charged via automatic registration of the passing vehicle by subscription or invoice 3. Hybrid - A tollbooth, which is both physical and virtual

Column Name	Column Type	Mandatory	Short Name	Valid Values
AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', ... (See ORN_AGENCY_NAME_LIST table)

The name of the agency.

Column Name	Column Type	Mandatory	Short Name	Valid Values
NATIONAL_UUID	VARCHAR2 (32)	Yes	NID	

A unique national identifier assigned to a road net element, junction and selected event data such as Toll Point, Blocked Passage and Structure which are required to support the National Road Network (NRN).

Column Name	Column Type	Mandatory	Short Name	Valid Values
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

ORN_TOLL_POINT_TYPE_LIST

List of valid toll point types

Column Name	Column Type	Mandatory	Short Name	Valid Values
TOLL_POINT_TYPE	VARCHAR2 (10)	Yes	TOLL_PT_T	

A point event indicating the type of a toll point that may exist along a road element.

Column Name	Column Type	Mandatory	Short Name	Valid Values
TOLL_POINT_TYPE_DESCR	VARCHAR2 (250)	Yes	TOLL_PT_D	

A description of the toll point type.

Column Name	Column Type	Mandatory	Short Name	Valid Values
NRN_TOLLPOINTTYPE	NUMBER (3,0)	No	NRN_CODE	

Toll point type assigned to support the National Road Network (NRN).

Column Name	Column Type	Mandatory	Short Name	Valid Values
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

ORN_UNDERPASS

A point event on a road element identifying the existence of an underpass. An underpass occurs where the road element runs underneath a passage accommodating the movement of water, a building, road, rail, pedestrian or wildlife.

Column Name	Column Type	Mandatory	Short Name	Valid Values
EVENT_ID	NUMBER (13,0)	Yes	EVENT_ID	

System generated identifier, unique at the application level.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ORN_ROAD_NET_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	

Foreign Key (FK) OGF_ID reference to parent ORN_ROAD_NET_ELEMENT_FT feature table record.

AT_MEASURE	NUMBER (9,3)	Yes	AT_MEASURE	

At measure represents a location or point of interest along a linear feature. At measure is expressed as a distance in metres from the beginning of the road net element. This measure is related to planimetric distance not actual driven distance.

UNDERPASS_TYPE	VARCHAR2 (25)	Yes	TYPE	'Building', 'Industrial', 'Rail', 'Road', 'Walkway', 'Water', … (See ORN_UNDERPASS_TYPE_LIST table)

Identifies the type of underpass present at this road location. Permissible values: See Lookup Table ORN_UNDERPASS_TYPE_LIST.

AGENCY_NAME	VARCHAR2 (100)	No	AGENCY	'CITY OF BARRIE', 'CITY OF BELLEVILLE', 'CITY OF BRAMPTON', 'CITY OF BRANTFORD', 'CITY OF BROCKVILLE', 'CITY OF BURLINGTON', … (See ORN_AGENCY_NAME_LIST table)

The name of the agency.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

ORN_UNDERPASS_TYPE_LIST

List of valid underpass types.

Column Name	Column Type	Mandatory	Short Name	Valid Values
UNDERPASS_TYPE	VARCHAR2 (25)	Yes	TYPE	

Identifies the type of underpass.

UNDERPASS_DESCR	VARCHAR2 (2000)	No	DESCR	

A description of the underpass type.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	

Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE	

Date/time that the record was expired from use.

LIO Lookup Table Values:

ORN_ACQUISITION_TECHNIQUE_LIST

ACQUISITION TECHNIQUE	ACQUISITION TECHNIQUE DESCR	NRN ACQUISITIONTECHNIQUE	EXPIRY DATETIME
AERIAL PHOTO	Aerial photography not ortho-rectified	10	
COMPUTED	Geometric information that has been computed (not captured)	12	
DIGITAL ELEVATION MODEL	Data coming from a Digital Elevation Model (DEM)	9	
FIELD COMPLETION	Information gathered from people directly in the field	7	
GPS	Data collected using a GPS device	2	
NONE	No value applies	0	
ORTHOIMAGE	Satellite imagery ortho-rectified	3	
ORTHOPHOTO	Aerial photo ortho-rectified	4	
OTHER	All possible values not explicitly mentioned in the domain	1	
PAPER MAP	Conventional sources of information like maps or plans	6	
RASTER DATA	Data resulting from a scanning process	8	
RAW IMAGERY DATA	Satellite imagery not ortho-rectified	11	
UNKNOWN	Impossible to determine	-1	
VECTOR DATA	Vector digital data	5	

LIO Lookup Table Values:

ORN_AGENCY_NAME_LIST

AGENCY NAME	AGENCY TYPE	AGENCY DESCR	EXPIRY DATETIME
CITY OF BARRIE	MUNICIPAL	BARRIE	
CITY OF BELLEVILLE	MUNICIPAL	BELLEVILLE	
CITY OF BRAMPTON	MUNICIPAL	BRAMPTON	
CITY OF BRANTFORD	MUNICIPAL	BRANTFORD	
CITY OF BROCKVILLE	MUNICIPAL	BROCKVILLE	
CITY OF BURLINGTON	MUNICIPAL	BURLINGTON	
CITY OF CAMBRIDGE	MUNICIPAL	CAMBRIDGE	
CITY OF CLARENCE-ROCKLAND	MUNICIPAL	CLARENCE-ROCKLAND	
CITY OF CORNWALL	MUNICIPAL	CORNWALL	
CITY OF DRYDEN	MUNICIPAL	DRYDEN	
CITY OF ELLIOT LAKE	MUNICIPAL	ELLIOT LAKE	
CITY OF GREATER SUDBURY	MUNICIPAL	GREATER SUDBURY	
CITY OF GUELPH	MUNICIPAL	GUELPH	
CITY OF HAMILTON	MUNICIPAL	HAMILTON	
CITY OF KAWARTHA LAKES	MUNICIPAL	KAWARTHA LAKES	
CITY OF KENORA	MUNICIPAL	KENORA	
CITY OF KINGSTON	MUNICIPAL	KINGSTON	
CITY OF KITCHENER	MUNICIPAL	KITCHENER	
CITY OF LONDON	MUNICIPAL	LONDON	
CITY OF MISSISSAUGA	MUNICIPAL	MISSISSAUGA	
CITY OF NIAGARA FALLS	MUNICIPAL	NIAGARA FALLS	
CITY OF NORTH BAY	MUNICIPAL	NORTH BAY	
CITY OF ORILLIA	MUNICIPAL	ORILLIA	
CITY OF OSHAWA	MUNICIPAL	OSHAWA	
CITY OF OTTAWA	MUNICIPAL	OTTAWA	
CITY OF OWEN SOUND	MUNICIPAL	OWEN SOUND	
CITY OF PEMBROKE	MUNICIPAL	PEMBROKE	

