

# Land Information Ontario

## **NRVIS/OLIW Data Management Model For Traditional Land Use Area (V.2) Fact Sheet Edition**

Version 1.0

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## Additional Information

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Refer to the *DMM Users-Guide to the Fact Sheet Edition* for additional details about the context of information collected for a Data Management Model.

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## 1. Preface

Data modeling involves identifying the things of importance to an organization (entities), the properties of those things (attributes) and how they are related to one another (relationships). This document provides the logical view of the data model. Appendix 1 provides details on understanding data models.

## 2. Overview

### **Traditional Land Use Area (TLUA) version 2**

A Traditional Land Use Area is a polygon feature that identifies an area commonly used for both current and past human activities that are deemed worthy of special consideration. These areas are not officially recognized, but may be located on the basis of local common knowledge.

This is a NRVIS 3.3 and an OLIW 2006 Data Class

### **Abstract Class:**

SPSNTUREGION -

Abstract Spatial Single-Non-Tessellating-Unconstrained-Region User Object. One and only one contiguous region forms a single object. Regions may overlap each other. Gaps, holes, and islands are allowed. This class may be used to model habitat areas if we view all "habitat" as a single type of entity and if we do NOT allow disjoint areas of habitat to be considered a single object. E.g.: moose habitat areas overlaps caribou habitat areas AND disjoint summer and winter caribou habitat areas are treated as a separate objects in the inventory. The nature of the overlap is unconstrained. At the physical level this class of user object will be implemented - within ARC/INFO - as a REGION feature subclass. The corresponding POLYGON feature class is not visible to the user.

### **Custodian: (INTERIM)**

Ministry of Natural Resources (MNR), Science and Information Resources Division (SIRD), Information Resources Management Branch (IRMB)

No MNR Business Area has yet agreed to being the 'Official' Custodian for this data class, although it is actively maintained at the OMNR District level.

### **Geographic Unit Types:**

#### **Bear Baiting Station (1017)**

A Bear Baiting Station is a Traditional Land Use Area in which people leave bait to attract bears for the purposes of hunting or capturing the bears.

#### **Berry Picking Area (1019)**

A Berry Picking Area is a Traditional Land Use Area in which individuals and groups are known to harvest berries.

#### **Birdwatching Site (1021)**

A Birdwatching Site is a Traditional Land Use Area used on an ongoing basis by birdwatchers.

#### **Lookout (1508)**

A Lookout is used to view the surrounding landscape and may include an observation landing or tower.

#### **Lookout, Potential (1131)**

A Lookout, Potential is a Traditional Land Use Area with the capacity of becoming a lookout point. A lookout is used to view the surrounding landscape and may include an observation landing or tower.

#### **Semi-Permanent Structure (1600)**

A Semi-Permanent Structure is a building or frame that is not quite permanent.

**Traditional Fishing Area** (1251)

A Traditional Fishing Area is a Traditional Land Use Area used by certain groups (primarily aboriginal people) on an ongoing basis for fishing.

**Traditional Hunting Grounds** (1252)

A Traditional Hunting Ground is a Traditional Land Use Area used by certain groups (primarily aboriginal people) on an ongoing basis for hunting.

**Viewpoint, Potential** (1260)

A Viewpoint, Potential, is a point on the landscape that offers a scenic view.

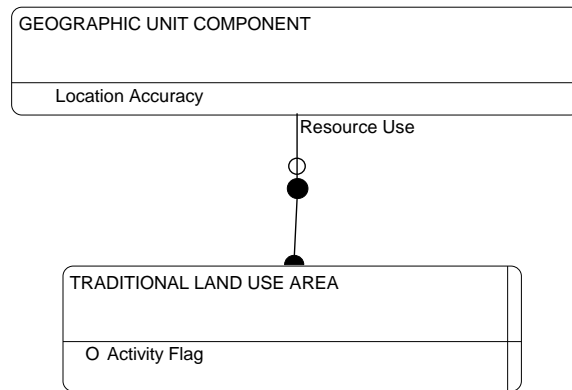
**Viewscape** (1261)

A Viewscape is an area that is kept in its natural state to promote tourism. In most cases, it is on the flight path to a lodge.

### 3. Logical Data Model (Business View)

Refer to the Appendix 1 guide on how to read an Entity Relationship Diagram (ERD).

Business View Logical Data Model  
 Data Class: Traditional Land Use Area  
 Data Class Version: 2  
 Subset: TLUA



### 4. Data Dictionary

Refer to the Appendix 2 for guide on how to interpret a data dictionary.

**Entity : GEOGRAPHIC UNIT COMPONENT**

**Description :**

A Geographic Unit that may be included in a Geographic Unit Consolidation.

Location Accuracy

Character (variable length string) 2 Mandatory

The degree of conformity or closeness of a measurement within the database to its true value in the world.

