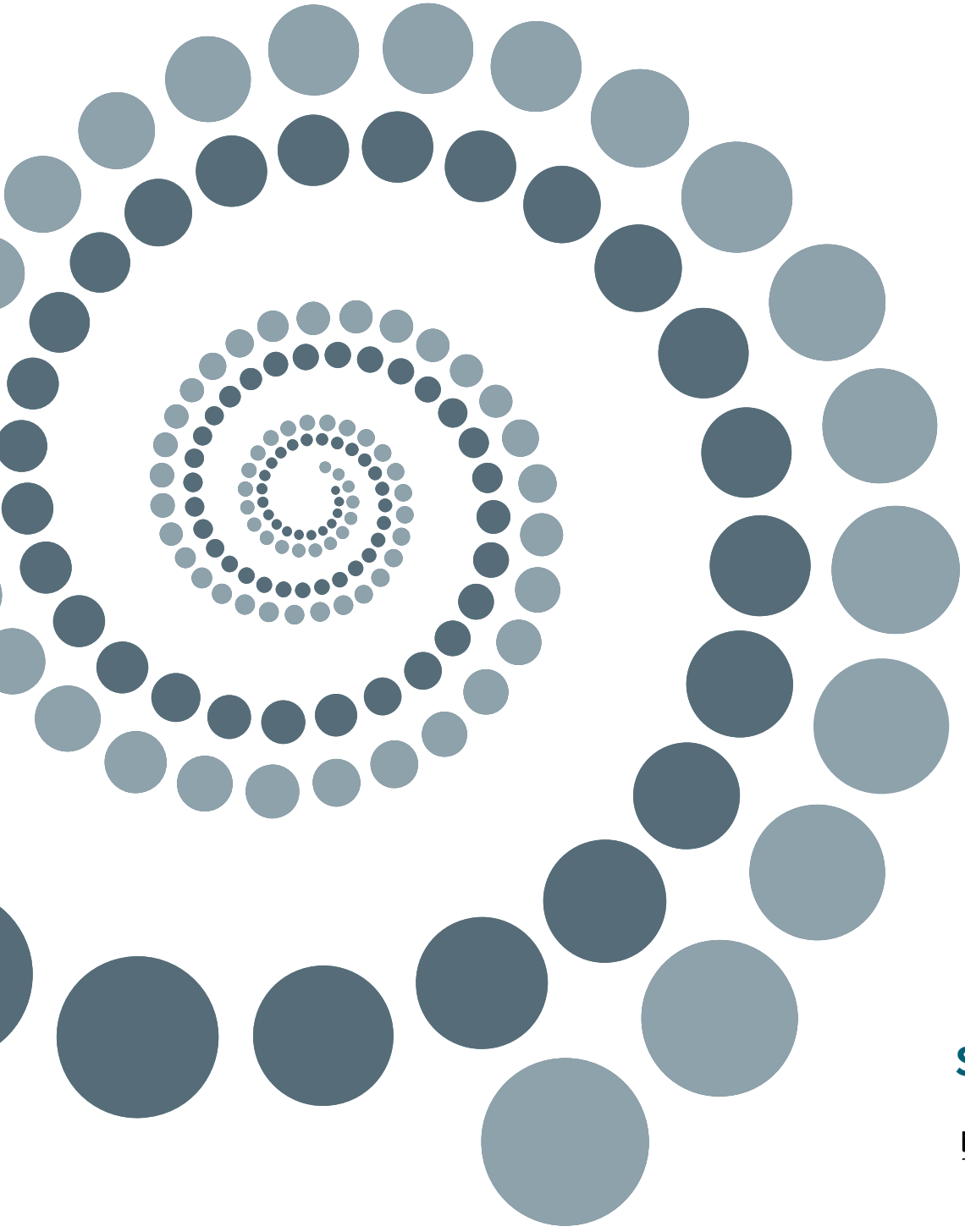
Stats NZ
Tatauranga Aotearoa

Towards new data and statistics legislation: Public discussion document



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Foreword from the Minister of Statistics

Stats NZ, our official data agency, has a key role in providing independent, high-quality information and insights about New Zealand and the lives of its people.

Data and statistics support everything government does, including our Government's ambitious agenda on child poverty, open government, and sustainable development.

Stats NZ gets the data needed to understand what New Zealanders can afford and what they can't, especially for their children. This data helps Government develop more effective policies and actions to reduce child poverty.

Stats NZ is developing new ways of measuring success that go beyond economic measures and include the wellbeing of New Zealanders and their environment. Indicators Aotearoa New Zealand will inform government policy and investment, ensuring investment and resourcing decisions are made through a wellbeing lens.

Stats NZ's work will not just help government. Making more data available to the public and businesses will help strengthen New Zealanders' sense of agency by increasing participation, openness and transparency.

Much of what Stats NZ does is governed by the Statistics Act 1975. But legislation dating from the 1970s is not fit for today's purpose. Mass computer access, the internet and social media have all arrived in the years since the Statistics Act was passed. All have tremendous implications for data gathering, use, and privacy. This discussion document sets out the challenges and opportunities the new legislation must meet.

Data and statistics legislation needs to recognise that government-held data is a strategic asset. It can be used to benefit people, government, and the economy.

We need to ensure that the new legislation reflects the Government's intention to work with Māori, to respond to Māori data needs, aspirations, rights, and interests. We want to see an active partnership with Māori when agencies design and implement new data processes.

Data and statistics legislation must address the challenges that come with more data being collected, managed, and used. Often this data is personal and sensitive. The legislation must ensure it is used safely and responsibly.

We must get the balance right between increasing availability and use of data, and ensuring data is shared and used in a way that is acceptable to New Zealand and keeps people safe.

This balance needs to be right for New Zealand. That's why I am interested in what you have to say during this consultation. I invite you to be part of it.

Hon James Shaw
Minister of Statistics

The Government Statistician's preface

At Stats NZ our vision is to 'unleash the power of data to change lives'. Every day we work to increase the value and use of data to drive innovation and achieve better outcomes for New Zealanders, while maintaining and growing trust and confidence in how we manage and use data. Stats NZ is New Zealand's major producer of official statistics, delivering and communicating our most important and trusted statistics that tell us how our country is doing.

The Statistics Act 1975, which guides the way we operate, is more than 40 years old. In 1975, statistics were produced in hard copy on paper, and regular use of computers was just beginning. Now, in 2018, there is much more data available and advances in technology mean we can make better use of it than ever before. At the same time, traditional forms of data collection, while still useful, now require more effort and funding to maintain results.

New data and statistics legislation will shape how we work in the future. It will support our wider responsibility to work with iwi and Māori, other government agencies, businesses, non-government organisations (NGOs), and communities to get the most from one of New Zealand's most strategic and precious assets – data.

