

<b>Title</b>	<b>Assess data collections and make statistical inferences in a public sector or other policy context</b>		
<b>Level</b>	<b>5</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	<p>This unit standard is designed for people employed in positions where they are required to interpret statistical data to make and/or report on recommendations.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> <li>– assess data collections for use in a public sector or other policy context; and</li> <li>– make statistical inferences and draw conclusions from data collections to answer a specific question in a public sector or other policy context.</li> </ul>
----------------	--

<b>Classification</b>	Public Sector Services > Public Sector Core Skills
-----------------------	--

<b>Available grade</b>	Achieved
------------------------	----------

## Guidance Information

- 1 References
- Human Rights Act 1993;  
 Income Tax Act 2007;  
 Local Government Official Information and Meetings Act 1987;  
 New Zealand Bill of Rights Act 1990;  
 Official Information Act 1982;  
 Protected Disclosures Act 2000;  
 Privacy Act 1993;  
 Public Finance Act 1989;  
 State Sector Act 1988;  
 Statistics Act 1975;  
 Information sharing agreements between government agencies and any other organisations;  
 Treaty of Waitangi/Te Tiriti o Waitangi;  
 United Nations Fundamental Principles of Official Statistics; and  
 any relevant legislation applicable to specific government agencies and any other organisations whose employees are supplying evidence for assessment against this unit standard.

Statistical obligations may also exist under a range of treaties and conventions, e.g. World Health Organisation (WHO), or environmental treaties such as the Paris Climate Agreement.

Any references superseding any of the above will apply, pending review of this unit standard.

- 2 Where assessment will occur for an international audience, the applicable or equivalent legislation of the country where assessment is taking place may be used. Statistical related obligations may also exist under a treaty of conventions, e.g. WHO conventions or environmental treaties such as the Paris Climate Agreement.
- 3 **Recommended entry knowledge and skills**  
It is recommended that candidates have basic data transformation skills, including the ability to use simple formulae in a spreadsheet application, and be able to compute the value of a simple mathematical expression.
- 4 Demonstration of knowledge and skills must be consistent with any applicable code or codes of conduct such as the New Zealand State Services Code of Conduct, Standards of Integrity and Conduct (available from <http://www.ssc.govt.nz>) and/or any other organisation or sector specific code or codes of conduct and/or ethics.
- 5 Although this unit standard is classified in the *Public Sector Core Skills* domain it is written so it can also be applied to non-public sector organisations as well as within the public sector. Examples of such non-public sector organisations are non-governmental organisations (NGOs), charities, and iwi authorities.
- 6 Assessment for this unit standard will be based on data collection case studies, and additional reports and datasets as required.
- 7 **Definitions**  
*Assess* refers to the process of judging that the material is fit for purpose including the quality, origins, and currency of the sources of the material.  
*Data collection* refers to sample surveys, census surveys and administrative data sources.

---

## Outcomes and performance criteria

### Outcome 1

Assess data collections for use in a public sector or other policy context.

**Range** features of data collections may include but are not limited to – administrative versus survey data, purpose, population, frame, data collection instrument, sample design, data collection method, data recording process, estimation, margin of error, stratification, clustering, weight, editing and imputation, classifications and standards, metadata, questionnaire design, non-response objectives, data linkage, unique identifiers.

### Performance criteria

- 1.1 Identify and describe features of the given data collection.

- 1.2 Assess features of data collections in terms of their impacts on the statistical results.

## Outcome 2

Make statistical inferences and draw conclusions from data collections to answer a specific question in a public sector or other policy context.

### Performance criteria

- 2.1 Make inferences from sample data using confidence intervals for population estimates.
- Range inferences may include but are not limited to – estimates of population mean, population proportion, difference between means and proportions of two populations.
- 2.2 Interpret and use levels of statistical significance to make inferences to answer a specific policy question in a public sector or other context.
- Range must include but is not limited to – p-values, correlation and contingency table analysis, population means and proportions.

**This unit standard is expiring. Assessment against this standard must take place by the last date for assessment set out below.**

### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 September 2006	31 December 2020
Review	2	21 May 2010	31 December 2020
Review	3	14 December 2017	31 December 2023
Review	4	15 December 2022	31 December 2023

### Consent and Moderation Requirements (CMR) reference

0121

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.