

Social Investment Analytical Layer

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About the SIAL

The Social Investment Analytical Layer (SIAL) is events-structured tables that arrange a version of the data held in the IDI into a consistent format, making it easier and faster for authorised IDI users (researchers and analysts) to use and understand.

SIAL is designed to be reusable. It reformats social sector tables available in the IDI into tables based on events (events-structured).

Statistics NZ

Statistics NZ's Integrated Data Infrastructure (IDI) holds administrative data from government agencies and NGOs across New Zealand, which is linked at the individual level and then anonymised.

The IDI is an important asset to support social investment analysis.

Benefits

Accessing cross-agency data structured into events means authorised IDI users can easily and quickly gain a more complete understanding of a person's experiences throughout their life. This is key to implementing the investing for social wellbeing approach, e.g.:

- education enrolment
- number of CYF abuse findings
- number of days in Youth Justice residences
- number of days on income support
- total cost to government.

Without the SIAL, producing this profile would be an involved and lengthy process. SIAL will save analysts months of work.

Authorised IDI users can also create metrics within a specified date range, including (but not limited to):

- total cost of an event
- total revenue generated by the event
- total duration of an event
- number of times an event has occurred
- duration since the first event of the same type
- duration since the last event of the same type

Who can use the SIAL?

Authorised IDI users are given access to certain tables. In line with permissions granted as part of their project access, users will also be able to create a corresponding events-structured table (if available).

Code to generate events tables has been mostly written in SQL.

Production process and access

SIAL was created by restructuring data already available in the IDI.

To ensure it's accurate and fit for purpose, the SWA is conducting quality assurance by having agencies review the SIAL scripts. This quality assurance process is on-going as more tables are added and business rules change.

Currently it's up to the end user to run the SIAL code to build the event tables.

The SIAL code is hosted on GitHub – a dedicated online hosting service where the open source community share their code.

GitHub allows for:

- anyone to see their code
- issues to be raised
- version control
- collaboration

The code and instructions needed to build the SIAL tables can be viewed and downloaded at:

https://github.com/nz-social-investment-unit/social_investment_analytical_layer.

Agencies and measure used in SIAL

Agencies:

- Accident Compensation Corporation
- Department of Corrections
- Housing New Zealand
- Inland Revenue
- Ministry of Education
- Ministry of Health
- Ministry of Justice
- Ministry of Social Development
- Child, Youth and Family
- New Zealand Police.

Measures:

- cost
- duration
- count/flag
- how recent.

Note: Statistics NZ is committed to keeping information secure and confidential. They ensure the data they collect in the IDI benefits New Zealand, and is used for research or statistical purposes to inform good decision-making by Government, business, and all New Zealanders.

Find out more at <https://www.stats.govt.nz/integrated-data/integrated-data-infrastructure/>