**Class :** Code

Valid values in NRVIS\_LOCATION\_ACCURACY.

**Subtype Of** GEOGRAPHIC UNIT

Each GEOGRAPHIC UNIT COMPONENT May be One and only one FIRE DETAIL(s). Exclusive :

Each GEOGRAPHIC UNIT COMPONENT May be One and only one GEOGRAPHIC UNIT SENSITIVITY(s). Exclusive :

Each GEOGRAPHIC UNIT COMPONENT May be Defined By One or more DRAWING SCALE(s). Exclusive :

**Entity : TRADITIONAL LAND USE AREA**

**Description :**

An area commonly used for various human activities both current and past that is deemed worthy of special consideration. Examples include traditional hunting grounds, fishing area, viewscape, birdwatching, berry picking, bear baiting station, etc.

Activity Flag

Character (variable length string) 10 Optional

The status of the Traditional Land Use feature, in terms of human activity or use. The feature may be assigned a status of:

-Active: The feature is actively used/visited by people on a regular or seasonal basis.

-Inactive: The feature has not been used/visited by people for an extended period of time (e.g.: 2+ years)

**Class :** Indicator

**Permissible Values :**

'Active','Inactive'

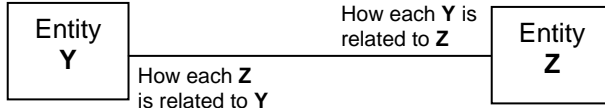
**Subtype Of** GEOGRAPHIC UNIT COMPONENT

## Appendix 1: Reading an Entity-Relationship Diagram

A modeler can define the data needs of a business using an **entity relationship diagram** (ERD). An ERD is a schematic representation showing entities and their relationship to other entities. An **entity** is a data object and a **relationship** is a model of the association between objects of one or more different entities. In an ERD, entities are rectangles connected to other entities by relationship lines. (official definition excerpt from the *Information Modeling Handbook for the OPS – Ontario Government Management Board Secretariat Corporate Architecture Branch*)

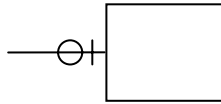
You will encounter the following symbology in an ERD.

**General Notation:** Text that describes a relationship between entities.

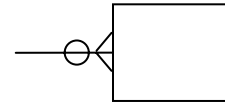


### Relationship Cardinality Symbols:

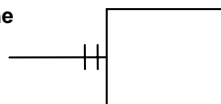
There *may* be **zero or one** occurrence of this entity. This means that the entity is optional.



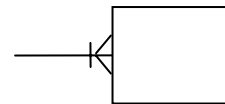
There *may* be **zero or more** occurrences of this entity. The relationship is optional.



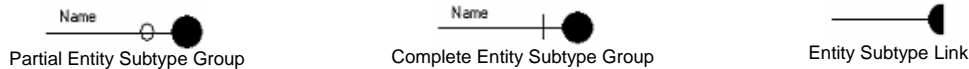
There *must* be **one and only one** occurrence of this entity. This means that the relationship is mandatory.



There *must* be **one or more** occurrences of this entity. The relationship is mandatory.

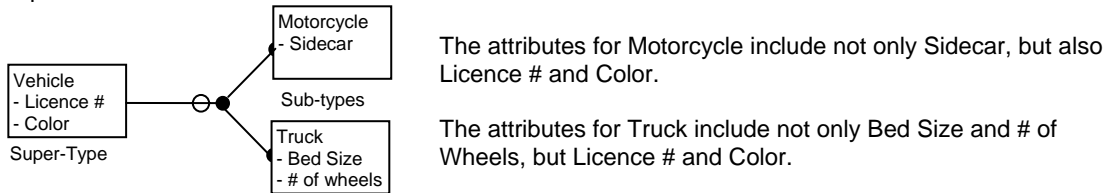


**Entity Sub-type Groups:** Entity subtype group icons link sub-type entities to the super-type entity. All subtype entities inherit the characteristics of the super-type entity. For example:



Group icons link subtype entities to the super-type entity. All subtype entities inherit the characteristics of the super-type entity. For example:

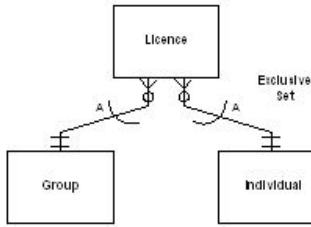
The circle indicates that the definition of subtypes for the super-type Vehicle is only partially complete. A line in this same location would indicate that all possible subtypes have been defined – indicating it as complete.



Types of vehicles that have not be explicitly defined would inherit only the characteristics of the Vehicle entity e.g. Car, ATV.

**Exclusive Set:**

An Exclusive Set describes a relationship between entities where, at any one time, only one of the relationships can be true. For example:



A Group *may* be the holder of one or more Licences.

