Stats NZ: Representation review

Spatial data guidelines

New Zealand Government

Contents

Document Overview

Intended audience	Users that wish to undertake a representation review and understand the process for making a request for population estimates for an electoral geography. Defining the spatial data requirements required for the supply of proposals to the Local government commission and the Stats NZ geospatial team.
Document purpose	To provide a set of guidelines for councils to supply geospatial data to Stats NZ during a representation review. As custodian of electoral geographies, Stats NZ maintains and publishes the boundaries on Datafinder, our geographic data service.
Feedback	This is a living document and feedback is welcome. Please email any comments to representationreview@stats.govt.nz

Document History

Version	Issue Date	Changes
V1.0	1/01/2024	First release for the local government commission website
V2.0	8/07/2024	Separate geospatial and population guidelines into two documents.

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Introduction

Purpose

The representation review spatial data guidelines are to be used from 2024 onwards. They set out requirements for the creation and supply of spatial datasets for electoral geographies that Stats NZ needs for processing.

Background

Stats NZ receives geospatial files from both councils and consultants during the representation review period for processing and updating the local electoral boundaries. The formats and content of files vary from supplier to supplier.

To improve our processing of these datasets, these spatial data guidelines have been designed to be used for data supply. Meeting these standards will assist the Local Government Commission (LGC) to review boundaries in a web-based map, and Stats NZ to process the data in an automated and efficient way.

Format

Data Supply Overview

To enable faster processing and fewer modifications to the supplied datasets, the following criteria should be followed when supplying spatial files to Stats NZ:

- Files should be supplied in the formats as defined in table 1, 'Data Supply'.

- Files should be named as defined in table 2, 'File Name'.

- Data attribute names and formats as defined in table 3, 'Attribution'.

- All files should be supplied as the newly proposed electoral boundary geometries, dissolved from the latest available meshblock pattern, available on the Stats NZ Geographic Data Service, here. A list of the most current published geographies can be found here.

- Electoral boundary geometry shapes are to include all meshblocks within the local authority boundary, i.e., including water meshblocks.

- Fields and field names shall be mapped to the schema attached in table 2 with no additional fields as part of the dataset.

Data Structure

Any questions about the supply of geospatial files should be delivered to Stats NZ via this email address: representationreview@stats.govt.nz

The geospatial file formats that Stats NZ accepts are listed below. Should you not be able to deliver files in this format please contact us at the email above to discuss.

Data Tables

Table 1 outlines the required file formats, and other details such as naming conventions.

- Files should be sent to Stats NZ as a compressed file, using a lossless data compression tool, such as a ZIP file.

- Files should have only one featureclass per file geodatabase (FGDB - Esri geodatabase). If the supply has multiple electoral boundaries, please supply a file for each.

- File preference is an Esri geodatabase file (FGDB), shapefiles can be supplied as a secondary solution should your system requirements not allow for FGDB files.

Table 1: Data Supply

File Format	Description	File Type	File Name Format	Example
File Geodatabase (FGDB)	A native file format by Esri for storing a featureclass.	. FGDB	Name Status Electoral type Date (refer table 2)	Christchurch_City_Initial_Ward_20230601.GDB
Featureclass (ESRI)	A native file format by Esri for spatial or tabular content within a file geodatabase.	Not Applicable	Name Status Electoral type Date (refer table 2)	Christchurch_City_Initial_Ward_20230601 *or* Christchurch_City_Initial_Community_Board_20 230601
Shapefile	Spatial content. Minimum of three mandatory fields are required as part of data supply; extensions are. *.shp, *.shx, and *.dbf.	.SHP .DBF .SHX	Name Status Electoral type Date (refer table 2)	Christchurch_City_Initial_Ward_20230601.ZIP *(example of files within the ZIP file)* Christchurch_City_Initial_Ward_20230601.SHX Christchurch_City_Initial_Ward_20230601.SHP

Table 2: File Name

Table 2 outlines the naming structure to be used when supplying geospatial files.

Example: *Christchurch_City_Initial_Ward_20230601* (format: Name_*Status_Electoral Type_Date*)

Item name	Description of requirements	Format examples
Name	Full name of the local authority supplying data (Name of council, including 'city', 'district' or 'region')	Christchurch_City *or* Northland_Region
Status	The proposal status, i.e., the initial or final proposal.	Initial *or* Final
Electoral Type	The type of electoral geography supplied. (Refer table 4)	Ward *or* Community_Board
Date	Creation date. Format is YYYYMMDD Useful for Stats NZ to check for most recent supplied files when comparing datasets.	20230601

Table 3: Attribute data

Table 3 outlines the attribution schema requirements needed when supplying geospatial files. Please follow the field name capitalisation structure as per table below.

