

GO-ITS 70.01 Customer Index Files (CIFs) Implementation Information



Management Board Secretariat

Foreword

Government of Ontario Information & Technology Standards are the official publications on the standards, guidelines, technical reports and preferred practices adopted by the Information & Technology Standards Council under delegated authority of the Management Board of Cabinet. These publications support the Management Board Secretariat's responsibilities for coordinating standardization of Information and Technology in the Government of Ontario. Publications that set new or revised standards provide policy guidance and administrative information for their implementation. In particular, they describe where the application of a standard is mandatory and specify any qualifications governing its implementation.

Amendment Notice (July 1996)

The reader should note that this version of the Standard has been improved over the previous release by the insertion of both major and minor changes, *in the same manner as indicated by this paragraph*. These changes are important in the light of recent experience with implementation of the Client Basic Information Directory (CBID) project, and these changes align the Standard with that implementation.

Of particular importance, is the notion of a new Mailing address type called "Route Civic Address". Also of significance is renaming of the "Physical "Actual Address" (residential) to "Physical Survey Address".

Abstract

This technical report interprets and defines information for the implementation of the GO-ITS standards for government Customer Index Files (CIFs).

Implementation Criteria

1.1 Category

Technical Report

1.2 Related Documents

GO-ITS 70

Registration of Individual Customers in Ministry Customer Index Files (CIFs) - A document outlining the specifications for the registration of individual customers in ministry customer index files.

Repertoire des Avis Linguistiques et Terminologiques - A document stipulating the official use of diacritic marks in the French language in Ontario.

Canada Postal Guide, Part 1 Domestic Mail, Subject 8.1 Addressing - The Canada Post standards for addressing.

Delivery Needs Accuracy - A guide to using the Canada Post standards for addressing. *International Standards Organization (OSI) 639, Language Code Reference Number* - A document defining the OSI standard for codes for the representation of languages.

2 Purpose

This GO-ITS contains guidelines for clusters/ministries and all former Schedule I and IV provincial government agencies that are designing customer index files that conform to the standard GO-ITS 70.0.

3 Application

This document will be of use to all clusters/ministries and to all former Schedule I and IV provincial government agencies that are designing customer index files that conform to the government-wide standard.

4 Specifications

See Technical Specifications.

5 Qualifications

Government of Ontario IT Standards and Enterprise Products apply (are mandatory) for use by all clusters/ministries and to all former Schedule I and IV provincial government agencies under their present classification (Advisory, Regulatory, Adjudicative, Operational Service, Operational Enterprise, Trust or Crown Foundation) according to the current agency classification system. Additionally, this applies to any other new or existing agencies designated by Management Board of Cabinet as being subject to such publications.

Kindly refer to

http://intra.pmed.mbs.gov.on.ca/mbc/pdf/Agency_Establishment&Accountability-Dir.pdf for a list of provincial government agencies with their classification under the current classification system, as well as their previous Schedule under the former Schedule system.

The document was prepared by the Ministry of Transportation as a technical report for implementing and connecting to the planned GO-NET service that subject to legislative

approval will provide an option for clusters/ministries to connect to a single shared customer information database operated and maintained by the Computer and Telecommunication Services Division of Management Board Secretariat. Since the planned GO-NET service will conform to the standard GO-ITS 70.0 on the format of customer index file data elements, this document provides clusters/ministries developing their own CIFs with valuable implementation advice. However, clusters/ministries are not bound by any *physical* design structures inferred by the document due to its relevance to the GO-NET

6 Implementation

The effective date of this standard is December 15, 1994.