Treating data as an asset, rather than simply an input, allows more value to be extracted from it. This requires us to consider how the data asset will be used, not just once, but multiple times, by different users. But we must ensure data is being used appropriately across the system, with the right safeguards and protections.

Increasing access to data means more people can use it – people from all walks of life, with different backgrounds and experiences. Solving some of New Zealand's problems will require new ideas and we will only get this through greater diversity of thought.

New data and statistics legislation aims to also much better reflect the modern Treaty relationship between Māori and the Crown. Data has a significant role to play in advancing iwi and Māori economic, social, and cultural wellbeing. We also know how important it is that data governance arrangements reflect Māori interests and concerns. We want your views on how we can recognise these interests.

Some of the proposals in this discussion document are about Stats NZ's role as New Zealand's national statistical office. For these, we want your views on how we can get the data we need for our important official statistics and ensure there's transparency, trust, and integrity in producing those statistics.

We also talk about the importance of a consistent approach across government in collecting, managing, and using data. Our ability to use data in new and different ways is affected by the behaviour of all of government – loss of trust in one part of government can have a lasting effect on others.

This is your chance to make a difference to the future of data and statistics, and how they are used for the benefit of New Zealand.

I look forward to your feedback.

Liz MacPherson
Government Statistician

Contents

Purpose of this discussion document

This document sets out the challenges and opportunities with current legislation for statistics, and the sharing and use of government data for research and analysis. It discusses high-level proposals for new data and statistics legislation that will provide a consistent approach to the production of official statistics, and the safe management and use of government data for research and analysis.

It also asks questions for anyone wanting to have input into the legislative review, and explains ways to engage with the review and make a submission.

Finding your way around this document

Part 1 – Introduction

The introduction discusses why new data and statistics legislation is needed and what is important for new legislation: modern and future-focused, reflects the Treaty relationship between Māori and the Crown, recognises data as a strategic asset, and has the right safeguards and protections.

Part 2 – Discussion and questions

The topics we discuss in Part 2 are listed below, with a summary of the key questions we'd like your feedback on. The questions are intended to encourage discussion and seek views about options for new data and statistics legislation. We would also like to hear any further suggestions you may have for improving the way that government collects, manages, and uses data.

New data and statistics legislation

- What are the right outcomes for new data and statistics legislation to guide how government collects, manages, and uses data?
- How can the Treaty of Waitangi and the interests of iwi and Māori be recognised when collecting, managing, and using data?

Collecting the data New Zealand needs

- What functions are needed for leading the official statistics system?
- How important are professional independence and ministerial oversight?
- Should the public have input into New Zealand's most important statistics (Tier 1)?
- How can the best survey and administrative data be provided?
- Should the public be consulted on changes to census topics?

Making better use of data

- What should be considered when making government data open and accessible?
- What is important when data is shared across government and with government (by those outside of government)?
- What should inform decisions about accessing government-held data for research and analysis?

Safeguards and protections

- What factors need to be considered for de-identification and confidentialisation?
- What are the issues around approving international users and secure access?
- What requirements about transparency should there be?
- How appropriate are offences and penalties?

Part 3 – How to have your say

Part 3 explains how to provide feedback on the proposals in this discussion document, and other ways you can have your say during public consultation.

For more information

Visit www.stats1975.nz.

Contact the legislative review team at stats1975@stats.govt.nz.

Key terms used in the discussion document

Administrative data
Data collected or created for administrative purposes such as registration, service delivery, transactions, and record-keeping. This includes data collected as part of the day-to-day activities of:

- government agencies, for example benefit data, ACC injury claims, driver licences and motor vehicle registers
- businesses, for example banking or EFTPOS transactions, insurance claims
- other organisations, for example community organisations delivering services.

Confidentialisation
Reduces the likelihood that individuals, households, or organisations can be identified by using statistical techniques such as combining two or more groups (aggregation), and changing the number of respondents in a group (eg rounding or suppressing small numbers).

De-identification
Reduces the risk of spontaneous recognition (that is, the likelihood that a person, place or organisation may be identified without any effort). It typically includes, but is not limited to, removing names, day of birth or death, addresses, and unique personal or business identifiers.

Government data system
The government data system is the government-wide system of policies, practices, processes, and people that are involved in the collection, management, and use of government-held data. A map of the New Zealand government data system is available.

Linked or integrated data
Data from different sources that has been combined into a single dataset. For example combining information about individuals, households, organisations, geographical regions, communities, and populations.

Official statistics
Statistics summarise information about groups of individuals, households, or organisations. Official statistics are defined in the Statistics Act 1975 as any statistics that are or could be regularly published by government departments. New Zealand's most important official statistics are called Tier 1 statistics.

Official Statistics System
The whole-of-government system that underpins the production of official statistics.

Research and analysis
Research and analysis generates new knowledge about: economic, social, and environmental issues; groups of individuals, households, or organisations; and the relationship between different factors and how they change over time. Research and analysis are used by government, and by people, communities, and organisations outside of government to inform decision-making, develop policy, improve service design and delivery, and better understand what is working and what needs improvement.

Survey data
Data collected by directly asking an individual, family, organisation, or business to provide answers to questions. Examples include data collected via full-count surveys (eg the Census of Population and Dwellings, and the agricultural production census), and sample surveys (eg the Household Labour Force Survey, and the Wholesale Trade Survey).

Tier 1 statistics
Tier 1 statistics are New Zealand's most important official statistics. They are essential for understanding how well New Zealand is performing and for informing critical decisions made by government, business and the public. They enable international comparisons and are crucial for New Zealand's international credibility.

Part 1: Introduction

Introduction

For more than 40 years the Statistics Act 1975 has governed the operation of New Zealand's Official Statistics System. The Statistics Act aims to deliver value by ensuring that high-quality statistics are produced across government, independent of political and other undue interference. This means New Zealanders can have trust and confidence in the statistics and use them to inform decisions.

Statistics and the data that underpins them are needed to support critical decisions taken by government, businesses, iwi, communities, households, and individuals. Together, statistics and data are one of the cornerstones of an open and democratic society, supporting good government and public confidence.

Why change is needed

The Statistics Act isn't keeping up and understandably so. It was designed back in the 1970s when statistics were produced in hard copy and regular computer use was just beginning.

The data environment and information needs have changed significantly and will keep changing. Even newer technologies will emerge, the capabilities of data users will increase, and new data sources will be created. The need to keep data safe and protect personal and confidential information has not changed, but the ways we can do that have.

The Statistics Act does not have the flexibility needed to respond to these or future changes. This limits the value New Zealand could gain from transparent, trusted, and greater use of government data.

The Statistics Act is also out of sync with other legislation such as the Official Information Act 1982, the Privacy Act 1993, and the Public Records Act 2005. These Acts take a more modern approach. They include protections without unreasonably restricting data access and use.

In over 40 years, only minor amendments have been made to the Statistics Act. Change is needed.

