9 May 2024

Official Information Act request

Thank you for your email of 3 April 2024, in which made the following request under the Official Information Act 1982 (OIA). You requested:

To assist me with my research, please would you provide at your earliest convenience any reports or materials held by your organisation:

1.   setting out and/or summarising how and when your organisation has met, or intends to meet, the commitments to transparency and partnership set out in the Algorithm Charter for Aotearoa|New Zealand;

2.   setting out or explaining how decisions made by the organisation are informed by algorithms. This may include without limitation "plain English" documentation of the algorithm/s, information about the data and processes involved, or published information about how data is collected, secured, and stored;

3.   that demonstrate or detail how your organisation is delivering clear public benefits through Treaty of Waitangi commitments by embedding a te ao Maaori perspective in the organisation's development and use of algorithms consistent with the Treaty of Waitangi;

4.   that demonstrate or detail how your organisation has, or intends to, identify and consult with people, communities and groups who have an interest in algorithms, including Maaori;

5.   that describe how your organisation makes sure data is fit for purpose by identifying and managing bias;

6.   showing how privacy, ethics, and human rights are safeguarded by regular peer reviews of algorithms to assess for unintended consequences, and how the organisation acts on this information; and

7.   setting out the nominated point of contact for public inquiries about algorithms -

together with any internal policies, principles, rules, or guidelines that relate to the above matters.

Thank you for taking the time to meet with us on Wednesday 10 April to discuss and clarify your request. I hope you found this conversation helpful for understanding our approach to the Algorithm Charter.

As an agency, we are committed to being good stewards of data. We work to ensure that we comply with our legal and moral obligations relating to the collection, storge, and use of data.

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When we collect data, we apply the Data Protection and use Policy (DPUP) at all times. This means that:

- data is only collected for the purpose it is intended,
- we do not currently collect or use Personally Identifying Information (PII), and
- the data we use is all aggregated according to Stats NZ Suppression and Confidentiality rules.

Additionally, when we receive data in our Data and Analytics Platform, the data is stored securely the platform is certified up to a level of sensitive. This means that if we had a reasonable and well-defined purpose, the platform would be secure enough to store PII.

We have made a number of commitments in relation to the Algorithm Charter. The table below shows the commitments we uphold.

Commitments	
TRANSPARENCY Maintain transparency by clearly explaining how decisions are informed by algorithms.	Plain English documentation of the algorithm.
	Making information about the data and processes available.
	Publishing information about how data are collected, secured and stored.
PARTNERSHIP Deliver clear public benefit through Treaty commitments.	Embedding a Te Ao Māori perspective in the development and use of algorithms consistent with the principles of the Te Tiriti o Waitangi/Treaty of Waitangi.
PEOPLE Focus on people.	Identifying and actively engaging with people, communities and groups who have an interest in algorithms, and consulting with those impacted by their use.
DATA Make sure data is fit for purpose.	Understanding its limitations.
	Identifying and managing bias.
HUMAN OVERSIGHT Retain human oversight.	Nominating a point of contact for public inquiries about algorithms.
	Providing a channel for challenging or appealing of decisions informed by algorithms.
	Clearly explaining the role of humans in decisions informed by algorithms.

Any insights we produce we undertake sense making sessions with our stakeholders we are working with to test the findings and we engage with our Māori advisor within our agency. If we are working with iwi we engage with iwi and communities to provide information back to them for their feedback.

We are also involved in the Algorithm Charter Community of Practice (CoP). The CoP was established in 2023 to facilitate knowledge and information sharing between Charter signatories. It held its fourth gathering in April 2024. Its establishment responds to an Independent Review of the Charter carried out in 2021 which found that, while there was 'almost universal support for the Charter amongst Government agencies and subject matter experts who participated' and while some progress has been made in implementing Charter commitments, there was a strong desire for a community of practice for knowledge and information sharing.

The Community of Practice also responds to the Open Government Partnership of New Zealand's Fourth Action Plan (led by Te Kawa Mataaho – The Public Service Commission) which commits to making government more accessible, responsive and accountable to its citizens. Commitment 8 under the Action Plan undertakes to *"improve transparency and accountability of algorithm use across government"*. In its role as Government Chief Data Steward, Stats NZ led the development of the Algorithm Charter and is the agency that convenes the Community of Practice.