7 Where to obtain copies

Copies of related documents may be obtained as follows:

French language documents

Champlain Book Store 468 Queen St. East Toronto, Ontario M5A 1T7 416-364-4345

Canada Post standards

Canada Post Corporation Performance Standards and Quality Assurance Mail Quality Standards Station 537 720 Heron Road Ottawa, Ontario K1A 0B1

ISO standards

Standards Council of Canada 350 Sparks St. Suite 1200 Ottawa, Ontario K1P 6N7
1-800-267-8220

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Technical Specifications

Technical Report - Implementation of Government Standard on Customer Index Files (CIF)s

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1. CUSTOMER INDEX FILE DATA STRUCTURE

The Customer Index File (CIF) consists of a number of groupings of inter-related data. Each line of a grouping represents data for one customer and contains data elements of information about that customer.

As an example, the "INDIVIDUAL IDENTIFICATION" grouping can contain the following data:

LAST NAME	GIVEN NAME 1	COMMON NAME
Smith	James	Jim
Stevens	Anastasia	Stacy

Data groupings in the CIF form a structure as in the diagram below:

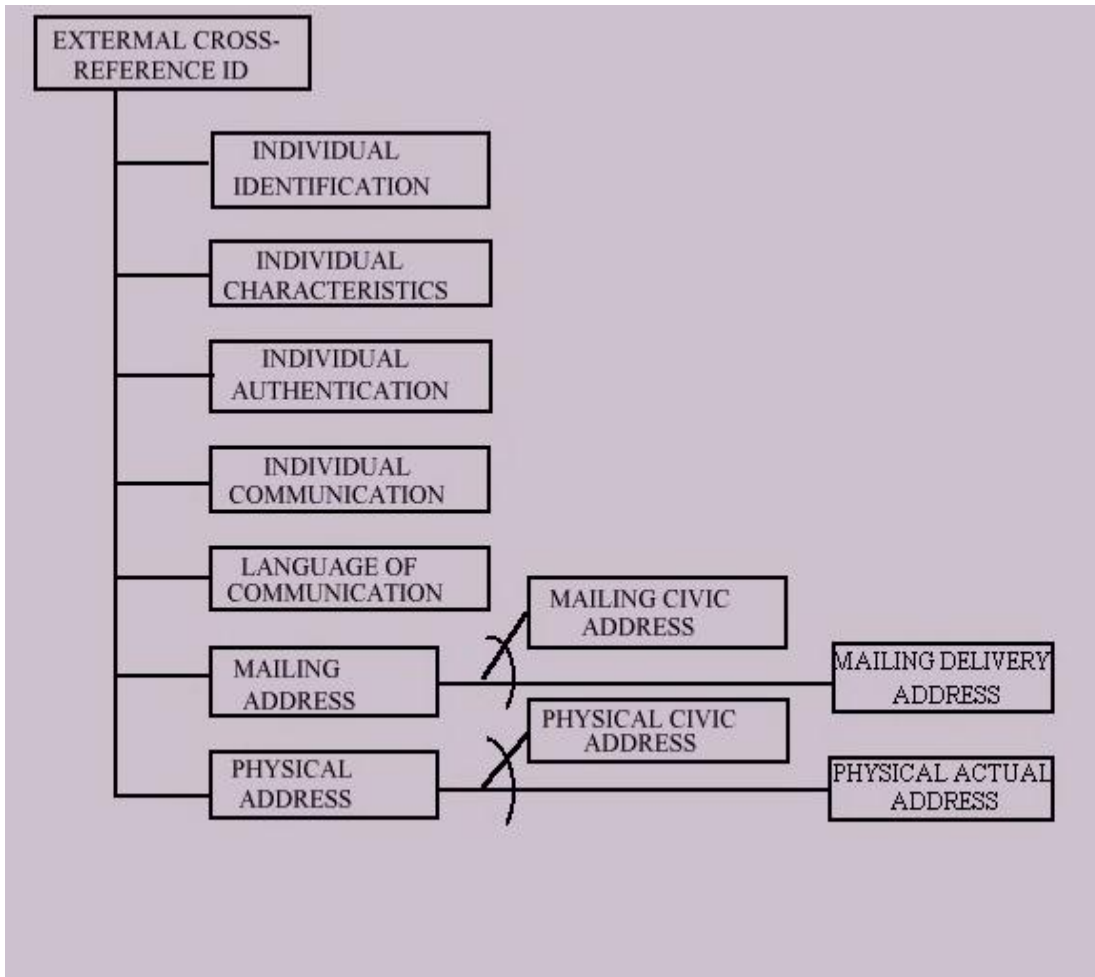


Figure 1. CUSTOMER INDEX FILE DATA STRUCTURE

For implementation, more than one customer can share the same MAILING ADDRESS and PHYSICAL ADDRESS.