Doing more with data to benefit New Zealanders

Data is not valuable by itself, its value is in its use. When used safely – protecting privacy and confidentiality – and with New Zealanders' trust and confidence, data and statistics can provide rich insights about us and our communities.

Improved access and better use of data, combined with the use of sophisticated technology and analytical techniques, can help create better outcomes for New Zealanders. Iwi and Māori, businesses, community groups, academics, researchers, and individuals should all be able to use data held by government – alongside their own data sources – to inform thinking and decisions.

Greater data use has the potential to make a real difference by shining a light on complex problems and delivering innovative solutions. This could improve the quality and efficiency of services, and ensure action and resources are focused in the best places to achieve our society's objectives.

Safeguards and protections are essential

While greater data use is a significant opportunity for New Zealand, we must be prepared for, and able to address, the associated risks and concerns.

We must keep data safe, and protect privacy and confidentiality. We must also ensure government use of data is appropriate and meets New Zealanders' expectations. There must be clear accountability for the way data is collected, managed, and used. New Zealanders need to know the right action will be taken if things go wrong.

Transparency, trust, confidence, and integrity must be at the heart of any decisions around the use of data held by government on behalf of New Zealanders.

Getting the balance right

We know New Zealanders are comfortable with data use that creates benefits for themselves or others, but those benefits must outweigh the risks. 1 We must ensure data isn't misused or used in a way that results in harmful or unfair outcomes.

The processes weighing up risks and benefits are evident in decisions about:

- what data to collect and how to collect it
- when data should be made open or only available to approved users
- the confidentiality settings for data
- whether data should be integrated with other data
- who can access data.

We need to find the right balance between delivering increased value to New Zealanders through data availability and use, and ensuring data is shared and used in a way that keeps people safe and is acceptable to society. If we don't get this right, data may not be used safely, and public trust and confidence will decline. But if we are too cautious, we could miss out on new insights with the potential to change lives.

Keeping pace with change

New data and statistics legislation needs to reflect a modern and future-focused data environment. It will shape how Stats NZ works in the future by keeping pace with new technology, increasing capabilities of data users, and creating new data sources.

New data and statistics legislation will recognise the Treaty relationship between Māori and the Crown, and their interests in using data for decision-making and advancing economic, social, and cultural wellbeing.

It will recognise government-held data as a strategic asset and help increase the economic, social, and environmental benefits from data. It needs to have the right safeguards and protections to ensure New Zealand's data is used safely and appropriately.

It will need to be flexible to keep pace with change, able to respond to the current data environment and a future that can't be fully envisaged.

1 For example, research conducted for the Data Futures Partnership and their work on trusted data use: Our data, our way. Findings from public engagement February/March 2017.

Part 2: Discussion and questions

New data and statistics legislation

Purpose and scope

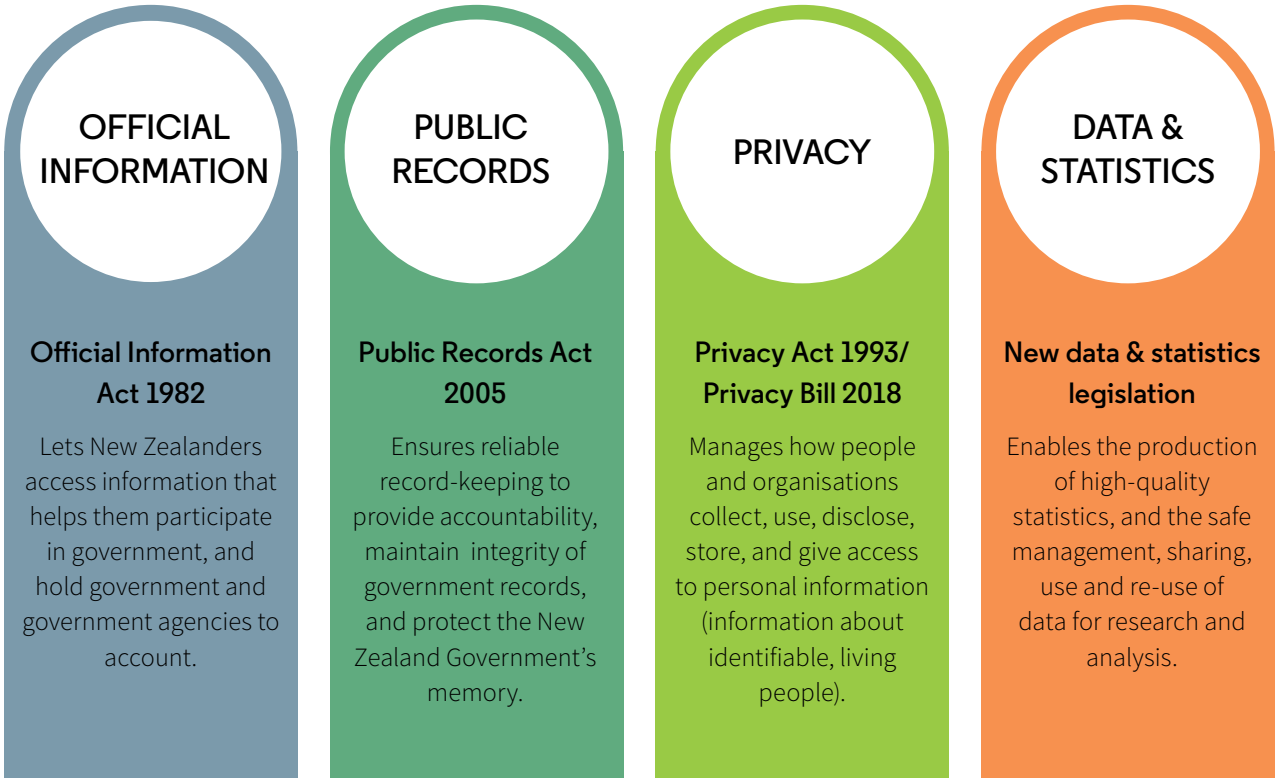
New data and statistics legislation will modernise outdated official statistics legislation. It will support the safe and responsible collection, management, and use of government-held data. This in turn will maximise the value of data to improve outcomes for all New Zealanders.

The new data and statistics legislation's primary focus will be the production of official statistics, supported by a clear framework for sharing and accessing government-held data for research and analysis.

Relationship with other legislation

New data and statistics legislation will sit alongside other legislation including the Official Information Act 1982, the Privacy Act 1993, and the Public Records Act 2005. These Acts establish positions (eg Privacy Commissioner, Chief Archivist) that have responsibility for carrying out governance functions, alongside the Government Statistician and others (see Appendix 2). The aspects of data collection, management, and use covered by the Acts are summarised below.

Figure 1: Legislation with responsibilities for data collection, management, and use



Outcomes for data and statistics legislation

The data collected and held by government on behalf of New Zealanders, organisations and communities is a strategic asset. We have an obligation to ensure this asset is used safely and responsibly, so all New Zealanders can benefit. But it must be done in a way that's sustainable, and maintains trust and confidence.