Example of Algorithm Charter implementation

Where possible we apply the Algorithm Charter to the work we do.

In response to the adverse weather events that impacted communities across the North Island in early 2023, we developed a data explorer to bring a range of information together for decision-makers. The explorer identified areas damaged by flooding and silt deposits and has combined this with data on the wellbeing needs (prior to the floods) of community's resident in those areas.

Together, this information can help to identify where need is likely to be greatest to inform decisions about where and how to most effectively target support for flood-affected communities.

In undertaking this work, we acknowledged that different communities felt the impact of the cyclone differently. To assist users to appropriately target resources to flood affected communities we built functionality into the tool so that users can specify weightings across multiple dimensions that might be important for their context.

Information being released

In response to your request, I am making the following information available to you. Please note that staff contact details have been withheld to protect privacy in accordance with section 9(2)a of the Official Information Act 1982.

- A document on implementing the Charter at SWA,
- A review of the implementation of the charter
- An extract from our Project Initiation Documents that outlines how the project will align with the Data Protection and Use Principles and quality

I hope this response answers your questions. If you would like to discuss this response, or if you have any additional questions about the Social Wellbeing Agency's algorithm work, please feel free to contact me on Louise.Pirini@swa.govt.nz.

If you are not satisfied with this response, you have a right to seek an investigation or review by the Ombudsman. Information about how to make a complaint is available at www.ombudsman.parliament.nz or by calling 0800 802 602.

As part of our commitment to transparency, we proactively release our responses to information requests where possible. This response, with your personal details removed, will be published on our website shortly.

Nāku iti noa, nā

Louise Pirini
Manager, Analytics
Social Wellbeing Agency
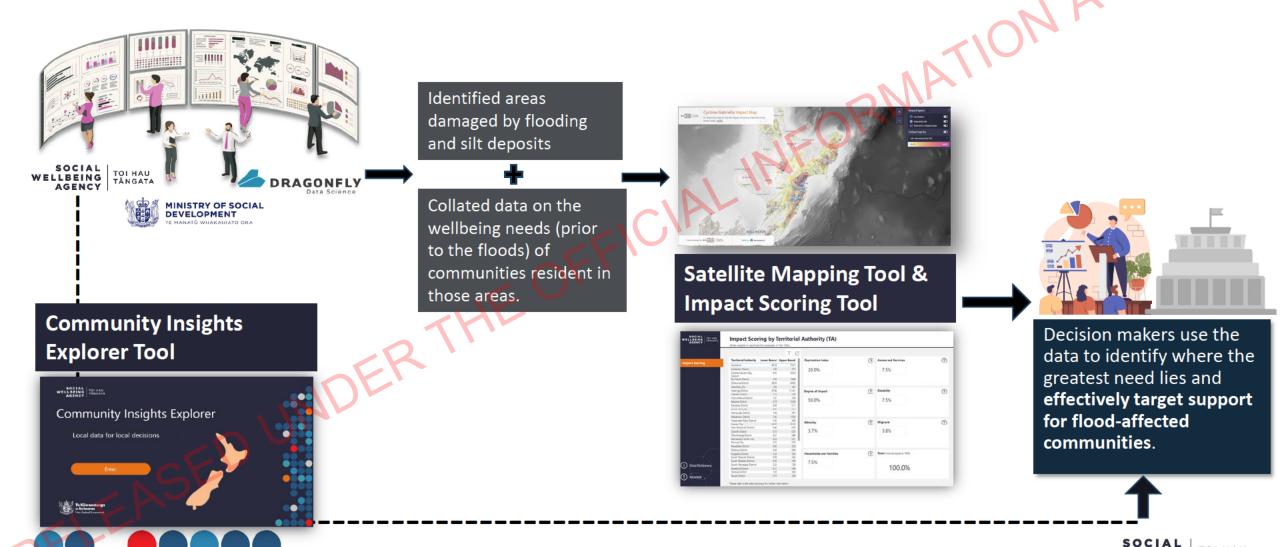
Cyclone Impact Scoring Tool & Community Explorer Tool
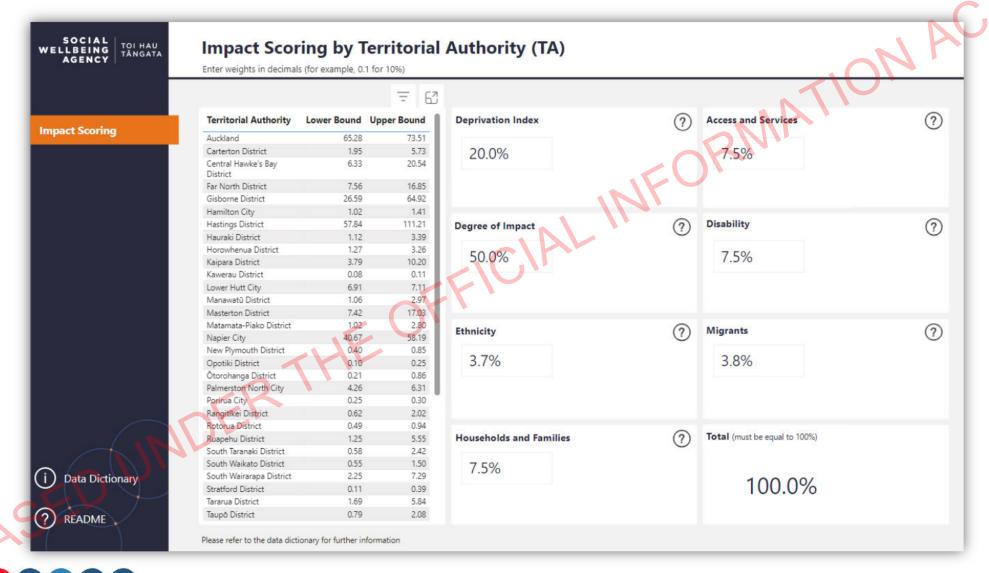
Algorithm Charter Hui