Each grouping is described in a separate section in the pages that follow.

2. COMMON DATA ELEMENTS

In addition to the data elements that are assigned specifically to each group, the following data elements are common to every data grouping to provide an audit trail of all data changes.

Cluster/Ministry Identifier

A code that is unique to each Cluster/Ministry

Program Identifier

A code that indicates the business area of the Cluster/Ministry.

Application Identifier

A code that indicates the business application that causes a change to be made to CIF data.

Transaction Identifier

A code that indicates the computer program that causes a change to be made to CIF data

Data Source Office

The location where data is originated / entered for a customer.

Data Source Operator

The ID of a person or computer device that is used to enter data for a customer.

Date Time Stamp

The date and time at which the computer stores data for a customer. Time goes down to the second level.

3. EXTERNAL CROSS-REFERENCE ID

A cross-reference file can be created in order to access customers by an external customer identifier that is unique to an Ontario Government program. For example, the Ministry of Transportation can access the CIF using Driver Licence number while the Ministry of Health can use a Health number. For CIF's that are to be shared among multiple Government cluster/ministries, encryption of external identifiers can prevent a cluster/ministry from accessing another Ministry's data, as well as the external identifiers themselves.

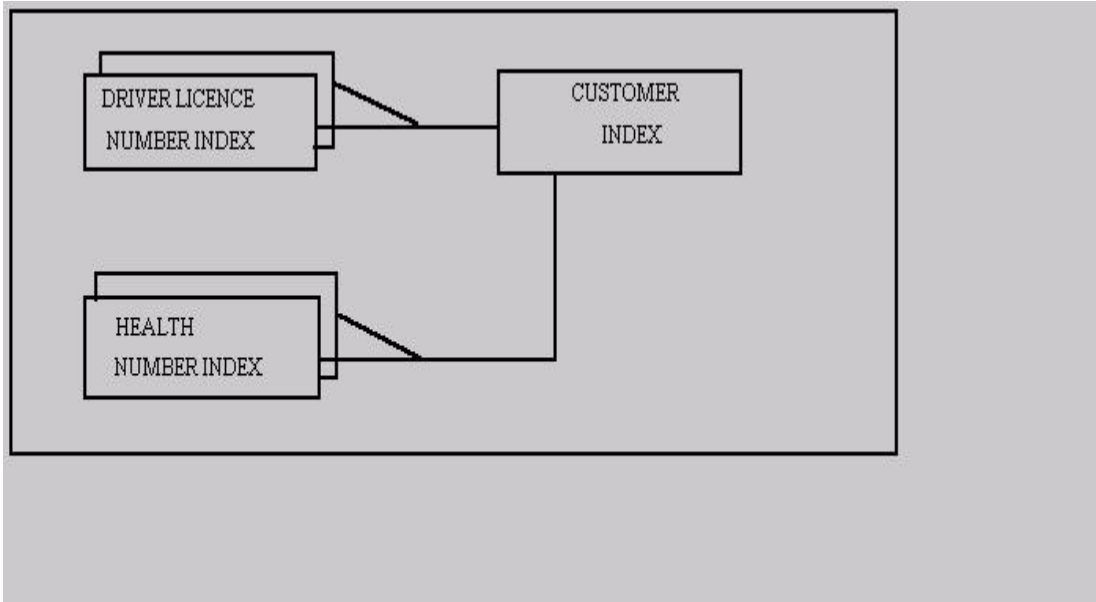


Figure 2. CROSS REFERENCE TABLES

This index contains one or more external customer identification numbers for an individual such that each of these will map to a single common Internal Identification Code to access the CIF.