Data and statistics are significant contributors to improving the wellbeing of New Zealanders and lifting productivity. Data and statistics help New Zealanders understand their world, make informed decisions, and engage with government. Within government, data and statistics inform policy development, investment decisions, service delivery, and the setting of government targets.

Challenges and opportunities

New data and statistics legislation needs to guide how we collect, manage, and use data within a context of rapid change. This is best done by using modern drafting, reflecting high-level outcomes in primary legislation (an Act) with more detailed measures in other legislative instruments that can be responsive to change. This means data methods, rules, and processes can change as the data environment changes. Such approaches can help decision-makers interpret and apply legislation consistently and accurately.

Proposals – tell us what you think

Your views are sought on whether the outcomes below are the right ones for new data and statistics legislation:

Government-held data is a strategic asset when used safely and responsibly to improve the lives of all New Zealanders.

Iwi and Māori rights and interests are actively protected when collecting, managing, and using data.

Official statistics are relevant, reliable and impartial.

The independence and integrity of official statistics are actively protected and promoted.

Government has ongoing access to the data it needs.

The burden of supplying data is minimised for individuals, organisations, and businesses.

Data is made open (anyone can freely access, use, and share it), whenever possible, to maximise value and access. When data can't be made open, but can be safely shared through controlled access, it will be.

Privacy, confidentiality, and transparency underpin collection, management, and use of data.

Governance and accountability arrangements ensure safe and appropriate use of data to create value, while maintaining New Zealand's trust and confidence.

Question:

1. **Do you think these proposed outcomes are the right ones for new data and statistics legislation? Please comment on any of these outcomes, and/or list any other outcomes you think should be considered.**

Treaty relationship with Māori

The government is committed to meeting its responsibilities under the Treaty of Waitangi (the Treaty) and its broader legal obligations to Māori. Stats NZ plays a key role in strengthening the wider Māori–Crown relationship – our work supports iwi self-determination, and aspirations to thrive and be successful through the benefits of data-enhanced decision-making. This includes:

- understanding the views of Māori, particularly concerns around data sovereignty and governance
- working closely with iwi and Māori to ensure their involvement and engagement in key developments around data for, and about, Māori and the data system
- collaborating with Māori/iwi through Pilot Partnership Projects, which tackle real-world issues and develop innovative products and services
- improving our products and services so they align with Māori data needs
- providing richer insights to improve the quality of decisions.

The Government intends to work with Māori to respond better to the range of needs, aspirations, rights, and interests, and provide for active partnerships with Māori in the design and implementation of the process and outcomes sought. The proposed values for the Māori–Crown relationship are as follows:

- **Partnership** – the Crown and Māori will act reasonably, honourably, and in good faith towards each other as Treaty partners.
- **Participation** – the Crown will encourage and make it easier for Māori to more actively participate in the relationship.
- **Protection** – the Crown will take active, positive steps to ensure that Māori interests are protected as appropriate.
- **Recognition of cultural values** – the Crown will recognise and provide for Māori perspectives and values.
- **Use mana-enhancing processes** – for the Crown and Māori, the process is as important as the end point. This involves a commitment to early engagement and ongoing relationship processes in decision-making about government-held data.

There's growing Māori interest in governance and management of the government data system.

For example, the Data Iwi Leaders Group, established by the Iwi Chairs Forum, provides a forum for discussing governance of Māori data and working with government to address data governance issues.

Te Mana Rauranga (Māori Data Sovereignty Network) advocates and provides support for Māori data sovereignty. In their Tūtohinga (Charter), they say that:

- data is a living tāonga and is of strategic value to Māori
- Māori data refers to data produced by Māori or about Māori and the environments we have relationships with.
- Māori data is subject to the rights articulated in the Treaty and the UN's Declaration on the Rights of Indigenous Peoples, to which Aotearoa New Zealand is a signatory.

Challenges and opportunities

The Statistics Act doesn't reflect the modern Treaty relationship between Māori and the Crown – it doesn't mention the Treaty or the interests of Māori in collecting, managing, and using data.

Data and statistics can play a significant role in decision-making, and advancing iwi and Māori economic, social, and cultural wellbeing. It's about improving data and statistics for, and about, Māori. It's also about increasing access and capability. But data for and about Māori must be safeguarded and protected.

Proposals – tell us what you think

Your views are sought on how new data and statistics legislation can recognise the Treaty relationship between Māori and the Crown, and iwi and Māori interests in collecting, managing, and using data.

Questions:

2. **How do you think the Treaty of Waitangi should be recognised across the government data system?**
3. **How do you think iwi and Māori interests in collecting, managing, and using data should be recognised?**

Collecting the data New Zealand needs

Official statistics

Official statistics are a cornerstone of good government and support public confidence in government. They:

- provide insights into the performance of government
- allow New Zealanders to assess the impact of public policies and actions
- support an open democracy when people use them to engage with, and participate in, government.

Official statistics are relied on to guide government's most important decisions, and those made by individuals, families, communities, iwi, businesses, and other organisations. For example, they're used by government to calculate benefit entitlements, determine electoral boundaries, and set the official cash rate (which influences interest rates). They also inform evidence-based policy, service design, and delivery.

For users to have trust and confidence in official statistics, the statistics should meet the following criteria:[2]

- **Independent** – explicit professional independence applies in producing and releasing official statistics.
- **Relevant** – to the information needs of current and potential customers, and not measuring outdated or unimportant things.
- **Accurate** – based on scientific method, not based on opinion or measured using biased concepts.
- **Transparent** – everyone knows how they're measured so they can be used effectively, be publicly discussed, and openly challenged.
- **Coherent and comparable** – consistent concepts, definitions, and methods are used, making it possible to combine and jointly use related data sources.
- **Interpretable** – accompanied by sufficient information to allow people to properly interpret and use the data and statistics, not just take the numbers at face value.
- **Timely** – released in a timely and punctual manner.

Leading the Official Statistics System

Stats NZ is New Zealand's national statistical office and a major producer of official statistics. The Government Statistician, who is also the Chief Executive of Stats NZ, leads the Official Statistics System and coordinates statistical activity across government by:

- driving overall performance and ensuring New Zealand gets the information it needs, at the lowest possible cost to government, the community, and suppliers of data
- providing direction and engaging other government departments to build shared ownership, minimise duplication, and maximise reuse of data
- defining and agreeing on the results that agencies will focus on together
- overseeing statistical activities across government, including:
  - setting statistical standards
  - reviewing and commenting on the validity of statistics
  - monitoring progress and performance
  - ensuring action is taken if expected results do not occur
- advising government on policies, priorities, and the costs and benefits of statistical activities.

