

# Social Investment Analytical Layer (SIAL)

The Social Investment Analytical Layer (SIAL) will help agencies understand the potential return on investment (ROI) before investing in a new service.

We've created a Social Investment Analytical Layer (SIAL): events-structured tables that arrange a version of the data held in Statistics NZ's [Integrated Data Infrastructure \(IDI\)](#) into a consistent format, making it easier and faster for authorised IDI users (researchers and analysts) to use and understand.

The SIAL is designed to be reusable. It reformats all the social sector tables available in the IDI into tables based on events (events-structured). Here are the [datasets available in the SIAL \[PPTX, 244 KB\]](#).

## Watch the video

## 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 social investment 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 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 given access to a corresponding events-structured table (if available). Code to generate events tables has been written in a mix of SAS and SQL.

## Production process and access

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 and collaboration.

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

[https://github.com/nz-social-investment-unit/social\\_investment\\_analytical\\_layer](https://github.com/nz-social-investment-unit/social_investment_analytical_layer)

To use the code:

- Download the zip file
- Email [access2microdata@stats.govt.nz](mailto:access2microdata@stats.govt.nz) (the Microdata team at Statistics NZ), asking them to drop the code into your own project for your own use.

More detailed instructions can be found in the README file.

Users are free to use the code as is or to create their own additional SIAL tables. We'd love it if you contributed your code to the master version on GitHub. Please contact [info@swa.govt.nz](mailto:info@swa.govt.nz) to do this.

## Agencies and measures 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.

## Fact sheets

[Check out our fact sheet about the SIAL.](#)