External Customer Identifier

A number assigned to a customer by a Cluster/Ministry; e.g. a Driver's Licence Number is used by the Ministry of Transportation to identify a customer.

Internal Identification Code

A computer-generated unique number that is assigned to each individual.

4. INDIVIDUAL IDENTIFICATION

The information by which an individual's identity is known, legally or commonly can be recorded.

Internal Identification Code (primary key)

A computer-generated unique number that is assigned to each individual.

Last Name

The legal last name on official documents.

Given Name 1

The first legal given name on official documents.

Given Name 2

A second legal given name on official documents, in legal order following Given Name 1.

Given Name 3

A third legal given name on official documents, in legal order following Given Name 2.

Common Name

The name the individual is commonly known as. For instance "Billy" for William (if William is an official given name).

Gender

The gender of the individual. There may be 3 values: "M" for male, "F" for female, and "U" for unknown.

Height

Height of the individual in centimetres. History should be retained where this item is changed.

Effective Date of Height

Date for which height was recorded in the CIF.

History can be retained for the INDIVIDUAL IDENTIFICATION in a similar data grouping along with two additional data elements:

End Date Time (primary key)

The date of the day prior to when this identification data grouping is replaced with a new current set of identification data.

Start Date Time

The date that this data grouping was first recorded. A Start Date/End Date period for the data group must not overlap any other Start Date/End Date period for the data group for the customer.

5. INDIVIDUAL CHARACTERISTICS

The information that describes an individual.

Internal Identification Code (primary key)

A computer-generated unique number that is assigned to each individual.

Date of Birth

Date of birth of the individual as officially recorded.

Place of Birth Country

The country where a person was born, as recorded on official identification documents; useful for identification purposes during registration.

Place of Birth Province State

The province or state where a person was born; useful for identification purposes during registration.

Place of Birth Upper Tier Municipality

Upper tier municipality in which a person was born; useful for identification purposes during registration. e.g. Regional Municipality, County, Territorial District.

Place of Birth Lower Tier Municipality

Lower tier municipality in which a person was born; useful for identification purposes during registration. e.g. City, Town, Village.

Date of Death

Date of death of the individual as officially recorded.

Official Language of Choice

The preferred official language for communication in government documents that are not bilingual. Two codes are permissible: "E" for English, "F" for French.

Photo-Image Number

The Photo-Image identification number assigned to the most recent digitized photo.

Signature Number

The Signature identification number assigned to the most recent digitized signature.

Citizenship Category

The current held citizenship(s) of an individual. Multiple citizenships should be supported. (See Canadian Citizenship Type table)

6. INDIVIDUAL AUTHENTICATION

Static data about the individual. This information also records that an individual has provided valid identification. Certain supporting documentation must be provided to verify that a person is, in fact, who they claim to be. e.g. Citizenship papers, birth certificate. No history need be retained; any change to a data element in this information would be regarded as an update or correction.

Internal Identification Code (primary key)

A computer-generated unique number that is assigned to each individual.

Source Document Type (primary key)

This is a code that indicates the type of document submitted as proof of identity. (See Canadian Citizenship Document Type table)

Source Document Number (primary key)

The unique number that is assigned to a document for a given Document Type; e.g. a birth certificate number.

Jurisdiction Country

The code that indicates the country jurisdiction that issued the document. (See Country table [ISO Standard])

Jurisdiction Province State

The code that indicates the province or state jurisdiction that issued the document. This level of authentication is preferred, if Country is Canada or the United States of America. (See Province State table)

7. INDIVIDUAL COMMUNICATION INFORMATION

Data used to communicate with an individual. No history need be retained; any change to a data element in this information would be regarded as an update or correction. Any previous data would be no longer useful. Multiples of each type of item of this group should be recorded, e.g. to support more than one Home Telephone Number for an individual, etc.