CITY OF PETERBOROUGH	MUNICIPAL	PETERBOROUGH	
CITY OF PICKERING	MUNICIPAL	PICKERING	
CITY OF PORT COLBORNE	MUNICIPAL	PORT COLBORNE	
CITY OF PRINCE EDWARD COUNTY	MUNICIPAL	PRINCE EDWARD COUNTY	
CITY OF QUINTE WEST	MUNICIPAL	QUINTE WEST	
CITY OF SARNIA	MUNICIPAL	SARNIA	
CITY OF SAULT STE. MARIE	MUNICIPAL	SAULT STE. MARIE	
CITY OF ST. CATHARINES	MUNICIPAL	ST. CATHARINES	
CITY OF ST. THOMAS	MUNICIPAL	ST. THOMAS	
CITY OF STRATFORD	MUNICIPAL	STRATFORD	
CITY OF TEMISKAMING SHORES	MUNICIPAL	TEMISKAMING SHORES	
CITY OF THOROLD	MUNICIPAL	THOROLD	
CITY OF THUNDER BAY	MUNICIPAL	THUNDER BAY	
CITY OF TIMMINS	MUNICIPAL	TIMMINS	
CITY OF TORONTO	MUNICIPAL	TORONTO	
CITY OF VAUGHAN	MUNICIPAL	VAUGHAN	
CITY OF WATERLOO	MUNICIPAL	WATERLOO	
CITY OF WELLAND	MUNICIPAL	WELLAND	
CITY OF WINDSOR	MUNICIPAL	WINDSOR	
CITY OF WOODSTOCK	MUNICIPAL	WOODSTOCK	
COUNTY OF BRANT	MUNICIPAL	BRANT	
COUNTY OF BRUCE	MUNICIPAL	BRUCE	
COUNTY OF DUFFERIN	MUNICIPAL	DUFFERIN	
COUNTY OF ELGIN	MUNICIPAL	ELGIN	
COUNTY OF ESSEX	MUNICIPAL	ESSEX	
COUNTY OF FRONTENAC	MUNICIPAL	FRONTENAC	
COUNTY OF GREY	MUNICIPAL	GREY	
COUNTY OF HALIBURTON	MUNICIPAL	HALIBURTON	
COUNTY OF HASTINGS	MUNICIPAL	HASTINGS	
COUNTY OF HURON	MUNICIPAL	HURON	
COUNTY OF LAMBTON	MUNICIPAL	LAMBTON	
COUNTY OF LANARK	MUNICIPAL	LANARK	

COUNTY OF LENNOX AND ADDINGTON	MUNICIPAL	LENNOX AND ADDINGTON	
COUNTY OF MIDDLESEX	MUNICIPAL	MIDDLESEX	
COUNTY OF NORTHUMBERLAND	MUNICIPAL	NORTHUMBERLAND	
COUNTY OF OXFORD	MUNICIPAL	OXFORD	
COUNTY OF PERTH	MUNICIPAL	PERTH	
COUNTY OF PETERBOROUGH	MUNICIPAL	PETERBOROUGH	
COUNTY OF RENFREW	MUNICIPAL	RENFREW	
COUNTY OF SIMCOE	MUNICIPAL	SIMCOE	
COUNTY OF WELLINGTON	MUNICIPAL	WELLINGTON	
DISTRICT MUNICIPALITY OF MUSKOKA	MUNICIPAL	MUSKOKA	
DISTRICT OF NIPISSING	MUNICIPAL	NIPISSING	
DISTRICT OF PARRY SOUND	MUNICIPAL	PARRY SOUND	
DISTRICT OF SUDBURY	MUNICIPAL	SUDBURY	
ELECTIONS AND STATISTICS CANADA	FEDERAL	NGD	
HALDIMAND COUNTY	MUNICIPAL	HALDIMAND	
MINISTRY OF NATURAL RESOURCES AND FORESTRY	PROVINCIAL	MNRF	
MINISTRY OF TRANSPORTATION	PROVINCIAL	MTO	
MUNICIPALITY OF ARRAN-ELDERSLIE	MUNICIPAL	ARRAN-ELDERSLIE	
MUNICIPALITY OF BAYHAM	MUNICIPAL	BAYHAM	
MUNICIPALITY OF BLUEWATER	MUNICIPAL	BLUEWATER	
MUNICIPALITY OF BRIGHTON	MUNICIPAL	BRIGHTON	
MUNICIPALITY OF BROCKTON	MUNICIPAL	BROCKTON	
MUNICIPALITY OF BROOKE-ALVINSTON	MUNICIPAL	BROOKE-ALVINSTON	
MUNICIPALITY OF CALLANDER	MUNICIPAL	CALLANDER	
MUNICIPALITY OF CENTRAL ELGIN	MUNICIPAL	CENTRAL ELGIN	
MUNICIPALITY OF CENTRAL HURON	MUNICIPAL	CENTRAL HURON	
MUNICIPALITY OF CENTRE HASTINGS	MUNICIPAL	CENTRE HASTINGS	

MUNICIPALITY OF CHARLTON AND DACK	MUNICIPAL	CHARLTON AND DACK	
MUNICIPALITY OF CHATHAM-KENT	MUNICIPAL	CHATHAM-KENT	
MUNICIPALITY OF CLARINGTON	MUNICIPAL	CLARINGTON	
MUNICIPALITY OF DUTTON-DUNWICH	MUNICIPAL	DUTTON-DUNWICH	
MUNICIPALITY OF FRENCH RIVER	MUNICIPAL	FRENCH RIVER	
MUNICIPALITY OF GREENSTONE	MUNICIPAL	GREENSTONE	
MUNICIPALITY OF GREY HIGHLANDS	MUNICIPAL	GREY HIGHLANDS	
MUNICIPALITY OF HASTINGS HIGHLANDS	MUNICIPAL	HASTINGS HIGHLANDS	
MUNICIPALITY OF HIGHLANDS EAST	MUNICIPAL	HIGHLANDS EAST	
MUNICIPALITY OF HURON EAST	MUNICIPAL	HURON EAST	
MUNICIPALITY OF HURON SHORES	MUNICIPAL	HURON SHORES	
MUNICIPALITY OF KILLARNEY	MUNICIPAL	KILLARNEY	
MUNICIPALITY OF KINCARDINE	MUNICIPAL	KINCARDINE	
MUNICIPALITY OF LAMBTON SHORES	MUNICIPAL	LAMBTON SHORES	
MUNICIPALITY OF LEAMINGTON	MUNICIPAL	LEAMINGTON	
MUNICIPALITY OF MAGNETAWAN	MUNICIPAL	MAGNETAWAN	
MUNICIPALITY OF MARKSTAY-WARREN	MUNICIPAL	MARKSTAY-WARREN	
MUNICIPALITY OF MARMORA AND LAKE	MUNICIPAL	MARMORA AND LAKE	
MUNICIPALITY OF MEAFORD	MUNICIPAL	MEAFORD	
MUNICIPALITY OF MORRIS-TURNBERRY	MUNICIPAL	MORRIS-TURNBERRY	
MUNICIPALITY OF NEEBING	MUNICIPAL	NEEBING	
MUNICIPALITY OF NORTH GRENVILLE	MUNICIPAL	NORTH GRENVILLE	
MUNICIPALITY OF NORTH MIDDLESEX	MUNICIPAL	NORTH MIDDLESEX	
MUNICIPALITY OF NORTHERN BRUCE PENINSULA	MUNICIPAL	NORTHERN BRUCE PENINSULA	