Stats NZ partners with other national statistics offices and international organisations to deliver globally comparable data and statistics. Stats NZ has obligations to regularly provide statistics as part of New Zealand's

2 These criteria reflect New Zealand's Principles and Protocols for Producers of Tier 1 Statistics, the United Nations Fundamental Principles of Official Statistics (UN Fundamental Principles) and the OECD Recommendation on Good Statistical Practice.

membership of the Organisation for Economic Co-operation and Development (OECD), and the International Monetary Fund (IMF).

Challenges and opportunities

The Statistics Act doesn't provide a modern authorising framework for the Government Statistician to lead and coordinate the Official Statistics System. It only includes duties to develop and promote rather than guide and direct compliance with statistical best practice. To fill the gap, other mechanisms have been used. For example there's a Cabinet mandate that all agencies producing Tier 1 statistics must comply with requirements set out in the Principles and Protocols for Producers of Tier 1 Statistics.[3]

A more directive approach is supported by the UN Handbook of Statistical Organization. The Handbook advises that where the chief statistician is also the chief coordinator of the statistical system, they should have the authority to commit the system to certain standards and quality characteristics, as well as to address the burden on respondents.

When the Statistics Act came into force, there were only a few other government agencies producing official statistics alongside Stats NZ. This explains the strong focus on Stats NZ. There are now many more agencies producing official statistics. It's important any responsibilities relating to producers of official statistics apply to all producers of official statistics.

3 The Principles and Protocols are a set of practice guidelines and requirements developed by Stats NZ, in consultation with other Tier 1 statistics producer agencies. Stats NZ provides best practice advice and guidance on how best to adhere to the Principles and Protocols, which are intended to ensure that users can have trust and confidence in Tier 1 statistics.

Proposals – tell us what you think

New data and statistics legislation should clearly set out the Government Statistician's functions, duties, and powers for leading and coordinating the Official Statistics System. This includes being able to:

- set standards and issue directives about producing and publishing official statistics
- undertake monitoring and assurance reporting against the standards, with tools to support this
- influence the design and quality of administrative data collected by government to ensure its fitness for statistical (and research and analysis) purposes
- delegate functions, duties, and powers across the Official Statistics System when it's in the public interest and, if required, with Ministerial approval.

The ability to delegate functions, duties, and powers better supports a system with multiple producers of official statistics. Various delegation models could be followed, ranging from:

- the very broad approach under the Electronic Identity Verification Act 2012, which allows the chief executive with administrative responsibility to delegate any of their functions, duties, and powers, with Ministerial approval for delegation to someone outside the state services; to
- the more restricted approach under the Land Transfer Act 2017, which allows the Registrar-General of Land to delegate any of their duties and powers, subject to specified exclusions (eg the ability to set and issue mandatory standards and directives).

Questions:

4. **Do you agree or disagree with the proposed functions, duties, and powers of the Government Statistician listed above? Please comment.**
5. **Do you think there are any other functions, duties, or powers for leading and coordinating the Official Statistics System the Government Statistician needs to have?**

Professional independence and ministerial oversight

Professional independence is critical for ensuring transparency, trust, and integrity in the production of official statistics. It ensures that official statistics are developed, produced, and provided free from political and other interference. It also ensures the high quality of statistics through adherence to statistical best practice. This means New Zealanders and the international community can depend on the statistics produced.

The professional independence of the Government Statistician is protected in New Zealand through the State Sector Act 1998 and the Statistics Act.

The State Sector Act 1988 makes it clear that the Government Statistician must be appointed by the State Services Commissioner. Unlike the appointment process for many other chief executives, the Minister and the Governor-General do not have a role in the appointment.[4]

Under the Statistics Act, the Government Statistician is given sole responsibility for deciding the procedures and methods that Stats NZ uses to produce official statistics. The Government Statistician is also given sole responsibility for deciding the extent, form, and timing of publication of statistics produced by Stats NZ.

As the professionally independent leader of the Official Statistics System in New Zealand, the Government Statistician follows and contributes to international best practice in developing, producing, and disseminating official statistics. The Government Statistician also consults and takes advice.

However, there is still Ministerial oversight and the Government Statistician is accountable to the Minister and takes political guidance.[5] For example the Statistics Act says the Minister of Statistics can direct the Government Statistician to collect or cease collecting statistics of any kind. To ensure transparency, the Act also says that the Government Statistician can publicly comment if this happens. In practice, the Minister of Statistics and the Government Statistician agree on the official statistics Stats NZ will produce.

Challenges and opportunities

The principle of independence should apply to all official statistics, regardless of whether they are produced by Stats NZ or another agency. But the Statistics Act focuses exclusively on the independence of the Government Statistician in relation to statistics produced by Stats NZ. It offers no guidance on maintaining independence when statistics are produced by other agencies.

Proposals – tell us what you think

Requirements for independent production and dissemination of official statistics should apply to all agencies producing official statistics.

Question:

6. What are your suggestions for ensuring transparency, trust, and integrity in the production of official statistics across government?

4 The appointment process is set out in section 37 of the State Sector Act 1988.

5 The UN Handbook of Statistical Organization acknowledges the need for this relationship between the chief statistician and an elected politician.

New Zealand's most important statistics

Tier 1 statistics are essential for understanding how well New Zealand is performing and for informing critical decisions made by government, businesses, and the public.[6] They enable international comparisons and are crucial for New Zealand's international credibility. Because of their importance in meeting enduring information needs, Tier 1 statistics must be of the highest quality.[7]

A list of Tier 1 statistics is approved by Cabinet every five years on the recommendation of the Minister of Statistics, following advice from the Government Statistician. The Tier 1 list operates as a five-year statistical work programme as it includes statistics that are under development or consideration. There is an opportunity within the five years for statistics to be added or moved from development to production.

To support the Government's vision to improve the wellbeing of New Zealanders, Stats NZ is leading work across government to create a set of wellbeing indicators that provide a complete view of New Zealand's progress. The indicators will go beyond economic measures, such as the current gross domestic product (GDP), to include wellbeing and sustainable development.

Indicators Aotearoa New Zealand – Ngā Tūtohu Aotearoa will provide a clear view of how we are tracking as a nation, using a wellbeing and sustainable development lens. The indicators will build on international best practice and be tailored to New Zealanders by incorporating cultural and te ao Māori perspectives. Public consultation to find out what wellbeing means to New Zealand is underway.

Challenges and opportunities

The Statistics Act defines official statistics as statistics produced by government departments and specified Crown entities that are published regularly, or planned to be, or could reasonably be, published regularly.

Some statistics are more important than others (eg Tier 1 statistics), and quality and oversight requirements should reflect that. For example it doesn't make sense to subject statistics capturing the most popular baby names to the same degree of scrutiny as population projections, or adult literacy statistics.

Requiring some statistics to meet the highest quality standards, and any other specified requirements, doesn't mean other official statistics would be free from quality controls. Other official statistics would still be subject to quality standards and guidelines for the collection, management, and use of data, and agencies would be supported to follow statistical best practice.