Internal Identification Code (primary key)

A computer-generated unique number that is assigned to each individual.

Home Area Code Voice

The area code of the home telephone number of the individual.

Home Telephone Number Voice

The home telephone number of the individual.

Home Extension Number Voice

The extension number of the home telephone number of the individual.

Business Area Code Voice

The area code of the business telephone number of the individual.

Business Telephone Number Voice

The business telephone number of the individual.

Business Extension Number Voice

The extension number of the business telephone number of the individual.

Area Code FAX

The area code of the FAX telephone number of the individual.

Telephone Number FAX

The FAX number of the individual.

Extension Number FAX

The extension number of the FAX telephone number of the individual.

Email Provider

The network (e.g. Internet, CompuServe) that carries Email to the recipient.

Email ID

The electronic mail address of the individual. This can be a variable length character string.

8. LANGUAGES OF COMMUNICATION

The language(s) that an individual can speak or converse. Languages are extracted from a standard table of languages and there may be a number of languages recorded. (See Language table)

9. ADDRESS OF A CUSTOMER

Address information can be specified in any of *four basic types*: Civic Address, Route Civic Address, Delivery Installation Address, or Physical Survey Address.

An address can be used for one or more purposes. In this implementation, an address can have *two possible roles*: Mailing Address and Residence Address.

A resident of Ontario can be recognized in this implementation by referring to the Province State Code of the address of residence.

In the diagram of Figure 1 there is an arc associated with any MAILING ADDRESS indicating that any one of MAILING CIVIC ADDRESS, MAILING ROUTE CIVIC ADDRESS or MAILING DELIVERY ADDRESS should be used for mailing, not both. Similarly, an arc associated with PHYSICAL ADDRESS indicates that either PHYSICAL CIVIC ADDRESS or PHYSICAL SURVEY ADDRESS should be used for an individual's place of residence, not both.

10. MAILING ADDRESS

This address is used by Canada Post to deliver mail to an individual. Many mailing addresses can be recorded over time and history should be retained. For implementation, history can be held in a record separate from the current instance of an address.

Mailing Address follows CPC standards and conventions. It is structured to record a Civic Address and/or a Delivery Installation Address:

Civic Address generally applies to an individual who receives door-to-door delivery or who receives mail at a community mail box.

Route Civic Address is a variation on Civic Address. It applies to a street served by a delivery route service from a Delivery Installation.

Delivery Installation Address is used when there is no civic address numbering and street information.

Mailing Address components are defined as follows:

Same As Physical indicator

If the Mailing Address is the same as the place where an individual resides, this indicator will contain the letter "Y"; otherwise it will contain the letter "N", indicating that the Physical Address, rather than Mailing Address, must be referenced to locate an individual.

Non-address Data

This includes any additional information that an individual may wish to include, beyond their name to help clarify location (e.g. LAKESIDE ESTATES)

Mailing Address Structure

This is a code that indicates whether the mailing address is structured for Civic, Route Civic or Delivery Installation format, according to CPC standards.

Municipality

This refers to a City or Municipality or Town or Village or Community or Post Office recognized as a valid mailing destination.

Province State code

This should be identified by the international two-character code. (See Province_State table)

Country code

The code that indicates the country of the address. (See Country table [ISO Standard])

Postal Zip code

The Canadian postal code format is ANA NAN, where A is an alpha character and N is a numeric character. For United States Zip code, the format is NNNNN or NNNNN-NNNN. Other country's postal codes should be stored as unstructured character strings.

Invalid Client Address indicator

This is a date indicating when it has been determined that a mailing address is invalid for an individual; e.g. return of mail. If the address is subsequently updated or corrected, this date must be removed.

11. MAILING CIVIC ADDRESS

This form of address consists of:

Street Number

The official civic number that has been assigned to an address by the municipality.