MUNICIPALITY OF OLIVER PAIPOONGE	MUNICIPAL	OLIVER PAIPOONGE	
MUNICIPALITY OF PORT HOPE	MUNICIPAL	PORT HOPE	
MUNICIPALITY OF POWASSAN	MUNICIPAL	POWASSAN	
MUNICIPALITY OF RED LAKE	MUNICIPAL	RED LAKE	
MUNICIPALITY OF SIOUX LOOKOUT	MUNICIPAL	SIOUX LOOKOUT	
MUNICIPALITY OF SOUTH BRUCE	MUNICIPAL	SOUTH BRUCE	
MUNICIPALITY OF SOUTH HURON	MUNICIPAL	SOUTH HURON	
MUNICIPALITY OF SOUTHWEST MIDDLESEX	MUNICIPAL	SOUTHWEST MIDDLESEX	
MUNICIPALITY OF ST.-CHARLES	MUNICIPAL	ST.-CHARLES	
MUNICIPALITY OF TEMAGAMI	MUNICIPAL	TEMAGAMI	
MUNICIPALITY OF THAMES CENTRE	MUNICIPAL	THAMES CENTRE	
MUNICIPALITY OF THE NATION	MUNICIPAL	THE NATION	
MUNICIPALITY OF TRENT HILLS	MUNICIPAL	TRENT HILLS	
MUNICIPALITY OF TWEED	MUNICIPAL	TWEED	
MUNICIPALITY OF WEST ELGIN	MUNICIPAL	WEST ELGIN	
MUNICIPALITY OF WEST GREY	MUNICIPAL	WEST GREY	
MUNICIPALITY OF WEST NIPISSING	MUNICIPAL	WEST NIPISSING	
MUNICIPALITY OF WEST PERTH	MUNICIPAL	WEST PERTH	
MUNICIPALITY OF WHITESTONE	MUNICIPAL	WHITESTONE	
NORFOLK COUNTY	MUNICIPAL	NORFOLK	
NRCAN	FEDERAL	Natural Resources Canada	
ONTARIO MINISTRY OF HEALTH	PROVINCIAL	SLRN	
ONTARIO PROVINCIAL POLICE	PROVINCIAL	JRN	
ONTARIO ROAD NETWORK	PROVINCIAL	ORN	
REGIONAL MUNICIPALITY OF DURHAM	MUNICIPAL	DURHAM	
REGIONAL MUNICIPALITY OF HALTON	MUNICIPAL	HALTON	
REGIONAL MUNICIPALITY OF NIAGARA	MUNICIPAL	NIAGARA	

REGIONAL MUNICIPALITY OF PEEL	MUNICIPAL	PEEL	
REGIONAL MUNICIPALITY OF WATERLOO	MUNICIPAL	WATERLOO	
REGIONAL MUNICIPALITY OF YORK	MUNICIPAL	YORK	
TOWN OF AJAX	MUNICIPAL	AJAX	
TOWN OF AMHERSTBURG	MUNICIPAL	AMHERSTBURG	
TOWN OF ARNPRIOR	MUNICIPAL	ARNPRIOR	
TOWN OF AURORA	MUNICIPAL	AURORA	
TOWN OF AYLMER	MUNICIPAL	AYLMER	
TOWN OF BANCROFT	MUNICIPAL	BANCROFT	
TOWN OF BLIND RIVER	MUNICIPAL	BLIND RIVER	
TOWN OF BRACEBRIDGE	MUNICIPAL	BRACEBRIDGE	
TOWN OF BRADFORD-WEST GWILLIMBURY	MUNICIPAL	BRADFORD-WEST GWILLIMBURY	
TOWN OF BRUCE MINES	MUNICIPAL	BRUCE MINES	
TOWN OF CALEDON	MUNICIPAL	CALEDON	
TOWN OF CARLETON PLACE	MUNICIPAL	CARLETON PLACE	
TOWN OF COBALT	MUNICIPAL	COBALT	
TOWN OF COBOURG	MUNICIPAL	COBOURG	
TOWN OF COCHRANE	MUNICIPAL	COCHRANE	
TOWN OF COLLINGWOOD	MUNICIPAL	COLLINGWOOD	
TOWN OF DEEP RIVER	MUNICIPAL	DEEP RIVER	
TOWN OF DESERONTO	MUNICIPAL	DESERONTO	
TOWN OF EAST GWILLIMBURY	MUNICIPAL	EAST GWILLIMBURY	
TOWN OF ENGLEHART	MUNICIPAL	ENGLEHART	
TOWN OF ERIN	MUNICIPAL	ERIN	
TOWN OF ESPANOLA	MUNICIPAL	ESPANOLA	
TOWN OF ESSEX	MUNICIPAL	ESSEX	
TOWN OF FORT ERIE	MUNICIPAL	FORT ERIE	
TOWN OF FORT FRANCES	MUNICIPAL	FORT FRANCES	
TOWN OF GANANOQUE	MUNICIPAL	GANANOQUE	
TOWN OF GEORGINA	MUNICIPAL	GEORGINA	

TOWN OF GODERICH	MUNICIPAL	GODERICH	
TOWN OF GORE BAY	MUNICIPAL	GORE BAY	
TOWN OF GRAVENHURST	MUNICIPAL	GRAVENHURST	
TOWN OF GREATER NAPANEE	MUNICIPAL	GREATER NAPANEE	
TOWN OF GRIMSBY	MUNICIPAL	GRIMSBY	
TOWN OF HALTON HILLS	MUNICIPAL	HALTON HILLS	
TOWN OF HANOVER	MUNICIPAL	HANOVER	
TOWN OF HAWKESBURY	MUNICIPAL	HAWKESBURY	
TOWN OF HEARST	MUNICIPAL	HEARST	
TOWN OF HUNTSVILLE	MUNICIPAL	HUNTSVILLE	
TOWN OF INGERSOLL	MUNICIPAL	INGERSOLL	
TOWN OF INNISFIL	MUNICIPAL	INNISFIL	
TOWN OF IROQUOIS FALLS	MUNICIPAL	IROQUOIS FALLS	
TOWN OF KAPUSKASING	MUNICIPAL	KAPUSKASING	
TOWN OF KEARNEY	MUNICIPAL	KEARNEY	
TOWN OF KINGSVILLE	MUNICIPAL	KINGSVILLE	
TOWN OF KIRKLAND LAKE	MUNICIPAL	KIRKLAND LAKE	
TOWN OF LAKESHORE	MUNICIPAL	LAKESHORE	
TOWN OF LASALLE	MUNICIPAL	LASALLE	
TOWN OF LATCHFORD	MUNICIPAL	LATCHFORD	
TOWN OF LAURENTIAN HILLS	MUNICIPAL	LAURENTIAN HILLS	
TOWN OF LINCOLN	MUNICIPAL	LINCOLN	
TOWN OF MARATHON	MUNICIPAL	MARATHON	
TOWN OF MARKHAM	MUNICIPAL	MARKHAM	
TOWN OF MATTAWA	MUNICIPAL	MATTAWA	
TOWN OF MIDLAND	MUNICIPAL	MIDLAND	
TOWN OF MILTON	MUNICIPAL	MILTON	
TOWN OF MINTO	MUNICIPAL	MINTO	
TOWN OF MISSISSIPPI MILLS	MUNICIPAL	MISSISSIPPI MILLS	
TOWN OF MONO	MUNICIPAL	MONO	
TOWN OF MOOSONEE	MUNICIPAL	MOOSONEE	
TOWN OF NEW TECUMSETH	MUNICIPAL	NEW TECUMSETH	