4 September 2023

We created a tool to help inform decision makers about where and how to target support for flood-affected communities.

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DRAGONFLY Data Science

MINISTRY OF SOCIAL DEVELOPMENT TE MANATŪ WHAKAHIATO ORA

Identified areas damaged by flooding and silt deposits

+

Collated data on the wellbeing needs (prior to the floods) of communities resident in those areas.

Community Insights Explorer Tool

Satellite Mapping Tool & Impact Scoring Tool

Decision makers use the data to identify where the greatest need lies and **effectively target support for flood-affected communities.**

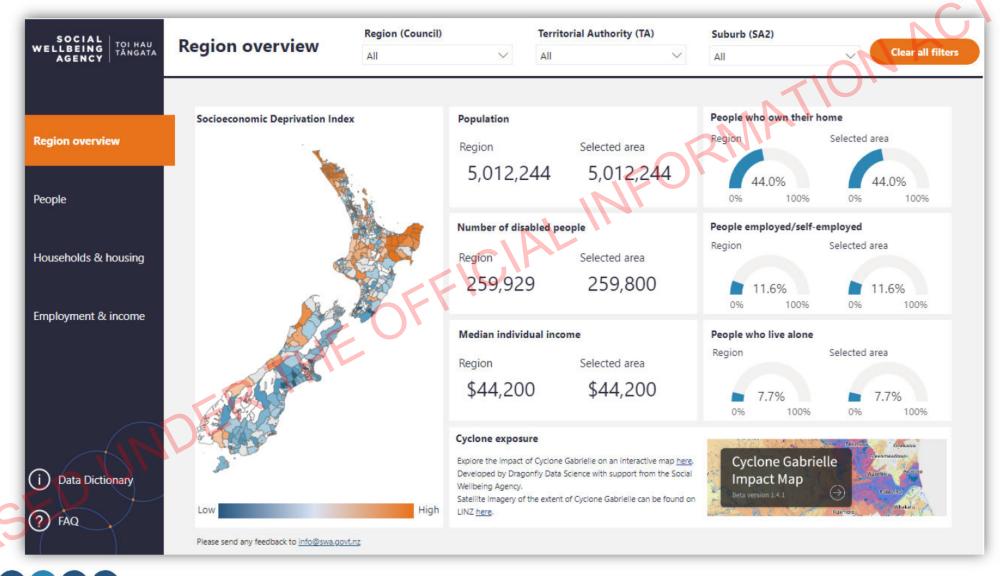**SOCIAL WELLBEING AGENCY | TOI HAU TĀNGATA**

Impact Scoring Tool

Community Insights Explorer Tool

Algorithm Charter Commitments

People

SWA has a **mechanism for feedback** from the stakeholders and communities. We incorporated feedback throughout the development process. Communities valued the opportunity to get the evidence first, and are happy for SWA to improve the tools overtime.