Street Number Suffix

This is used if a letter or fraction follows civic number (e.g. **140A** or **91 1/2** KING ST). The only permissible fractions are 1/4, 1/2 and 3/4.

Street Name

The official name recognized by the municipality.

Street Type

The street type is always identified by official CPC symbols (e.g. ST, CRT, BLVD, etc.). (See Street Types table [CPC Standard])

Street Direction

Where street direction is required, it must be identified by a one or two-character symbol (e.g. N, S, NE, NW). (See Street Directions table [CPC Standard])

Unit Designator

Identifies type of unit such as an apartment or suite. (See Unit Designator table [CPC Standard])

Unit Identifier

Identifies the specific unit as assigned by the building. The value can be alphanumeric. Numeric unit number must be presented in numeric form (e.g. 2 instead of TWO).

12. MAILING ROUTE CIVIC ADDRESS

This form of address consists of:

Street Number

The official civic number that has been assigned to an address by the municipality.

Street Number Suffix

This is used if a letter or fraction follows civic number (e.g. **140A** or **91 1/2** KING ST). The only permissible fractions are 1/4, 1/2 and 3/4.

Street Name

The official name recognized by the municipality.

Street Type

The street type is always identified by the official CPC symbols (e.g. ST, CRT, BLVD, etc.). (See Street Types table [CPC Standard])

Street Direction

Where street direction is required, it must be identified by a one or two-character symbol (e.g. N, S, NE, NW). (See Street Directions table [CPC Standard])

Mode of Delivery Designator

The official Canada Post symbol for Rural Route (RR), Suburban Services (SS), Mobile Route (MR), or General Delivery (GD). (See Mode Of Delivery Designators table [CPC Standard])

Mode of Delivery Identifier

A number identifying a Rural Route, Suburban Services or Mobile Route delivery mode.

13. MAILING DELIVERY ADDRESS

This form of mailing address consists of:

Mode of Delivery Designator

The official Canada Post symbol for Postal Box (PO BOX), Rural Route (RR),

Suburban Service (SS), Mobile Route (MR), or General Delivery (GD).
(See Mode Of Delivery Designators table [CPC Standard])

Mode of Delivery Identifier

A number identifying a Rural Route, Suburban Service or Mobile Route delivery mode.

Delivery Installation Area Name

This identifies general location of a delivery installation and is usually a village, town, community, city or metropolitan area name (e.g. RR 1 **ETOBICOKE** STN B). The Delivery Installation Area Name is not required if it is the same as the municipality name. e.g. PO BOX 3506 STN C OTTAWA ON K1Y 4K6

Delivery Installation Type

This identifies the delivery installation by the official Canada Post symbol. e.g. PO BOX 3506 STN C (See Delivery Installation Types table [CPC Standard])

Delivery Installation Qualifier

This identifies the specific delivery installation in the urban areas where there is more than one installation. e.g. PO BOX 3000 STN **MAIN**

14. PHYSICAL ADDRESS

A physical address should be used to record the place of residence of an individual. The Ministry of Transportation must record the residential address of every individual for whom they are required to keep a file pertaining to driver, vehicle or carrier business (See Note 1)

In the case where an individual's Mailing Address does not record where he/she lives, the Physical Address is required. A number of physical addresses may be recorded over time and history should be retained.

The physical address can be structured in one of two possible ways; a CPC Civic Address or an Actual Address:

Civic Address applies to an individual who resides at an address that has civic numbering and street information;

Survey Address would be used where a place of residence is at a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory.

Physical Address components are defined as follows:

Non-address Data

This includes any additional information that an individual may wish to include, beyond their name, to help clarify location (e.g. **WALMSLEY FARM**).

Physical Address Type

This is a code that indicates whether the physical address is structured as a Civic or a Survey address.

Province State code - same as for Mailing Address

Country code - same as for Mailing Address

Postal Zip code - same as for Mailing Address

Invalid Client Address Indicator

This indicator identifies the date for which a physical address is determined to be invalid, i.e. the individual does not reside at the physical address. If the physical address is subsequently corrected, the date indicator must be removed.