TOWN OF NEWMARKET	MUNICIPAL	NEWMARKET	
TOWN OF NIAGARA-ON-THE-LAKE	MUNICIPAL	NIAGARA-ON-THE-LAKE	
TOWN OF NORTH PERTH	MUNICIPAL	NORTH PERTH	
TOWN OF NORTHEASTERN MANITOULIN AND THE ISLANDS	MUNICIPAL	NORTHEASTERN MANITOULIN AND THE ISLANDS	
TOWN OF OAKVILLE	MUNICIPAL	OAKVILLE	
TOWN OF ORANGEVILLE	MUNICIPAL	ORANGEVILLE	
TOWN OF PARRY SOUND	MUNICIPAL	PARRY SOUND	
TOWN OF PELHAM	MUNICIPAL	PELHAM	
TOWN OF PENETANGUISHENE	MUNICIPAL	PENETANGUISHENE	
TOWN OF PERTH	MUNICIPAL	PERTH	
TOWN OF PETAWAWA	MUNICIPAL	PETAWAWA	
TOWN OF PETROLIA	MUNICIPAL	PETROLIA	
TOWN OF PLYMPTON-WYOMING	MUNICIPAL	PLYMPTON-WYOMING	
TOWN OF PRESCOTT	MUNICIPAL	PRESCOTT	
TOWN OF RAINY RIVER	MUNICIPAL	RAINY RIVER	
TOWN OF RENFREW	MUNICIPAL	RENFREW	
TOWN OF RICHMOND HILL	MUNICIPAL	RICHMOND HILL	
TOWN OF SAUGEEN SHORES	MUNICIPAL	SAUGEEN SHORES	
TOWN OF SHELBURNE	MUNICIPAL	SHELBURNE	
TOWN OF SMITHS FALLS	MUNICIPAL	SMITHS FALLS	
TOWN OF SMOOTH ROCK FALLS	MUNICIPAL	SMOOTH ROCK FALLS	
TOWN OF SOUTH BRUCE PENINSULA	MUNICIPAL	SOUTH BRUCE PENINSULA	
TOWN OF SPANISH	MUNICIPAL	SPANISH	
TOWN OF ST. MARYS	MUNICIPAL	ST. MARYS	
TOWN OF TECUMSEH	MUNICIPAL	TECUMSEH	
TOWN OF THE BLUE MOUNTAINS	MUNICIPAL	THE BLUE MOUNTAINS	
TOWN OF THESSALON	MUNICIPAL	THESSALON	
TOWN OF TILLSONBURG	MUNICIPAL	TILLSONBURG	
TOWN OF WASAGA BEACH	MUNICIPAL	WASAGA BEACH	
TOWN OF WHITBY	MUNICIPAL	WHITBY	
TOWN OF WHITCHURCH-	MUNICIPAL	WHITCHURCH-STOUFFVILLE	

STOUFFVILLE			
TOWNSHIP OF ADDINGTON HIGHLANDS	MUNICIPAL	ADDINGTON HIGHLANDS	
TOWNSHIP OF ADELAIDE-METCALFE	MUNICIPAL	ADELAIDE-METCALFE	
TOWNSHIP OF ADJALA-TOSORONTIO	MUNICIPAL	ADJALA-TOSORONTIO	
TOWNSHIP OF ADMASTON/BROMLEY	MUNICIPAL	ADMASTON/BROMLEY	
TOWNSHIP OF ALBERTON	MUNICIPAL	ALBERTON	
TOWNSHIP OF ALFRED AND PLANTAGENET	MUNICIPAL	ALFRED AND PLANTAGENET	
TOWNSHIP OF ALGONQUIN HIGHLANDS	MUNICIPAL	ALGONQUIN HIGHLANDS	
TOWNSHIP OF ALNWICK-HALDIMAND	MUNICIPAL	ALNWICK-HALDIMAND	
TOWNSHIP OF AMARANTH	MUNICIPAL	AMARANTH	
TOWNSHIP OF ARMOUR	MUNICIPAL	ARMOUR	
TOWNSHIP OF ARMSTRONG	MUNICIPAL	ARMSTRONG	
TOWNSHIP OF ASHFIELD-COLBORNE-WAWANOSH	MUNICIPAL	ASHFIELD-COLBORNE-WAWANOSH	
TOWNSHIP OF ASPHODEL-NORWOOD	MUNICIPAL	ASPHODEL-NORWOOD	
TOWNSHIP OF ASSIGINACK	MUNICIPAL	ASSIGINACK	
TOWNSHIP OF ATHENS	MUNICIPAL	ATHENS	
TOWNSHIP OF ATIKOKAN	MUNICIPAL	ATIKOKAN	
TOWNSHIP OF AUGUSTA	MUNICIPAL	AUGUSTA	
TOWNSHIP OF BALDWIN	MUNICIPAL	BALDWIN	
TOWNSHIP OF BARRIE ISLAND	MUNICIPAL	BARRIE ISLAND	
TOWNSHIP OF BECKWITH	MUNICIPAL	BECKWITH	
TOWNSHIP OF BILLINGS	MUNICIPAL	BILLINGS	
TOWNSHIP OF BLACK RIVER-MATHESON	MUNICIPAL	BLACK RIVER-MATHESON	
TOWNSHIP OF BLANDFORD-BLENHEIM	MUNICIPAL	BLANDFORD-BLENHEIM	
TOWNSHIP OF BONFIELD	MUNICIPAL	BONFIELD	
TOWNSHIP OF BONNECHERE VALLEY	MUNICIPAL	BONNECHERE VALLEY	

TOWNSHIP OF BRETHOUR	MUNICIPAL	BRETHOUR	

* Not a complete list.

LIO Lookup Table Values:

ORN_BLOCKED_PASSAGE_TYPE_LIST

BLOCKED PASSAGE TYPE	BLOCKED PASSAGE TYPE DESCR	NRN BLOCKEDPASSAGETYPE	EXPIRY DATETIME
Permanent	An obstacle placed across a road element that has to be removed or destroyed to free the entrance to the other side of the road that it is blocking. Examples include: concrete blocks, mound of earth or culvert or bridge removed.	1	
Removable	A man-made barrier designed to block the entrance to the other side of the road element. An example is a locked gate.	2	

LIO Lookup Table Values:

ORN_DIR_OF_TRAFFIC_FLOW_LIST

DIRECTION OF TRAFFIC FLOW	DIR OF TRAFFIC FLOW DESCR	NRN DIRECTIONOFTRAFFICFLOW	EXPIRY DATETIME
Both	Traffic is allowed in both directions.	1	
Negative	Traffic is opposite to the direction of the geometry.	3	
Positive	Traffic is in the same direction as the geometry.	2	

LIO Lookup Table Values:

ORN_HOUSE_NUM_STRUCTURE_LIST

HOUSE NUMBER STRUCTURE	HOUSE NUMBER STRUCTURE DESCR	NRN HOUSENUMBERSTRUCTURE	EXPIRY DATETIME
Even	The house numbers appear as even numbers in a sequential sorted order (ascending or descending) when moving from one end of an address information event to the other. Numeric completeness of the series is not a requirement.	1	
Irregular	The house numbers do not occur in any sorted order.	4	
Mixed	The house numbers are odd and even on the same side of an address information event in sequential order (asc or desc) when moving from one end of the address information event to the other. Numeric completeness of the series is not a requirement.	3	
None	No house numbers at all. There are no houses (or addressed dwellings) along a particular side of an address information event.	0	
Odd	The house numbers appear as odd numbers in a sequential sorted order (ascending or descending) when moving from one end of the address information event to the other. Numeric completeness of the series is not a requirement.	2	

LIO Lookup Table Values:

