

Dissemination Geographies Relationship File, Reference Guide

Census year 2021



Release date: November 17, 2021



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Dissemination Geographies Relationship File, Reference Guide, Census year 2021

This reference guide is intended for users of the *2021 Dissemination Geographies Relationship File* (DGRF). This guide provides an overview of the file, the general methodology used to create it, and important technical information.

1. About this guide

This reference guide is intended for users of the *2021 DGRF*. The [Technical specifications](#) section includes the record layout.

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2. Overview

The *2021 DGRF* contains information at the dissemination block (DB) level, based on 2021 Census standard geographic areas, along with higher level Dissemination Geographies Unique Identifiers (DGUIDs).

The *DGRF* released on November 17th, 2021 includes the relationships between the DB and higher geographic levels that are not population and dwelling counts dependent. A final version of the *2021 DGRF*, including all levels of standard geographies, will be released on February 9th, 2022.

3. About this product

Purpose of the product

The *2021 DGRF* is a dataset at the DB level that contains the complete set of 2021 Census geographic areas. The purpose of this product is for it to be used with the [2021 Census Boundary Files](#) to link geographic areas with higher geographic levels using the DGUIDs.

Definitions and concepts

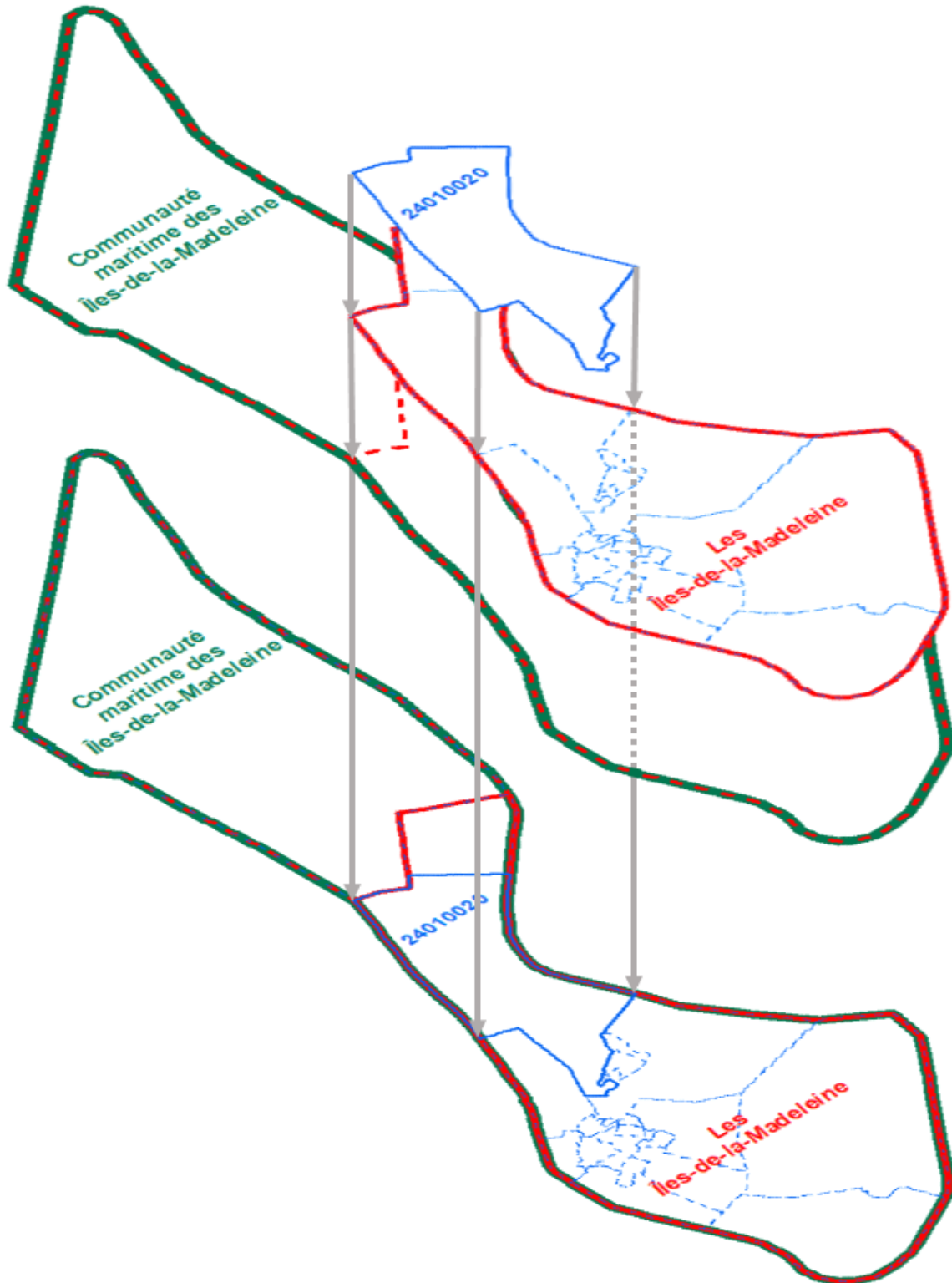
Geographic terms and concepts are briefly defined in the [Dictionary, Census of Population, 2021](#).