15. PHYSICAL CIVIC ADDRESS - same as MAILING CIVIC ADDRESS

16. PHYSICAL SURVEY ADDRESS

The physical Survey (or cadastral) form of address consists of:

Lot / Part number

A lot number is used to indicate location within a Subdivided Township; alternatively, a part number is used to indicate location within an Unsubdivided Township or Unsurveyed Territory.

Concession / Plan number

A concession or section number is used to indicate location within a Subdivided Township; it goes along with Lot number. Alternatively, a Reference Plan number is used for an Unsubdivided Township or Unsurveyed Territory; it goes along with Part number.

Address description

This is used to enter Toponyms such as Name of Locations, Boroughs, and possible textual description of the address.

Lower Tier

The name of a lower tier municipality such as a Municipality/City, Township, Town, Village. Entering a value for this is mandatory as the absolute minimum, if a Survey address is to be recorded at all.

Upper Tier

The upper tier (municipality) name such as Regional Municipality, County, Territorial District.

17. CUSTOMER ADDRESS PRESENTATION

Dual addressing, where both the individual's physical location and mailing address appear on one address item is discouraged by Canada Post Corporation (CPC).

MAILING ADDRESS FORMAT

The overall sequence of components required by Canada Post Corporation to be displayed/printed for any mail is as follows:

1. Non-address Data
2. Addressee information
3. Delivery Address Information
4. Municipality Province Postal Code

Order of importance is bottom-up.

"Non-address Data" (#1) and "Municipality Province Postal Code" (#4) are recorded in the Mailing Address table.

"Addressee Information" (#2) indicates the name of the intended recipient. It is stored in the Individual Identification table (not the Mailing Address table).

"Delivery Address Information" (#3) can be recorded in one or more of the Mailing Civic Address table, the Mailing Route Civic Address table or the Mailing Delivery Address table.

Postal ZIP Code

Note that there is one space between the first three and the last three characters. The postal code **must** be printed/displayed with two spaces separating it from the province. e.g. OTTAWA ON K1G ON2

Street Number Suffix

In the display/print format, if suffix is an alpha character there must be **no** intervening space; if suffix is a fraction there must be **one** intervening space.

Street Name

If the street is a number followed by an ordinal (e.g. 1ST, 2ND, 3RD, 4TH, etc.), there will be no space between the number and the ordinal. If the street name is alphanumeric, there will be no space between the numeric and the alpha portion (e.g. 36A ST instead of 36 A ST).

Street Type

In an English address, street type always follows street name. In a French address, street type appears before the street name unless the street type is numeric. In this case, street type follows street name (e.g. 1ERE RUE).

Mode Of Delivery Identifier

The numeric identifier is separated from the mode of delivery designator by one space (e.g. PO BOX 6001). The number sign (#) must not be included ahead of the number.

PHYSICAL ADDRESS FORMAT

The overall sequence of components for displaying/printing of a physical address can be as follows:

1. Non-address Data
2. Addressee Information

- 3. Physical Address Information
- 4. Municipality Province Postal Code

"Non-address Data" (#1) and "Province Postal Code" (part of #4) are recorded in the Physical Address table.

"Addressee Information" (#2) indicates the name of the individual. It is stored in the Individual Identification table (not the Physical Address table).

"Physical Address Information" (#3) can be recorded in either the Physical Civic Address table or the Physical Survey Address table, not both.

"Municipality" (part of #4) can be recorded in either the Physical Civic Address table (as Municipality), or the Physical Survey Address table (as Upper Tier).