ORN_JUNCTION_TYPE_LIST

JUNCTION TYPE	JUNCTION TYPE DESCR	NRN JUNCTIONTYPE	EXPIRY DATETIME
Boundary	Intersection of a road element or a ferry connection with a provincial or international boundary.	4	
Dead End	At the end of a dead-end road element.	2	
Ferry	Intersection of a road element and a ferry connection.	3	
Intersection	Intersection of three or more road elements at the same grade level.	1	

LIO Lookup Table Values:

ORN_OFFICIAL_LANGUAGE_LIST

OFFICIAL LANGUAGE	OFFICIAL LANGUAGE DESCR	NRN OFFICIALLANGUAGE	EXPIRY DATETIME
ENG	English	2	
FRE	French	1	

LIO Lookup Table Values:

ORN_PAVEMENT_STATUS_LIST

PAVEMENT STATUS	PAVEMENT STATUS DESCR	NRN PAVEMENTSTATUS	EXPIRY DATETIME
Paved	A road element which is paved.	1	
Unpaved	A road element which is not paved.	2	

LIO Lookup Table Values:

ORN_ROAD_CLASS_LIST

ROAD CLASS	ROAD CLASS DESCR	NRN ROADCLASS	EXPIRY DATETIME
Alleyway / Laneway	A low speed thoroughfare dedicated to provide access to the rear of properties.	8	
Arterial	A major thoroughfare with medium to large traffic capacity	3	
Collector	A minor thoroughfare mainly used to access properties and to feed traffic with right of way.	4	
Expressway / Highway	A high-speed thoroughfare with a combination of controlled access and intersections at grade level.	2	
Freeway	An unimpeded, high speed controlled access thoroughfare for through traffic with typically no at grade intersections, usually with no property access or direct access and which is accessed by a ramp. Pedestrians prohibited.	1	
Local / Strata	A low speed thoroughfare dedicated to provide access to properties with potential public restriction, trailer parks, First Nations, strata or private estates.	6	
Local / Street	A low speed thoroughfare dedicated to provide full access to the front of properties.	5	
Local / Unknown	A low speed thoroughfare dedicated to provide access to the front of properties but for which the access regulations are unknown.	7	
Ramp	A system of interconnecting roadways providing for the controlled movement between two or more roadways.	9	
Rapid Transit	A thoroughfare restricted 24 hours a day, for the sole use of public transportation buses.	11	
Resource / Recreation	A narrow passage which has as a primary function access for resources extraction and also may have a role in providing an access for the public to back country.	10	
Service	A stretch of road permitting vehicles to come to a stop along a Freeway or Highway. These include weigh scales, emergency lanes, lookouts and rest areas.	12	
Winter	A road that is only useable during the winter months when conditions allow for passage over lakes, rivers and wetlands.	13	

LIO Lookup Table Values:

ORN_ROAD_ELEMENT_TYPE_LIST

ROAD ELEMENT TYPE	ROAD ELEMENT TYPE DESCR	EXPIRY DATETIME
FERRY CONNECTION	The approximate route a ferry travels to transport vehicles across water and is linked to a road element by a junction	
ROAD ELEMENT	The basic centreline road feature spanning from intersection to intersection, or intersection to end where there is no subsequent intersection with another road	
VIRTUAL ROAD	A linear feature that is used as an address anchor for Bell 911 address information that is collected for dwellings (i.e. cottages) on islands or shorelines that are not accessible by road. These features are not actual roads and may or may not be connected to the main road network. They may be represented as straight line segments which bisect an island or follow the approximate shoreline of an island. They may also be represented as extensions of the road network crossing over land and water.	

LIO Lookup Table Values:

ORN_SHIELD_TYPE_LIST

SHIELD TYPE	SHIELD TYPE DESCR	EXPIRY DATETIME
DISTRICT, COUNTY, REGIONAL OR MUNICIPAL ROAD SHIELD	Upper Tier, Lower Tier or Single Tier Municipal Roads	
PRIMARY, KINGS OR 400 SERIES HIGHWAY SHIELD	A network of highways that represents the oldest provincial highways (numbered from 3 to 148) and which are designed to connect urban centres of 2000 people or more by the shortest possible route. Also includes controlled access 400 series highways (CAH), including the Queen Elizabeth Way (QEW) that have imposed stricter access and adjacent land use controls (numbered 400 ¿ 451).	
SECONDARY HIGHWAY SHIELD	A network of highways (numbered from 502 - 673) which connect smaller urban centres to each other and to the Kings Highway system. These highways often connect major traffic generators like airports, mines, quarries, saw mills, resort areas etc to the Kings Highway network. They became part of the provincial highway system in the 1950's and 1960's. The Secondary Highway System takes the place of the County or Regional Road systems in those areas of the provincial without incorporated municipalities or where the tax base was too low to afford a County Road system.	
TERTIARY HIGHWAY SHIELD	Highways which connect remote communities in Northern Ontario to the Secondary or Kings Highway network. Tertiary Highways have provincial highway numbers in the 800 series and were generally established in the 1950's and 1960's. The Ministry of Transport (MTO) is not obligated to maintain Tertiary Highways in the winter nor is MTO liable if winter maintenance is not provided. The Lieutenant Governor in Council (LGIC) can also designate a Tertiary Highway as a Resource Road. A number of the provisions of the Highway Traffic Act that apply to Kings and Secondary Highways do not apply to Tertiary Highways.	
TOLL HIGHWAY SHIELD	A controlled access highway which involves the payment of a fee to travel upon. Currently, Ontario only has one toll highway, the 407ETR or Electronic Toll Route, located in the golden horseshoe.	

LIO Lookup Table Values:

ORN_STANDARD_MUNICIPALITY_LIST

STANDARD MUNICIPALITY	EXPIRY DATETIME
Abitibi 70	
Agency 1	
Agency 30	
Akwesasne 59	
Alderville First Nation	
Assabaska	
Attawapiskat 91	
Attawapiskat 91a	
Bear Island 1	
Bearskin Lake	
Big Grassy River 35g	
Big Island 31d	
Big Island 31e	
Big Island 37	
Big Island Mainland 93	
Cape Croker Hunting Grounds 60b	
Cat Lake 63c	
Cfb Borden	
Chapleau 61	
Chapleau 61a	
Chapleau 74	
Chapleau 74a	
Chapleau 75	
Chapleau Cree Fox Lake	
Chief's Point 28	
Chippewa Island	
Chippewas of Georgina Island First Nation 33a	
Chippewas of Georgina Island First Nation	

Chippewas of the Thames First Nation 42	
Christian Island 30	
Christian Island 30a	
City of Barrie	
City of Belleville	
City of Brampton	
City of Brantford	
City of Brockville	
City of Burlington	
City of Cambridge	
City of Clarence-Rockland	
City of Cornwall	
City of Dryden	
City of Elliot Lake	
City of Greater Sudbury	
City of Guelph	
City of Hamilton	
City of Kawartha Lakes	
City of Kenora	
City of Kingston	
City of Kitchener	
City of London	
City of Mississauga	
City of Niagara Falls	
City of North Bay	
City of Orillia	
City of Oshawa	
City of Ottawa	
City of Owen Sound	
City of Pembroke	
City of Peterborough	
City of Pickering	