Relationships – spatial vs tabular

Relationships between lower and higher geography levels can be achieved either spatially or in a tabular fashion. Spatial relationships consist in superimposing layers of geographic data that cover the same area in order to study the relationship between them. Tabular relationships consist in establishing a connection between two layers using a key common to both.

In the context of the *2021 Census Boundary Files*, all the different levels of geographies have been integrated vertically, therefore spatial relationships are possible using GIS technology, either for analysis or mapping, as shown in the image below that presents an example of a spatial overlay between a dissemination area (DA), a census subdivision (CSD) and a census division (CD).

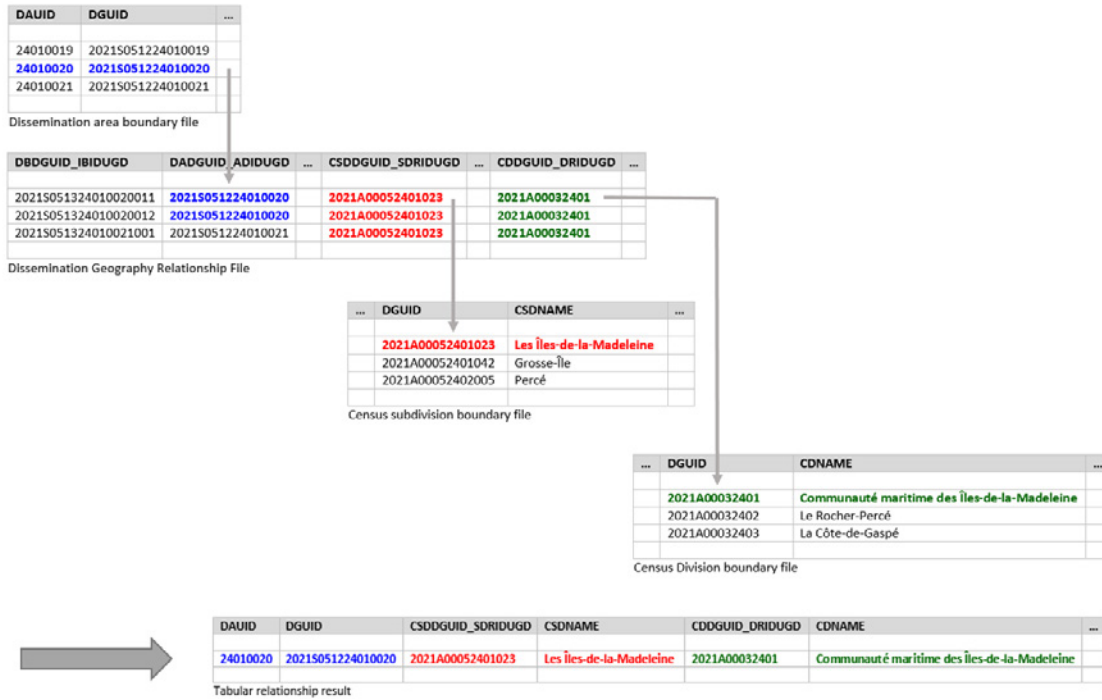
Figure 1
Example of a spatial relationship



Users can obtain similar results as above but in tabular fashion using the attribute tables of the *2021 Census Boundary Files*, along with the *DGRF*. Each boundary file level includes a DGUID that can be used to link to the *DGRF*. For example, the DGUID from the “DA Boundary Files” can be linked to the *DGRF* using the DADGUID_ ADIDUGD attribute. Additional linkages to the “CSD and CD boundary files” will then be possible using the CSDDGUID_ SDRIDUGD and the CDDGUID_ DRIDUGD attributes in the *DGRF* along with the corresponding DGUID in the “CSD and CD Boundary Files”.

The image below presents an example of linking a given DA to its corresponding CSD and CD using the *DGRF*:

Figure 2
Example of a tabular relationship



Content

The *2021 DGRF* contains all the DGUIDs for the 2021 Census standard geographic areas. It is a DB level dataset that also includes information for the following:

Release 1: November 17th, 2021

- Provinces and territories (PRs)
- Census divisions (CDs)
- Federal electoral districts (FEDs) (2013 Representation Order)
- Census subdivisions (CSDs)
- Economic regions (ERs)
- Census agricultural regions (CARs)
- Census consolidated subdivisions (CCSs)
- Dissemination areas (DAs)
- Aggregate dissemination areas (ADAs)

Release 2: February 9th, 2022

- All of release 1
- Designated places (DPLs)
- Census metropolitan areas and census agglomerations (CMA/CAs)
- Census tracts (CTs)
- Population centres (POPCTRs)

General methodology

The National Geographic Database (NGD) is a joint Statistics Canada - Elections Canada initiative to develop and maintain a spatial database which serves the needs of both organizations. The focus of the NGD is the continual improvement of quality and currency of spatial coverage using updates from provinces, territories and local sources.