EXAMPLES

Several combinations of table elements can be used to form a customer address. The following are some examples:

EXAMPLE 1 - Mailing Civic Address

ADDRESS LINES	TABLE SOURCE	DATA ELEMENTS
THOMPSON, MURRAY SCOTT	<u>INDIVIDUAL IDENTIFICATION</u>	Last Name, Given Names
123-61 MONROE ST E	<u>MAILING CIVIC ADDRESS</u>	Unit Number, Street Number, Street Name, Street type, Street Direction
MARKHAM, ON M3M 1J8	<u>MAILING ADDRESS</u>	Municipality, Province State code, Postal ZIP code

EXAMPLE 2 - Mailing Civic Address - With Non-address Data and Country

ADDRESS LINES	TABLE SOURCE	DATA ELEMENTS
LAKESIDE ESTATES	<u>MAILING ADDRESS</u>	Non-address Data line 1
SUPERINTENDENT	<u>MAILING ADDRESS</u>	Non-address Data line 1
CLARKE, LOUISE	<u>INDIVIDUAL</u>	Last Name, Given Names

ELLEN	<u>IDENTIFICATION</u>	
4145 65TH ST	<u>MAILING CIVIC ADDRESS</u>	Street Number, Street Name
GLACE BAY NS B1A 5H9	<u>MAILING ADDRESS</u>	Municipality, Province state code, Postal code
CANADA	<u>MAILING ADDRESS</u>	Country code

EXAMPLE 3 - Mailing Delivery Address

ADDRESS LINES	TABLE SOURCE	DATA ELEMENTS
WALMSLEY FARM	<u>MAILING ADDRESS</u>	Non-address data line1
SMITH, DOROTHY REBECCA	<u>INDIVIDUAL IDENTIFICATION</u>	Last Name, Given Names
RR 1 ETOBICOKE STN	<u>MAILING CIVIC ADDRESS</u>	Mode of Delivery Designator, Mode of Delivery Identifier, Delivery Installation Area name, delivery installation type, Delivery Installation Qualifier
WOODBIDGE ON L2R 3X4	<u>MAILING ADDRESS</u>	Municipality, Province State code, Postal ZIP code

EXAMPLE 4 - Route Civic Address

ADDRESS LINES	TABLE SOURCE	DATA ELEMENTS
STRATHDEE, SIGOURNEY	<u>INDIVIDUAL IDENTIFICATION</u>	Last Name, Given Names
1565 SMITH ST	<u>MAILING ROUTE CIVIC ADDRESS</u>	Street Number, Street Name, Street Type
RR 1	<u>MAILING ROUTE CIVIC ADDRESS</u>	Mode of Delivery Designator, Mode of Delivery Identifier
MARKHAM, ON M3M	<u>MAILING ADDRESS</u>	Municipality, Province State code,

1J8		Postal ZIP code
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EXAMPLE 5 - Physical Survey Address

ADDRESS LINES	TABLE SOURCE	DATA ELEMENTS
13	<u>PHYSICAL SURVEY ADDRESS</u>	Lot Part Number
23 R-432	<u>PHYSICAL SURVEY ADDRESS</u>	Concession Plan Number
ORO STATION	<u>PHYSICAL SURVEY ADDRESS</u>	Address Description
WILLIAMSVILLE	<u>PHYSICAL SURVEY ADDRESS</u>	Lower Tier Municipality
TIMMONS, ON L5R 8Y6	<u>PHYSICAL SURVEY ADDRESS</u> <u>PHYSICAL ADDRESS</u>	Upper Tier Municipality, Province State code, Postal ZIP code

18. ACKNOWLEDGEMENTS

The following external standards documents have been referenced by this report:

ISO Standards:

- Canadian Citizenship Table
- Canadian Citizenship Document Type
- Country
- Province_State
- Language

Canada Post Corporation (CPC) Standards:

- Street Types
- Street Directions
- Unit Designations
- Mode of Delivery Designations
- Delivery Installation Types

A lot of the examples in this report have been adapted from the document "Delivery needs Accuracy (Canadian Addressing Standard)" published by Canada Post Corporation.

Data element definitions for Physical Survey Address were provided by the Data Standards Secretariat, Natural Resources Information Branch, Information Resources Division, Ministry of Natural Resources.