It's timely to consider whether the Cabinet process for approving Tier 1 statistics is sufficiently transparent and sustainable. Tier 1 statistics underpin public policy and inform decision-making, so there's good reason to seek public input when identifying them. For example in Australia, their most important statistics (Essential Statistical Assets for Australia) are developed through public and targeted stakeholder consultation.

In some cases, statistics may be produced outside of government, such as house sales, that could also be relied upon in the same way as official statistics produced by government. It would be inefficient or impractical to reproduce these statistics within government.

Proposals – tell us what you think

New data and statistics legislation should ensure important official statistics meet the highest quality requirements and it's clear which statistics must meet those requirements.

6 The Tier 1 statistics list is published on the Stats NZ website. It comprises 162 statistics produced by Stats NZ and 15 other government agencies.

7 Tier 1 statistics must comply with the Principles and Protocols for Producers of Tier 1 Statistics – a set of practice requirements based on the United Nations Fundamental Principles of Official Statistics.

New data and statistics legislation should include opportunities for public input into determining New Zealand's most important statistics.

There should also be a way to recognise high-quality, reliable, and trustworthy statistics produced outside of government.

Questions:

7. **Do you think there should be an opportunity for public input when deciding on New Zealand's most important statistics? Please explain.**
8. **Do you agree that high-quality statistics produced outside of government should be able to be recognised as reliable and trustworthy? Please explain.**

Survey and administrative data

Official statistics are produced primarily from two data sources: through surveys (from the census and other household and business surveys) and from administrative data (eg data already collected or produced as part of the day-to-day activities of government agencies, businesses and other organisations). Without this combination of data sources, the ability to produce official statistics would be irreparably compromised. The Statistics Act is silent on the collection of administrative data, despite it being used to produce official statistics for over 100 years.

Challenges and opportunities

The primary purpose for which administrative data is collected and the frequency of collection mean that it can often be more accurate and timely than survey data. For example income from tax and transfer data (where high accuracy and timeliness for the data are enforced by law) can provide a more accurate picture of income than census data (where respondents are asked to recall their income, often from various sources).

Improving technology and statistical methodologies means administrative data can be used to reduce the burden for the people, households, and organisations required to complete surveys. But it's not a case of one size fits all. Not all data is available as administrative data. There can also be problems with administrative data, including:

- coverage gaps, missing or poor data where specific data is not important for the administrative process
- poor collection and coding practice
- lack of transparency or traceability
- poor documentation
- unexpected changes in data collected.

Stats NZ relies on voluntarily provided administrative data. If data isn't provided voluntarily, the Government Statistician must then collect the data via a survey. This takes longer and costs more for both government and suppliers. It also risks the continuous and timely supply of data.

Being clearer about the requirement to provide administrative data would help ensure that the best data source is used to produce the official statistics that New Zealanders rely on. It would also increase certainty for data suppliers that the protections and safeguards in the Act apply.

Making the most of data that already exists is consistent with international best practice, as more countries increase their use of administrative data. The United Nations Economic Commission for Europe's Guidance on common elements of statistical legislation recommends administrative data suppliers be required to provide that data to producers of official statistics. It also recommends they maintain continuity of supply, as much as possible. Further, providers of administrative data should consult with the national statistical office if they plan to develop a new data collection or make significant changes to data collection or processing.

International perspectives on accessing administrative data

OECD Council of Good Statistical Practice: recommends national statistics offices (NSOs) should have the right to access administrative data to produce official statistics. It recommends NSOs should have the authority to influence the design of administrative data to ensure they are fit for statistical purposes.

United Nations: recommends access to administrative data for official statistics be specifically covered in legislation.

United Kingdom: the UK Digital Economy Act 2017 explicitly empowers the Statistics Board to acquire administrative data from Crown bodies, other public authorities, businesses, and other organisations for the purposes of producing official statistics. Agencies, businesses, and organisations are required to comply.

Ireland: legislation requires public agencies to grant the NSO access to administrative data and provides for the NSO to influence the quality of administrative data. "[The NSO] shall have the authority to assess the statistical potential of the records maintained by public authorities and, in conjunction with them, to ensure this potential is realised in so far as resources permit."

Malta: similar provisions to Ireland, with the right to access administrative data extending to data held by any person or undertaking.

Norway: the NSO has the right to propose changes to planned administrative data collection to ensure the data can be efficiently used for statistical purposes.

Proposals – tell us what you think

New data and statistics legislation should give positive, clear assurance that it's appropriate and safe to provide data, regardless of the data source. New data and statistics legislation should enable the Government Statistician to:

- collect data from the most appropriate data source to produce official statistics regardless of whether the data source is a survey or administrative data
- influence the design and quality of administrative data collected by government to ensure its fitness for statistical (and research and analysis) purposes.

We propose that government agencies, other public authorities, businesses, and other organisations be required to provide administrative data. An exception would be when another law, for example, requires the data to not be shared at all.

Questions:

9. **What do you think about the Government Statistician being able to choose the best data source (administrative data or survey data) and require the data to be provided?**
10. **Do you have any suggestions about what the Government Statistician should consider when deciding the best data source needed to produce official statistics?**

The Census

The Census of Population and Dwellings (the Census) provides the official count of the population and dwellings in New Zealand. It's conducted once every five years, as required by the Statistics Act. By counting people where they are on Census night, the Census provides a snapshot of the people in New Zealand and tells the story of social and economic change.

Census information is used:

- to determine how billions of dollars of government funding is spent in the community
- to plan and make decisions about services such as hospitals, kōhanga reo, schools, roads, public transport, and recreational facilities

- by councils, community groups, iwi, and businesses to make informed decisions about existing and new services
- to adjust electoral boundaries for Parliament and determine the number of general and Māori electoral seats (alongside results from the Māori electoral option).

The Census provides detailed demographic and socio-economic information about communities. It's unique in its ability to provide information for very small geographical areas and population groups such as iwi. It allows communities to see themselves in the data, and engage with government on issues impacting their families, businesses, schools, and other organisations.

Cabinet has directed Stats NZ, like many statistical offices overseas, to work towards producing Census information from administrative data. For this to happen, the Government Statistician must be able to access the right data and influence its quality. Using administrative data will reduce the cost and burden for New Zealanders. Read more about our progress on Census transformation.

Regardless of what form the Census takes, the requirement that the Government Statistician and Stats NZ provide an official count of the population and dwellings should remain.

Challenges and opportunities

Many of the Census provisions in the Statistics Act are overly prescriptive, such as the long list of topics that can be collected if it's in the public interest.[8] In practice, decisions by the Government Statistician to collect any new or altered information are based on a comprehensive process of consultation, evaluation and review.

Decisions on content take into account:

- the value of the data to New Zealand's society and economy
- the level of public acceptance and burden for those completing the Census
- whether the Census is the most appropriate way of collecting the data
- consistency with other data collections (concepts, definitions, classifications).