The native files used for the creation of the *2021 DGRF* reside on Statistics Canada's Spatial Data Infrastructure (SDI) which was derived directly from data stored in the NGD environment. In creating the *2021 DGRF*, all DBs were extracted from the SDI along with DGUIDs for the higher level standard geographic areas in which DBs are located.

Limitations

Not applicable

Comparison to other products or versions

The *2021 DGRF* is compatible with the suite of 2021 Census geography products. There is no previous version of the *DGRF*.

Use with other products

The 2021 Census standard geographic areas in the *2021 DGRF* can be linked to other 2021 Census geography products, such as the *2021 Census Boundary Files*, using the DGUIDs.

Reference date

The geographic reference date is a date determined by Statistics Canada to finalize the geographic framework for which 2021 Census statistical data are collected, tabulated and reported. The reference date for 2021 Census standard geographic areas is January 1, 2021.

4. Technical specifications

Record layout and data descriptions

Table 4.1
Record layout - Dissemination Geographies Relationship File

Attribute name	Data type	Description	Release
PRDGUID_PRIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Province and Territory. ¹	November 2021 and February 2022
CDDGUID_DRIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Census Division. ¹	November 2021 and February 2022
FEDDGUID_CEFIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2013 Federal Electoral District. ¹	November 2021 and February 2022
CSDDGUID_SDRIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Census Subdivision. ¹	November 2021 and February 2022
ERDGUID_REIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Economic Region. ¹	November 2021 and February 2022
CARDGUID_RARIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Census Agricultural Region. ¹	November 2021 and February 2022
CCSDGUID_SRUIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Census Consolidated Subdivision. ¹	November 2021 and February 2022
DADGUID_ADIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Dissemination Area. ¹	November 2021 and February 2022
DBDGUID_IDIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Dissemination Block. ¹	November 2021 and February 2022
ADADGUID_ADAIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Aggregate Dissemination Area. ¹	November 2021 and February 2022
DPLDGUID_LDIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Designated Place. ¹	February 2022
CMPDGUID_RMRPIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Census Metropolitan Area or Census Agglomeration Part. ¹	February 2022
CMADGUID_RMRIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Census Metropolitan Area or Census Agglomeration. ¹	February 2022
CTDGUID_SRIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Census Tract. ¹	February 2022
POPCTRPDGUID_CTRPOPIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Population Center Part. ¹	February 2022
POPCTRDGUID_CTRPOPIDUGD	Character (21)	Dissemination Geography Unique Identifier for 2021 Population Center. ¹	February 2022

1. For further information please refer to the "[Dissemination Geography Unique Identifier \(DGUID\)](#)" definition from the *Dictionary, Census of Population, 2021*.

Attribute domain values

Not applicable

File specifications

The 2021 DGRF's size is approximately 100 MB in comma separated value format (.csv).

Software formats

This reference guide does not provide details on specific software packages that are available for use in comma separated value format (.csv). Users are advised to contact the appropriate software vendor for information.

File extension and accented character information

Not applicable

Geographic representation

Not applicable

File naming convention

The 2021 *DGRF* follows a standard naming convention. The file name includes: Census year, catalogue number, file format.

The 2021 *DGRF*, in comma separated value (.csv) format, is named as follows: 2021_98260004.csv

5. Data quality

Data quality elements provide information on the fitness-for-use of a dataset by describing why, when, how the data are created, and how accurate the data are. The quality elements include an overview reporting on the lineage, positional accuracy, attribute accuracy, logical consistency and completeness. This information is provided to users for all geographic data products disseminated for the census.

Lineage

Lineage describes the history of the data, including descriptions of the source material from which the data were derived and the methods of derivation. It also contains the dates of the source material and all transformations involved in producing the file.

All data in the *DGRF* were originally extracted from Statistics Canada's SDI.

Positional accuracy

Not applicable

Attribute accuracy

Attribute accuracy refers to the accuracy of the quantitative and qualitative information attached to each feature.

The DGUIDs contained within the 2021 *DGRF*, along with the relationships between all standard geographic areas, were verified against Statistics Canada's SDI. The [Figure 1.1, "Hierarchy of standard geographic areas for dissemination, 2021 Census,"](#) illustrates the relationships between all standard geographic areas.

Logical consistency

Logical consistency describes the fidelity of relationships encoded in the data structure of the digital spatial data.

Internal consistency

Consistency between the data at the various geographic levels was verified. Verification procedures included checks to ensure all the 2021 dissemination blocks are included in the *DGRF*. All geographic areas in the *DGRF* have also been verified to ensure that they have a valid DGUID for the 2021 Census.

Consistency with other products

The DGUIDs used in the 2021 *DGRF* are the same as those used in other geography products and represent the same geographic areas.

Completeness

Completeness refers to the degree to which geographic features, their attributes and their relationships are included or omitted in a dataset. It also includes information on selection criteria, definitions used and other relevant mapping rules.

The 2021 *DGRF* contains a DGUID for each geographic area. It also contains the appropriate number of geographic areas for each standard geographic level. Refer to [Table 1.1, "Geographic areas by province and territory, 2021 Census,"](#) from the *Dictionary, Census of Population, 2021*. These numbers were verified within the 2021 *DGRF*.