

## US23268 - Interpret statistical information to form conclusions for projects in a state sector context

**Level** 4

**Credits** 8

**Purpose** This unit standard is designed for people employed in the State Sector in positions where they are required to interpret statistical data to make and/or report decisions.

People credited with this unit standard are able to: describe the process for obtaining statistical information for a project; interpret results from categorical and numerical variables for a project; interpret results from time series variables for a project; and interpret results from demographic information for a project in a state sector context.

**Subfield** Public Sector Services

**Domain** Public Sector Core Skills

**Status** Registered

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**Entry information** Open.

**Accreditation** Evaluation of documentation and visit by NZQA and industry.

**Standard setting body (SSB)** Public Sector Training Organisation

**Accreditation and Moderation Action Plan (AMAP) reference** 0121

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

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### Special notes

- 1 Reference  
Reference information to assist with providing evidence for this unit standard can be obtained from the Statistics New Zealand website at <http://www.statisphere.govt.nz> or the specific government ministry, department or agency in which the candidate works.

## 2 Definition

*Organisational requirements* refer to instructions to staff on policy and procedures, which are documented in memo or manual format and are available in the workplace.

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## Elements and performance criteria

### Element 1

Describe the process for obtaining statistical information for a project in a state sector context.

#### Performance criteria

- 1.1 The requirements for statistical information are identified and described in terms of the project.
- 1.2 Requirements for statistical information are identified and described in terms of the type of data collection, variables, application to the project questions and the context.

### Element 2

Interpret results from categorical and numerical variables for a project in a state sector context.

#### Performance criteria

- 2.1 Tables of counts, percentages and proportions with their row and column marginal totals are interpreted to form responses to the project requirements.
- 2.2 Graphs, numerical summaries and descriptions of distributions of numerical variables are interpreted to give responses to the project requirements.
- 2.3 Scatterplots, regression models and residual plots of relationships between numerical variables are interpreted to give responses to the project requirements.
- 2.4 Tables of magnitudes of categorical variables and numerical variables are interpreted to give responses to the project requirements.
- 2.5 Graphs are interpreted and formed to support responses to the project requirements.
- 2.6 Conclusions are drawn from the analysis of the categorical and numerical variables and recorded in accordance with organisational requirements.

### Element 3

Interpret results from time series variables for a project in a state sector context.

#### Performance criteria

- 3.1 Analysis of time series variables is interpreted to give responses to the project questions.
- Range time series variables may include but are not limited to – actual, seasonally adjusted, deflated, percentage change; components may include but are not limited to – trend, seasonal, irregular.
- 3.2 Indexes are used to give responses to project questions.
- 3.3 Performance indicators are interpreted to give responses to project questions.
- 3.4 Conclusions are drawn about the original variables and their components and recorded in accordance with organisational requirements.
- Range components may include but are not limited to – trend, seasonal, irregular.

### Element 4

Interpret results from demographic information for a project in a state sector context.

#### Performance criteria

- 4.1 Standardised rates and/or odds ratios are calculated and interpreted to form responses to the project questions.
- 4.2 Conclusions are drawn from the demographic information and recorded in accordance with organisational requirements.

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#### Please note

Providers must be accredited by the Qualifications Authority, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

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### **Comments on this unit standard**

Please contact Learning State at [info@learningstate.govt.nz](mailto:info@learningstate.govt.nz) if you wish to suggest changes to the content of this unit standard.