Privacy, Ethics and Human Rights

We are not collecting new data but **returning collected data back to the community** in the form of insights and evidence.

Human Oversight

The tool is one of many inputs used to inform **decisions.**

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Algorithm Charter Commitments

Partnership

SWA partnered with **Dragon Fly** and **MSD** for this work. MSD has consulted widely with the affected **communities**.

Data

We clearly state the data sources, data limitations and caveats in the guidelines.

Transparency

We published the **user guide** in plain English on the website and can supply the underlying data if requested.

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SWA learnings

- The Algorithm Charter commitments are built into SWA's work and thinking. We apply the DPUP principles to our work.

- We publish our work including the codes for transparency.

- SWA has a Chief Māori Adviser to provide advice on embedding Te Ao Māori perspectives and approaches consistent with the principles of the Treaty of Waitangi.

SOCIAL WELLBEING AGENCY | TOI HAU TĀNGATA

To:	Analytics team
CC:	Insights team, Danny Mollan
From:	9(2)(a)
Date:	28/10/2020
Subject:	Implementing the Algorithm Charter at SWA

In mid-2020 the Social Wellbeing Agency signed the Algorithm Charter. Written and supported by Stats NZ, The Charter requires signatories to conduct a risk assessment of their algorithms, and from this to consider six aspects of their use of algorithms: Transparency, Partnership, People, Data, Human oversight, and Privacy, ethics and human rights.

The Charter does not provide a definition of what algorithms are within scope, nor does it specify how signatories should work through the six aspects of their algorithms. Instead it recognises that "The Charter will apply differently to each signatory".

On 22 October 2020, two of our analytics staff met with Dale Elvy and Issy Hall from Stats NZ to discuss SWA's application of the charter. This document summarises key points from this conversation and recommends that:

1. SWA should focus on applying DPUP as this broader than the charter
2. If SWA adopts 'two human steps' between algorithms and decisions as the standard for safety, then the majority of our work will be low risk and need not apply the charter.

A first attempt at applying the charter has been made

Given a lack of any other guidance, Simon Anastasiadis wrote a nine-page document applying the Algorithm Charter to the project: Gaps in New Fathers' Employment. This is a new research project with The Southern Initiative (TSI) that was going through start-up at the time. It is a good example of an SWA analytics research project.

The application considered software used, groups of algorithms, data in the IDI, and the potential impact of algorithms that are outside the control of project staff (such as those that prepare data for the IDI). SWA staff who reviewed the application commented that while thorough, providing such extensive detail was not a sustainable choice for applying the charter.

Each agency is free to determine how it applies the charter

Elvy and Hall are meeting with each of the charter signatories to support their application of the charter. Our application of the charter to the Gaps in New Fathers' Employment was shared with these Stats NZ staff prior to our conversation on the 22nd. As part of this we had identified a range of considerations where additional clarity would be helpful.

However, advice from Elvy and Hall was much more limited than anticipated. They could not instruct us as to what algorithms are in/out of scope, or what application of the charter is/is not expected. Their comments highlighted that each signatory may decide for itself how/where to apply the charter.

Their focus was instead to understand how organisations were applying the charter and to foster consistency across agencies. As part of this, there were three ways they offered help:

- Arranging meetings between agencies applying the charter so that we can discuss our approaches and come to similar conclusions.
- Facilitate access to needed experts, noting that few agencies have easy access to data ethics, privacy, and transparency experts.
- Develop and circulate resources for consistent communication to the public about how each signatory uses algorithms.

In addition to these ways they could assist, two observations stood out:

1. Several other agencies are implementing The Charter as part of implementing the Data Protection and Use Policy (DPUP).
2. The success of The Algorithm Charter will most likely depend on one-or-two high profile operational algorithms such as the risk of reconviction and risk of reimprisonment (ROC-ROI) modelling used by Corrections, and facial recognition software used by Police.