The Statistics Act also includes a lot of detail about how the Census should be carried out, for example the process for handing over and collecting paper forms in sealed envelopes. This detail doesn't match how New Zealanders go about their lives in the 21st century.

It also doesn't fit well with modern legislation and it limits the ability to respond efficiently to changes in information needs and collection methods.

Proposals – tell us what you think

We propose new data and statistics legislation to require that:

- the Government Statistician and Stats NZ conduct the official count of the population and dwellings for New Zealand
- the Census is conducted at least every five years
- the New Zealand public is notified when the Census is to take place and how it will be conducted
- public consultation is undertaken before decisions are made on any changes to content
- new content must be in the public interest.

Question:

11. Do you think public consultation should be required before decisions are made on new or altered content for the Census? Please give reasons.

8 In addition to the long list, the Census must collect: name, address, sex, age, and ethnicity of every occupant of a dwelling; and the location, number of rooms, ownership, and number of occupants on Census night of every occupied dwelling.

Making better use of data

Open data

Open data is data anyone can freely access, use, and share. Open data is easily accessible, openly licensed, and in a format that makes it easy for others to re-use (this often means it should be in a machine-readable format). Open government data is generally non-personal, unclassified, and non-confidential.[9] Official statistics are open data.

Some data can't be made open but can be accessed and used for particular purposes, such as for research and analysis (with the right safeguards and protections). Other data must remain closed because it's highly confidential, or using it for other purposes isn't permitted.

The Declaration on Open and Transparent Government explains the government's commitment to actively releasing high-value public data:

> *The government holds data on behalf of the New Zealand public. We release it to enable the private and community sectors to use it to grow the economy, strengthen our social and cultural fabric, and sustain our environment. We release it to encourage business and community involvement in government decision-making.*

The International Open Data Charter principles, adopted by the New Zealand Government, guide best practice for making data open. Similar principles for official statistics[10] support open data and open government. Protecting privacy is an integral part of the open data approach – "open data can only be unlocked when citizens are confident that open data will not compromise their right to privacy" (Principle 1.4).

Stats NZ supports agencies to accelerate the release of open government data in its capacity as the agency responsible for the Open Government Data Programme, and through its data stewardship role.

Challenges and opportunities

New Zealand has made good progress in opening government data but more can be done. When data is made open it must be safe. Decisions about which data to make open are informed by relevant laws (eg the Privacy Act), public safety, and commercial sensitivities. There should be a consistent approach across government, with decisions based on weighing up risks and benefits.

Proposals – tell us what you think

New data and statistics legislation should support proactive release of data, whenever possible, to maximise value and access to that data.

Question:

12. What things do you think are important when deciding to make data open?

9 While open government data, including that about individuals, businesses, and organisations, is typically confidentialised, there are exceptions where consent has been provided or is provided for in legislation (eg chief executives' remuneration is published in the public interest).

10 United Nations Fundamental Principles of Official Statistics (UN Fundamental Principles).

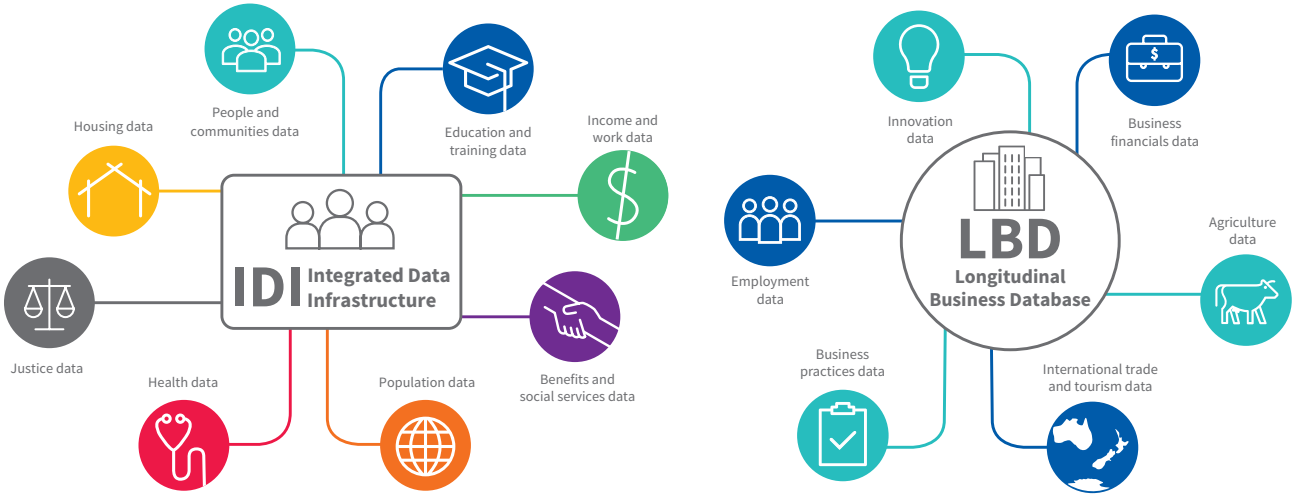
Using data for research and analysis

Research and analysis generate new knowledge about groups of individuals, households or organisations, and the relationship between different factors and how they change over time. Research and analysis are used by government, and by individuals, communities, and organisations outside of government. They inform decision-making, develop policy, improve service design and delivery, and better understand what's working and what needs improvement.

Stats NZ is recognised as a world leader in the linking (or integration) of data for research and analysis, and protecting the identities of individual people and organisations. Stats NZ has two large integrated databases (find out more about integrated data at Stats NZ):

- Integrated Data Infrastructure (IDI) – contains data about people and households
- Longitudinal Business Database (LBD) – contains data about businesses.

Figure 2: Types of data in Stats NZ's IDI and LBD



Research can lead to new insights and knowledge about things that are important to New Zealand, such as in the research examples below.

Agricultural productivity

Researchers at Motu Economic and Public Policy Research have used the Longitudinal Business Database (LBD) to explore productivity of dairy and sheep/beef farms. Their research has shown that dairy farms achieve the greatest benefit from concentrating production in their primary activity. Sheep/beef farms benefit from adding other activities (eg forestry).

Wellbeing of Ngāi Tahu Whanui

Ngāi Tahu researchers are using data from the IDI and data held by Ngāi Tahu to understand how and why whānau may be at higher risk of serious health conditions. Other work is looking at how specific groups, such as kaumātua, may be assisted to build economic resilience against poverty.

Natural environment and asthma

Researchers from Massey University have used the IDI to explore the connection between the natural environment and asthma. They followed 50,000 New Zealand children born in 1998 through to 2016 and found that children who lived in greener areas were less likely to be asthmatic.

Making better study decisions

Career NZ's Compare Study Options tool helps young people make better-informed decisions about where their study choices can lead them. It compares earning and employment outcomes for different study options. The Ministry of Education created this tool by using combined student loan, tax, and education data in the IDI.