An Individual *may* be the holder of one or more Licences.

A Licence *must* be Issued to one and only one Group **or** One and only one Individual.

One licence cannot be issued to both a group and an individual.

**Additional Examples:**

*Interpreted as :*

**An Instructor *must* be teaching One or More Courses.**

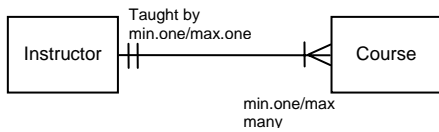
**A Course *must* be taught by One and Only One Instructor.**

An Instructor cannot exist unless they teach a course.

A Course cannot exist unless it has an Instructor. Tag-Team teaching by Instructors is not permitted.

A newly hired Instructor, not yet assigned to a course, may therefore not be part of this entity.

If the business rules dictate that this is not so, the relationship is incorrect. (See next example)



*Interpreted as :*

**An Instructor *may* be teaching One or More Courses.**

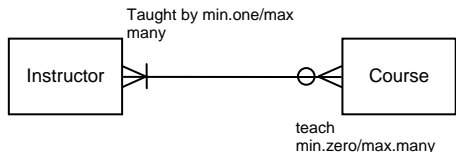
**A Course *must* be taught by One or More Instructors.**

A newly hired Instructor, not yet assigned to a course, can exist.

A new inexperienced Instructor, can be paired up with an experienced Instructor to teach a course until they are confident to teach solo.

A Course cannot exist unless it has an Instructor.

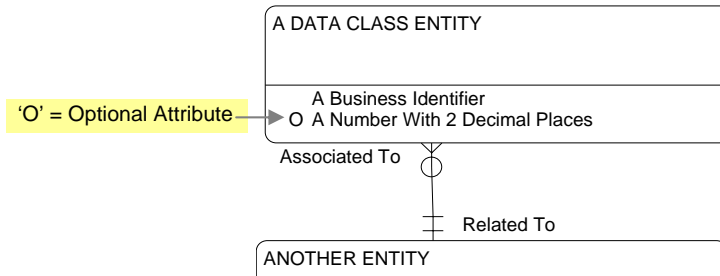
Once again, if the business rules dictate that this is not so, the relationship is incorrect.





## Appendix 2: Interpreting a Data Dictionary

General guidelines on how to interpret a Business View Logical Model Data Dictionary



**Entity : A DATA CLASS ENTITY**

**2 Description :**  
This is an example of a Entity Description

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**4 A Business Identifier**  
This is the main Business Identifier.

**8 Class : Business Identifier**

**5** Character (variable length string) **25** **Mandatory**

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**4 A Number With 2 Decimal Places**  
This is an example of a Data Item description.  
This is an example of an Attribute Description.

**8 Class : Measurement**

**6** **3** **2** **Optional** **7**

**9 This is an example of a Business Definition.**

**10 Each A DATA CLASS ENTITY Must be Associated To One and only one ANOTHER ENTITY(s). Exclusive :**

1. Entity Block
2. Entity Name and Description
3. Attribute Block
4. Attribute name (underlined) with item description (below). Sometimes, the item is also described at the attribute level to describe its specific usage within an entity.
5. Field Type. E.g.: Character, Numeric, Date etc...
6. Field Length and where applicable – number of decimal places. The maximum capacity for a field's content is determined by the Item's set length. With the examples above...
  - The 1st item, has been defined as a Character (Variable length string) field, with a maximum length of 25 characters.
  - The 2<sup>nd</sup> item has been defined a Numeric field with a width of 3 including 2 decimal places. (9.99)
 Other numeric definition examples: 99.99 would be defined as 4 2, 999.9 as 4 1, 999 as 3 0 etc...  
 Whenever numeric data items are defined, it is good practice to include an example in the item's description.
7. Attribute Optionality within Entity. Optional attributes are prefixed with an 'O' within an Entity's ERD.
8. Logical Class of the Data Item. Examples include:
  - Business Identifier: a field used by a business area as a reference to obtain more information.
  - Code: Where values are stored as a code – with the full value sometimes stored in a corresponding lookup table.
  - Date: For storing date information e.g.: Year, full or partial dates, character dates etc...
  - Description: For storing long descriptions.
  - Flag: Where the field is used to store a condition that may be used by the business area to trigger an event.
  - Identifier: Where field is used to store an identifier e.g.: a Licence Number.
  - Indicator: Usually Boolean e.g. Yes/No
  - Measurement: The unit of measure is also defined e.g.: mm, feet, kilograms etc...
  - Name: Where field is used to store a name. e.g.: Lake Rome
  - Quantity: Where a field stores a value that measures quantity. E.g.: Number of Moose Observed: 12
9. Business Definition. E.g.: *Valid Values in NRVIS\_2NUM Lookup Table*
10. Entity Relationship Description