Two recommendations for how SWA applies the charter

Given our conversation with Stats NZ staff, our engagement with the charter before and after SWA became a signatory, and reflections on applying the charter we recommend:

1. SWA upholds the Algorithm Charter as part of our implementation of DPUP.

This approach was discussed in a recent workshop on the charter at SWA. We are already implementing DPUP in our analytic work, and it is likely to be more effective to focus on DPUP given its more extensive guidance and broader scope than to consider both separately.

2. We adopt 'two human steps' between algorithms and decisions as the standard within which formal application of the algorithm charter is unnecessary.

The Charter is focused on "decisions made using algorithms". For almost all our work we have at least two humans between any algorithm and any decision: One person interpreting the outputs from any algorithm and writing advice or a report. A second person reading the advice or report and making decisions. As a result, there is a limited extent to which any resulting decision was "made using algorithms". From this perspective, most of our work is out of scope of the Algorithm Charter (though not out of scope of DPUP).

Reference links

Algorithm Charter 2020 Final (A12808013)
algorithm charter notes - gaps in new fathers employment (A12810454)

Regional data project

Design principles

The product developed through this work programme will align with Data Protection and Use Policy (DPUP). DPUP sets expectations about the respectful, trustworthy, and transparent collection and use of data or information about people, whānau and communities (whether it can identify people or not). SWA led the development of DPUP through a process of extensive engagement and collaboration with the social sector. It is about building good relationships between those who provide their data or information, and those who collect it or use it. DPUP is made up of a set of principles and guidelines. This project makes use of already collected data therefore not all DPUP principles around data collection need to be considered. The DPUP principles and how we have applied them to this work are outlined in Table 2 below.

Table 2: Application of DPUP principals

DPUP Principle	Application of principle in this work
He tāngata Focus on improving people's lives - individuals, children, and young people, whānau, iwi and communities	The focus of this work is on identifying and removing the current barriers for regions to access data for actionable insights to evidence informed decision making. This improves efficiency in the regions as it reduces the time spent sourcing and formatting data as well as reduces the resources central agencies spend on fulfilling these data requests.
Manaakitanga Respect and uphold the mana and dignity of the people, whānau, communities or groups who share their data and information	Experts will be consulted with to help ensure this. The RPSCs bring systems expertise, capability, and to lead and coordinate, rather than direct the funding and activities of individual agencies. Their work is focused on shared cross-government priorities that require joined up responses to inform priority planning and support decision making. Working with them will help to ensure data is being used to people's benefit and not disadvantage. Data sliced by Iwi is considered outside of scope for this project. However, SWA has other work underway that is exploring the potential for Iwi, in particular work with Te Hiku.
Mana whakahaere Empower people by giving them choice and enabling their access to, and use of, their data and information	The product will be made publicly available.
Kaitiakitanga Act as a steward in a way people understand and trust	Transparency in methods and interpretation. Publish methods and code used in this work. Be clear about the data sources used. Ensure data is stored and shared securely. IDI rules including outputting rules are followed.

Mahitahitanga Work as equals to create and share valuable knowledge	The product will be co-designed with regional representatives on the working group and subject matter experts.

Quality Assurance

The project team will implement a formal quality assurance process which will include the following elements:

- Technical review of new indicators in the IDI: this will include peer review of codes in the IDI and sense checking that results are consistent where appropriate with other published data. Where there are apparent, but unavoidable, inconsistencies, these will be identified and documented in metadata.
- Sense making: Discussion with experts from agencies and stakeholders to ensure data is accurate and represented correctly. Accurate can mean valid, relevant and timely.
- Testing the data pipeline: A robust data integrity and user acceptance testing strategy has been developed and implemented.

Quality standards will include as applicable:

- context is clear including why the product is being produced and how it can be used
- analysis is clear, logical and informed by evidence including using relevant analytical frameworks and methodologies and incorporates te ao Māori analysis and makes limitations clear
- data used in the analysis is accompanied by robust metadata that enables users to understand the concept it reflects, way it was constructed, and its limitations
- advice engages the decision makers and tells the full story
- next steps identify who is doing what next to enable effective implementation and monitoring / evaluation

Regular updates will be provided via the touchpoints covered in the stakeholder engagement section.