City of Port Colborne	
City of Prince Edward County	
City of Quinte West	
City of Sarnia	
City of Sault Ste. Marie	
City of St. Catharines	
City of St. Thomas	
City of Stratford	
City of Temiskaming Shores	
City of Thorold	
City of Thunder Bay	
City of Timmins	
City of Toronto	
City of Vaughan	
City of Waterloo	
City of Welland	
City of Windsor	
City of Woodstock	
Constance Lake 92	
Corporation of the Municipality of Mississippi Mills	
Couchiching 16a	
County of Brant	
Curve Lake 35a	
Curve Lake First Nation 35	
Deer Lake	
District of Algoma	
District of Cochrane	
District of Kenora	
District of Manitoulin	
District of Nipissing	
District of Parry Sound	
District of Rainy River	

District of Sudbury	
District of Thunder Bay	
District of Timiskaming	
Dokis 9	
Duck Lake 76b	
Eagle Lake 27	
English River 21	
English River 66	
Factory Island 1	
Flying Post 73	
Fort Albany 67	
Fort Hope 64	
Fort Severn 89	
Fort William 52	
French River 13	
Garden River 14	
Ginoogaming First Nation	
Glebe Farm 40b	
Goulais Bay 15a	
Gros Cap 49	
Gros Cap Indian Village 49a	
Gull River 55	
Haldimand County	
Henvey Inlet 2	
Hiawatha First Nation 36	
Indian River 1	
Islands In the Trent Waters 36a	
Islington 29	
Kasabonika Lake	
Keewaywin	
Kenora 38b	
Kettle Point 44	

Kingfisher 2a	
Kingfisher 3a	
Kingfisher Lake 1	
Kitchenuhmaykoosib Aaki 84	
Lac Des Mille Lacs 22a1	
Lac Seul 28	
Lake Helen 53a	
Lake of the Woods 31b	
Lake of the Woods 31c	
Lake of the Woods 31g	
Lake of the Woods 31h	
Lake of the Woods 34	
Lake of the Woods 35j	
Lake of the Woods 37	
Lake of the Woods 37b	
Long Lake 58	
Long Sault 12	
M'Chigeeng 22	
Magnetawan 1	
Manitou Rapids 11	
Marten Falls 65	
Matachewan 72	
Mattagami 71	
Missanabie 62	
Mississagi River 8	
Mississauga's of Scugog Island	
Mnjikaning First Nation 32	
Moose Factory 68	
Moose Point 79	
Moravian 47	
Mountbatten 76a	
Municipality of Arran-Elderslie	

Municipality of Bayham	
Municipality of Bluewater	
Municipality of Brighton	
Municipality of Brockton	
Municipality of Brooke-Alvinston	
Municipality of Callander	
Municipality of Central Elgin	
Municipality of Central Huron	
Municipality of Centre Hastings	
Municipality of Charlton and Dack	
Municipality of Chatham-Kent	
Municipality of Clarington	
Municipality of Dutton/Dunwich	
Municipality of French River	
Municipality of Greenstone	
Municipality of Grey Highlands	
Municipality of Hastings Highlands	
Municipality of Highlands East	
Municipality of Huron East	
Municipality of Huron Shores	
Municipality of Killarney	
Municipality of Kincardine	
Municipality of Lambton Shores	
Municipality of Leamington	
Municipality of Magnetawan	
Municipality of Markstay-Warren	
Municipality of Marmora and Lake	
Municipality of McDougall	
Municipality of Meaford	
Municipality of Middlesex Centre	
Municipality of Morris-Turnberry	
Municipality of Neebing	

Municipality of North Grenville	
Municipality of North Middlesex	
Municipality of North Perth	
Municipality of Northern Bruce Peninsula	
Municipality of Oliver Paipoonge	
Municipality of Port Hope	
Municipality of Powassan	
Municipality of Red Lake	
Municipality of Shuniah	
Municipality of Sioux Lookout	
Municipality of South Bruce	
Municipality of South Huron	
Municipality of Southwest Middlesex	
Municipality of St.-Charles	
Municipality of Temagami	
Municipality of Thames Centre	
Municipality of Trent Hills	
Municipality of Tweed	
Municipality of Wawa	
Municipality of West Elgin	
Municipality of West Grey	
Municipality of West Nipissing	
Municipality of West Perth	
Municipality of Whitestone	
Municipality of the Nation	
Munsee-Delaware Nation 1	
Muskrat Dam Lake	
Naiscoutaing 17a	
Naongashing 31a & 35a	
Neguaguon Lake 25d	
Neskantaga	
New Credit 40a	

New Post 69	
New Post 69a	
Neyaashiinigmiing	
Nipissing 10	
Norfolk County	
North Spirit Lake	
Northwest Angle 33b	
Northwest Angle 34c & 37b	
Obabikong 35b	
Obadjiwan 15e	
Ojibway Nation of Saugeen	
One Man Lake 29	
Oneida 41	
Osnaburgh 63a	
Osnaburgh 63b	
Parry Island First Nation	
Pays Plat 51	
Pic Mobert Reserve North	
Pic Mobert Reserve South	
Pic River 50	
Pikangikum 14	
Pikwakanagan	
Point Grondine 3	
Poplar Hill	
Rainy Lake 17a	
Rainy Lake 17b	
Rainy Lake 18c	
Rainy Lake 26a	
Rainy Lake 26b	
Rainy Lake 26c	
Rankin Location 15d	
Rat Portage 38a	

Red Rock 53	
Rocky Bay 1	
Sabaskong Bay 32c	
Sabaskong Bay 35c	

* Not a complete list.

LIO Lookup Table Values:

ORN_STREET_DIRECTION_LIST

STREET DIRECTION	OFFICIAL LANGUAGE	CPC DIRECTION CODE	NRN DIRECTION	EXPIRY DATETIME
East	ENG	E	5	
Est	FRE	E	6	
Nord Est	FRE	NE	12	
Nord Ouest	FRE	NO	10	
Nord	FRE	N	2	
North East	ENG	NE	11	
North West	ENG	NW	9	
North	ENG	N	1	
Ouest	FRE	O	8	
South East	ENG	SE	15	
South West	ENG	SW	13	
South	ENG	S	3	
Sud Est	FRE	SE	16	
Sud Ouest	FRE	SO	14	
Sud	FRE	S	4	
West	ENG	W	7	

LIO Lookup Table Values:

ORN_STREET_SIDE_LIST

STREET SIDE	STREET SIDE DESCR	NRN STREETSIDE	EXPIRY DATETIME
Both	Both Sides	3	
Left	Left Side	1	
Right	Right Side	2	

LIO Lookup Table Values:

ORN_STREET_TYPE_LIST

STREET TYPE	STREET TYPE SHORT FORM ENGLISH	STREET TYPE SHORT FORM FRENCH	NRN STREETTYPE	EXPIRY DATETIME
Abbey	ABBEY			
Access	ACCESS			
Acres	ACRES			
Aire	AIRE			
Alley	ALLEY			
Allée		ALLÉE		
Arm	ARM			
Autoroute	AUT			
Avenue	AVE	AV		
Bank	BK			
Barrage		BRGE		
Baseline	BASELINE			
Bay	BAY			
Beach	BEACH			
Bend	BEND			
Bloc	BLOC			
Block	BLOCK			
Bluff	BLUFF			
Bottom	BTM			
Boulevard	BLVD	BOUL		
Bourg		BOURG		
Bourne	BRNE			
Branch	BRANCH			
Bridge	BRIDGE			
Brook	BROOK			
Burn	BURN			
Bush	BUSH			