Field Name	Description	Data Type	Field Length	Table Name	Examples
Supplier	Source of supply	text	10	Not Applicable	Council or Consultant *(Local government commission use only, not for councils)*
Authority	Full name of the local, regional, or unitary authority supplying the information	text	50	Not Applicable	Christchurch City *or* Stratford District *or* Northland Region
Type	Type of electoral boundary	text	50	Electoral Type (refer table 4)	Ward *or* Community Board
Name	Full description of the proposed electoral boundary, including macrons	text	200	Not Applicable	Otaki Ward *or* Te Pātaka o Rākaihautū Banks Peninsula Community
Status	Status of the proposal	text	50	Not Applicable	Initial Proposal *or* Final Proposal *or* Determination *or* LINZ *(Local government commission use only, not for councils)*

Notes:

- The 'Supplier' field shall be 'Council' by default for all councils. Only consultants engaged by the Local government commission preparing LINZ plans shall use 'Consultant' for identification.
- The 'Authority' field is the name of the local, regional, or unitary authority. Use the council's name, including 'city', 'district' or 'region'. Note: This is helpful if a regional and district council with the same name are both supplying datasets.
- The 'Type' field is the name of the electoral subdivision, refer table 4 for the supply list.
- The 'Name' field must be the full name using tohutō (macrons) where applicable.
- The 'Status' field provides the current state of the review, councils will use only 'Initial Proposal', 'Final Proposal' or where applicable 'Determination' if a decision has been made from a commissioner's decision. The 'LINZ' status shall only to be used by consultants engaged by the Local Government Commission and is not for council use.
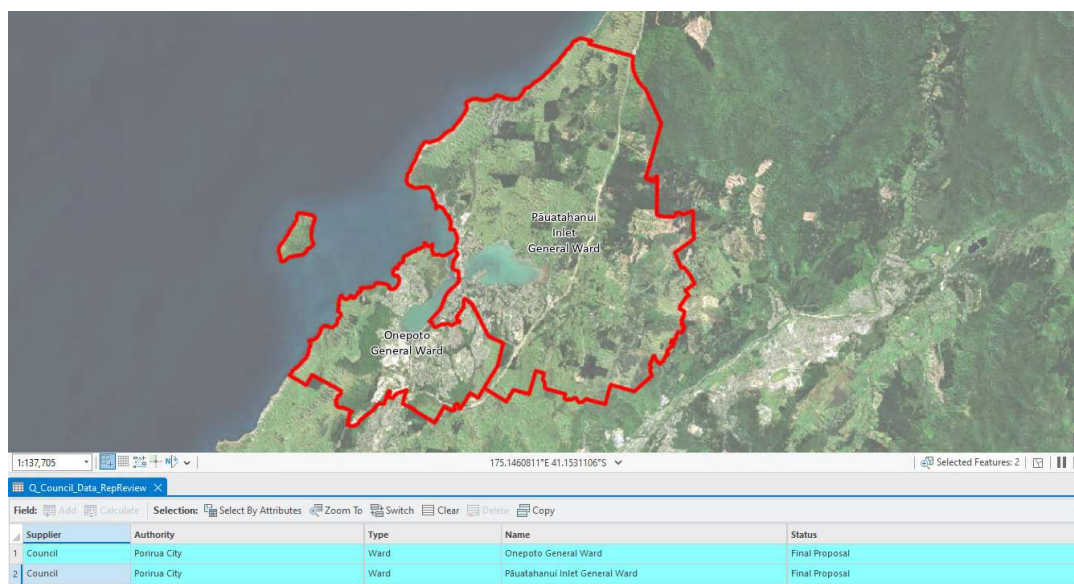
Figure 1: Typical example of proposed council file supply.

Table 4: Electoral Type

Table 4 outlines the list of available field names for each electoral subdivision.

Electoral type categories are listed below should be the only ones used.

Description
Community Board
Local Board
Māori Constituency
General Constituency
Constituency
Māori Ward
General Ward
Ward
Subdivision

Additional resources.

For making a request for population estimates for an electoral geography, please refer to the Local Government commission resources webpage for Stats NZ guideline documents.

Summary

The data supply guidelines will help Stats NZ process the information received from councils more efficiently with reduced time spent checking and modifying the supplied datasets for loading into our systems. Additionally, it will enable us to share the spatial proposals with the Local Government Commission at the earliest opportunity via a web map for assessment. The improvements will ensure accuracy and completeness of data throughout the process.

If you have any questions, please feel free to contact Stats NZ staff for assistance via this email address: [representationreview@stats.govt.nz.](mailto:representationreview@stats.govt.nz)