Bypass	BYPASS			
Byroad	BYROAD			
Byway	BYWAY			
Camp	CAMP			
Campus	CAMPUS			
Cape	CAPE			
Carrefour		CARREF		
Carré		CAR		
Causeway	CSWY			
Centre	CTR	C		
Cercle		CERCLE		
Chart	CHART			
Chase	CHASE			
Chemin		CH		
Circle	CIR			
Circuit	CIRCT			
Cliffs	CLFS			
Close	CLOSE			
Club	CLUB			
Common	COMMON			
Concession Road	CON RD			
Concession	CONC			
Copse	COPSE			
Corner	COR			
Corners	CRNRS			
County Road	COUNTY RD			
Cour		COUR		
Course	CRSE			
Court	CRT			
Courts	CTS			
Cove	COVE			
Creek	CK			

Crescent	CRES			
Crest	CREST			
Croft	CROFT			
Croissant		CROIS		
Cross	CX			
Crossing	CROSS			
Crossroad	CROSRD			
Crossroads	CRSSRD			
Cul De Sac	CDS			
Curve	CURVE			
Cut	CUT			
Côte		CÔTE		
Dale	DALE			
Dell	DELL			
Desserte		DESSTE		
Development	DEVELP			
Diversion	DIVERS			
Downs	DOWNS			
Drive	DR			
Driveway	DRWY			
Droit De Passage		DRPASS		
Easement	EASEMT			
End	END			
Esplanade	ESPL			
Estates	ESTATE			
Expressway	EXPY			
Extension	EXTEN			
Fairway	FAWY			
Farm	FARM			
Field	FIELD			
Fields	FIELDS			
Fire Route	FR			

Forest	FOREST			
Freeway	FWY			
Front	FRONT			
Garden	GN			
Gardens	GDNS			
Gate	GATE			
Gateway	GTWY			
Glade	GLADE			
Glen	GLEN			
Green	GREEN			
Greenway	GREENWAY			
Grounds	GRNDS			
Grove	GROVE			
Harbour	HARBR			
Haven	HAVEN			
Heath	HEATH			
Height	HT			
Heights	HTS			
Highlands	HGHLDS			
Highway	HWY			
Hill	HILL			
Hills	HS			
Hollow	HOLLOW			
Impasse		IMP		
Inamo	INAMO			
Inlet	INLET			
Intersection	INTERSN			
Island	ISLAND			
Islands	ISS			
Isle	ISLE			
Jardin		JARDIN		
Junction	JNC			

Keep	KEEP			
Key	KEY			
Knoll	KNOLL			
Lake	LK			
Lakes	LKS			
Lakeway	LKWY			
Land	LAND			
Landing	LANDNG			
Lane	LANE			
Lanes	LANES			
Laneway	LANEWY			
Lawn	LAWN			
Limits	LMTS			
Line	LINE			
Link	LINK			
Lock	LOCK			
Locks	LOCKS			
Lookout	LKOUT			
Loop	LOOP			
Mall	MALL			
Manor	MANOR			
Market	MKT			
Maze	MAZE			
Meadow	MEADOW			
Mews	MEWS			
Millway	MILLWAY			
Montée		MONTÉE		
Moor	MOOR			
Mount	MOUNT			
Mountain	MTN			
Orchard	ORCH			
Outlook	OUTLOOK			

Oval	OVAL			
Overpass	OVERPASS			
Parade	PARADE			
Parc	PARC			
Park	PK			
Parkway	PKY			
Pass	PS			
Passage	PASS			
Path	PATH			
Pathway	PTWAY			
Peak	PEAK			
Pier	PIER			
Pike	PIKE			
Pines	PINES			
Place	PL	PLACE		
Plateau	PLAT			
Plaza	PLAZA			
Point	PT			
Pointe		POINTE		
Pool	POOL			
Port	PORT			
Private	PVT			
Promenade	PROM			
Quai		QUAI		
Quay	QUAY			
Ramp	RAMP			
Rang		RANG		
Range	RG			
Reach	REACH			
Regional Road	REG RD			
Ridge	RIDGE			
Right Of Way	RTOFWY			

Rise	RISE			
River	RIVER			
Road	RD			
Roadway	RDWY			
Rond Point	RDPT			
Roundabout	RBT			
Route	ROUTE	RTE		
Row	ROW			
Rue		RUE		
Ruelle		RUELLE		
Ruisseau		RUIS		
Run	RUN			
Section	SECTN			
Sentier		SENT		
Service	SERV			
Shoal	SHOAL			
Shore	SHORE			
Shores	SHORES			
Side	SIDE			
Sideline	SLINE			
Sideroad	SIDERD			
Skyway	SKYWY			
Spur	SPUR			
Square	SQ			
Street	ST			
Strip	STRIP			
Stroll	STROLL			
Subdivision	SUBDIV			
Summit	SUM			
Surf	SURF			
Terrace	TERR			
Terrasse		TSSE		

Thicket	THICK			
Towers	TOWERS			
Townline	TLINE			
Trace	TRACE			
Track	TRACK			
Trafficway	TRAFFICWAY			
Trail	TRAIL			
Trunk	TRUNK			
Tunnel	TUN			
Turnabout	TRNABT			
Turnpike	TPIKE			
Vale	VALE			
Valley	VALLEY			
Via	VIA			
View	VIEW			
Village	VILLGE			
Villas	VILLAS			
Vista	VISTA			
Voie		VOIE		
Walk	WALK			
Walkway	WALKWAY			
Waterway	WATERWAY			
Way	WAY			
Wharf	WHARF			
Wold	WOLD			
Wood	WOOD			
Woods	WOODS			
Wynd	WYND			
Échangeur		ÉCH		
Île		ÎLE		

LIO Lookup Table Values:

ORN_STRUCTURE_TYPE_LIST

STRUCTURE TYPE	STRUCTURE TYPE DESCR	NRN STRUCTURETYPE	EXPIRY DATETIME
Bridge Covered	Part of a road supporting the travel of motorized vehicles, built on a raised, covered structure and serving to span an obstacle, river, another road or railway, etc.	2	
Bridge Moveable	Part of a road supporting the travel of motorized vehicles, built on a moveable, raised structure and serving to span an obstacle, river another road or railway, etc. The moveable surface allows for the passage of vessels.	3	
Bridge	Part of a road supporting the travel of motorized vehicles, built on a raised structure and serving to span an obstacle, river another road or railway, etc., yet does not have a moveable surface or a building-like cover.	1	
Dam	Part of a road supporting the travel of motorized vehicles, built across a waterway or floodway to control the flow of water.	7	
Tunnel	An enclosed man-made construction built to carry a transportation element through or below a natural feature or other obstruction.	5	

LIO Lookup Table Values:

ORN_SURFACE_TYPE_LIST

SURFACE TYPE	SURFACE TYPE DESCR	EXPIRY DATETIME
Blocks	A paved road element with a surface made of blocks such as cobblestones or interlocking pavers	
Dirt	An unpaved road element, which the surface is formed by the removal of vegetation and/or by transportation movements over the road, which inhibit further growth of any vegetation	
Flexible	A paved road element with a flexible surface such as asphalt or tar gravel	
Gravel	An unpaved road element, which the surface has been improved by grading with gravel	
Rigid	A paved road element with a rigid surface such as concrete	

LIO Lookup Table Values:

ORN_TOLL_POINT_TYPE_LIST

TOLL POINT TYPE	TOLL POINT TYPE DESCR	NRN TOLLPOINTTYPE	EXPIRY DATETIME
Hybrid	A tollbooth along a road element, which is both physical and virtual.	3	
Physical	A construction along or across a road element, where toll can be paid to employees of the organization in charge of collecting the toll or to machines involving electronic methods of payment like credit cards or bank cards.	1	
Virtual	At a virtual point along a road element, toll will be charged via automatic registration of the passing vehicle by subscription or invoice.	2	

LIO Lookup Table Values:

ORN_UNDERPASS_TYPE_LIST

UNDERPASS TYPE	UNDERPASS DESCR	EXPIRY DATETIME
Building	A point at the intersection of a building and the road element passing underneath.	
Industrial	A point at the intersection of an industrial structure e.g. utilities, and the road element passing underneath.	
Rail	A point at the intersection of a rail structure and the road element passing underneath.	
Road	A point at the intersection of a road e.g. a bridge structure, and the road element passing underneath.	
Walkway	A point at the intersection of a walkway, e.g. multi-use pathway, skywalk, trail, or bike path, and the road element passing underneath.	
Water	A point at the intersection of a water feature and the road element passing underneath, e.g. a tunnel.	
Wildlife	A point at the intersection of a wildlife corridor and the road element passing underneath.	

ORN_ROAD_NET_ELEMENT_FT			
ORN_ROAD_NET_ELEMENT_FT.ACQUISITION_TECHNIQUE = ORN_ACQUISITION_TECHNIQUE_LIST.ACQUISITION_TECHNIQUE	ORN_ACQUISITION_TECHNIQUE_LIST		
ORN_ADDRESS_INFO.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_ADDRESS_INFO	ORN_ADDRESS_INFO.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST
		ORN_ADDRESS_INFO.HOUSE_NUMBER_STRUCTURE = ORN_HOUSE_NUM_STRUCTURE_LIST.HOUSE_NUMBER_STRUCTURE	ORN_HOUSE_NUM_STRUCTURE_LIST
		ORN_ADDRESS_INFO.STANDARD_MUNICIPALITY = ORN_STANDARD_MUNICIPALITY_LIST.STANDARD_MUNICIPALITY	ORN_STANDARD_MUNICIPALITY_LIST
		ORN_ADDRESS_INFO.FULL_STREET_NAME = ORN_STREET_NAME_PARSED.FULL_STREET_NAME	ORN_STREET_NAME_PARSED
		ORN_ADDRESS_INFO.STREET_SIDE = ORN_STREET_SIDE_LIST.STREET_SIDE	ORN_STREET_SIDE_LIST
ORN_ALTERNATE_STREET_NAME.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_ALTERNATE_STREET_NAME	ORN_ALTERNATE_STREET_NAME.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST
		ORN_ALTERNATE_STREET_NAME.FULL_STREET_NAME = ORN_STREET_NAME_PARSED.FULL_STREET_NAME	ORN_STREET_NAME_PARSED
ORN_BLOCKED_PASSAGE.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_BLOCKED_PASSAGE	ORN_BLOCKED_PASSAGE.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST
		ORN_BLOCKED_PASSAGE.BLOCKED_PASSAGE_TYPE = ORN_BLOCKED_PASSAGE_TYPE_LIST.BLOCKED_PASSAGE_TYPE	ORN_BLOCKED_PASSAGE_TYPE_LIST
ORN_ROAD_NET_ELEMENT_FT.DIRECTION_OF_TRAFFIC_FLOW = ORN_DIR_OF_TRAFFIC_FLOW_LIST.DIRECTION_OF_TRAFFIC_FLOW	ORN_DIR_OF_TRAFFIC_FLOW_LIST		
ORN_ROAD_NET_ELEMENT_FT.FROM_JUNCTION_ID = ORN_JUNCTION.JUNCTION_ID	ORN_JUNCTION		
ORN_JURISDICTION.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_JURISDICTION	ORN_JURISDICTION.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST
		ORN_JURISDICTION.JURISDICTION = ORN_JURISDICTION_LIST.JURISDICTION	ORN_JURISDICTION_LIST
		ORN_JURISDICTION.STREET_SIDE = ORN_STREET_SIDE_LIST.STREET_SIDE	ORN_STREET_SIDE_LIST
ORN_NUMBER_OF_LANES.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_NUMBER_OF_LANES	ORN_NUMBER_OF_LANES.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST
ORN_OFFICIAL_STREET_NAME.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_OFFICIAL_STREET_NAME	ORN_OFFICIAL_STREET_NAME.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	
		ORN_OFFICIAL_STREET_NAME.FULL_STREET_NAME = ORN_STREET_NAME_PARSED.FULL_STREET_NAME	ORN_STREET_NAME_PARSED
ORN_ROAD_CLASS.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_ROAD_CLASS	ORN_ROAD_CLASS.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST
		ORN_ROAD_CLASS.ROAD_CLASS = ORN_ROAD_CLASS_LIST.ROAD_CLASS	ORN_ROAD_CLASS_LIST
ORN_ROAD_NET_ELEMENT_FT.ROAD_ELEMENT_TYPE = ORN_ROAD_ELEMENT_TYPE_LIST.ROAD_ELEMENT_TYPE	ORN_ROAD_ELEMENT_TYPE_LIST		
ORN_ROAD_NET_ELEMENT_SOURCE.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_ROAD_NET_ELEMENT_SOURCE	ORN_ROAD_NET_ELEMENT_SOURCE.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST
ORN_ROAD_SURFACE.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_ROAD_SURFACE	ORN_ROAD_SURFACE.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	
		ORN_ROAD_SURFACE.PAVEMENT_STATUS = ORN_PAVEMENT_STATUS_LIST.PAVEMENT_STATUS	ORN_PAVEMENT_STATUS_LIST
		ORN_ROAD_SURFACE.SURFACE_TYPE = ORN_SURFACE_TYPE_LIST.SURFACE_TYPE	ORN_SURFACE_TYPE_LIST

ORN_ROUTE_NAME.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_ROUTE_NAME	ORN_ROUTE_NAME.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST	
ORN_ROUTE_NUMBER.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_ROUTE_NUMBER	ORN_ROUTE_NUMBER.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST	
		ORN_ROUTE_NUMBER.SHIELD_TYPE = ORN_SHIELD_TYPE_LIST.SHIELD_TYPE	ORN_SHIELD_TYPE_LIST	
ORN_SPEED_LIMIT.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_SPEED_LIMIT	ORN_SPEED_LIMIT.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST	
ORN_STRUCTURE.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_STRUCTURE	ORN_STRUCTURE.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME		
		ORN_STRUCTURE.STRUCTURE_TYPE = ORN_STRUCTURE_TYPE_LIST.STRUCTURE_TYPE	ORN_STRUCTURE_TYPE_LIST	
ORN_TOLL_POINT.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_TOLL_POINT	ORN_TOLL_POINT.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST	
		ORN_TOLL_POINT.TOLL_POINT_TYPE = ORN_TOLL_POINT_TYPE_LIST.TOLL_POINT_TYPE	ORN_TOLL_POINT_TYPE_LIST	
ORN_UNDERPASS.ORN_ROAD_NET_ELEMENT_ID = ORN_ROAD_NET_ELEMENT_FT.OGF_ID	ORN_UNDERPASS	ORN_UNDERPASS.AGENCY_NAME = ORN_AGENCY_NAME_LIST.AGENCY_NAME	ORN_AGENCY_NAME_LIST	
		ORN_UNDERPASS.UNDERPASS_TYPE = ORN_UNDERPASS_TYPE_LIST.UNDERPASS_TYPE	ORN_UNDERPASS_TYPE_LIST	