Economic costs of marital separation

A researcher at Auckland University of Technology has explored the economic consequences of marital separation, particularly for families with children. The research found that women are substantially worse off than men, and the negative impact persists for at least three years after separation. This research could be used to inform future child support policy in New Zealand.

Sharing data for research and analysis

It's important that government-held data can be safely shared across government and linked (or integrated) for research and analysis. Linked datasets can provide richer insights and support better decision-making. Research and analysis of linked data can help identify patterns and trends, and show the relationship between different data (eg environmental, social and economic data).

It's also important that this is done ethically and securely, respecting privacy and confidentiality. Because of the Statistics Act's strong data protections and public concern about privacy and increased sensitivity of linked data, Cabinet directed in 1997 that:

> *Where datasets are integrated across agencies from information collected for unrelated purposes, Statistics New Zealand should be custodian of these datasets in order to ensure public confidence in the protection of individual records.*

Challenges and opportunities

While the Statistics Act enables the sharing of data for research and analysis (and to produce official statistics), there's no clear statement to this effect, and it's not always clear which protections should apply, and when.

It is not just government-held data that is shared and used for research and analysis. Organisations outside of government also share their data, for example, data from the Auckland City Mission is included in the IDI. It's not possible under the Statistics Act to distinguish data shared by those outside government for research and analysis from data shared by government agencies or data provided for official statistics.

Proposals – tell us what you think

New data and statistics legislation should clarify that data can be safely shared across government and linked so that it can be used for research and analysis. New legislation should clarify the protections and safeguards that apply, including when organisations outside government want to combine their data with government-held data for research and analysis.

Data shared under the new data and statistics legislation should not be able to be used to make decisions about an individual (eg law enforcement and service delivery) without the consent of that individual. Permission for agencies to share or use identifiable information for those purposes should continue to be provided by the agency's own legislation or overarching legislation such as the Privacy Act (eg approved information sharing agreements (AISAs)).

Questions:

13. **Do you agree or disagree that new data and statistics legislation should clarify that data can be shared across government so that it can be used for research and analysis, with appropriate safeguards and protections? Please give reasons why or why not.**
14. **What protections and safeguards do you think should apply when organisations outside government want to combine their data with government data for research and analysis?**

Access to government-held data for research and analysis

Government holds a range of data on behalf of New Zealanders. This data should be available for research and analysis, with appropriate safeguards and protections to recognise and protect privacy, commercial sensitivity, and other interests.

Access to government-held data for research and analysis may be granted if the public interest in doing so outweighs any associated risks. Public interest is broadly equivalent to the concept of public good or what's in the best interests of society. This approach acknowledges there are people, organisations, and communities behind the data who have an interest in, and are affected by, how data is used.

Research on public views to data use has generally found support for use of data where there is public good or benefit, including:

- improved outcomes that have individual or public benefit[11]
- improved Māori individual and collective wellbeing (cultural, economic, social, and environmental wellbeing)[12]
- fair allocation of taxpayer-funded services[13]
- enhancements to and more efficient public service provision.[14]

Other benefits include contribution to public debate, community development and social cohesion, economic development, and environmental sustainability.

Public interest research and analysis may contribute to:

- improved social and economic outcomes
- more effective and efficient services
- environmental sustainability.

There may be public interest in exploratory research or analysis where new knowledge will be generated (whether the research or analysis is successful or not) but there is uncertainty about whether it will lead to improved outcomes or services. There may also be public interest in research or analysis relating to small groups of people or resulting in some personal gain for an individual or organisation as well as benefiting the public.

Establishing there's public interest is only half the story. The nature and extent of any benefit from the research or analysis must be weighed against any associated risks or potential harms. This includes assessing the nature and extent of risks or harms, and whether, and to what extent, they can be managed or mitigated.

The process of weighing benefits against risks or potential harms is called a 'public interest test' and involves exercising judgement.

Challenges and opportunities

The Statistics Act requires the Government Statistician to consider the public interest when deciding whether to allow access to Stats NZ-held data for research and analysis purposes. But the Act doesn't say what sort of things to consider. This lack of guidance increases uncertainty about whether access to data will be permitted. It also raises questions about what types of research or analysis are generally in the public interest.

11 Opus International Consultants Limited (July 2015). Public attitudes to data integration: Report prepared for Statistics NZ.

12 Tūhono Trust for Data Futures Partnership (June 2017). Sharing Information for wellbeing: Māori engagement on social license report 2017.

13 Lips, M, Eppel, E, Cunningham, A, Hopkins-Burns, V (2010). Public Attitudes to the Sharing of Personal Information in the Course of Online Public Service provision. Wellington: Victoria University of Wellington.

14 National Research & Evaluation Unit (August 2013). Information-sharing between government agencies: Cultural perspectives. Wellington: Inland Revenue.

Proposals – tell us what you think

New data and statistics legislation should clarify the public interest test considerations for access to government-held data. It should provide guidance for those making decisions about access to government-held data for research and analysis.

Questions:

15. **Do you agree, or disagree, that new data and statistics legislation should clarify the public interest test considerations for access to government-held data for research and analysis? Please give reasons for your answer.**
16. **Data sensitivity, likelihood of harm, and public expectations are three possible factors to consider when assessing the benefits and risks of research or analysis using government-held data. What other factors do you think should be considered and why?**

Safeguards and protections

Right safeguards and protections for data

There are significant benefits from making better use of data, but the right safeguards and protections must be in place to keep data safe and protect privacy and confidentiality. We also need to ensure data use is appropriate and meets New Zealanders' expectations.

Safeguards and protections include de-identification and confidentialisation, approving users and providing secure access, transparency, and addressing breaches through offences and penalties.

De-identification and confidentialisation

De-identification helps to protect the people, places and organisations the data is about. It removes information to reduce the risk of spontaneous recognition (that is, the likelihood that the person, place, or organisation may be identified without any effort). It typically includes, but is not limited to, removing names, day of birth or death, addresses, and unique personal or business identifiers (eg IRD numbers, NHI/national health index numbers, or driver's licence numbers).

The Statistics Act requires that, before Census data, or other survey or administrative data is used for research and analysis, the names and addresses of individuals, businesses and other organisations are removed. Sometimes, as part of the de-identification process, personal or business identifiers are replaced by a randomised unique identifier, which can't be used to identify individuals or businesses.[15]

So while identifiers need to be retained to enable data from different sources to be effectively combined or linked, these are removed (the data is de-identified) before the data is made available for research and analysis.

Confidentialisation goes further than de-identification. It involves applying statistical techniques to group, mask, or scramble the data so the identity and/or location of identifiable subjects aren't apparent and are very difficult to ascertain. Confidentialisation techniques are applied at output, before most official statistics or research and analysis results are published.

It's not only personal data that can be sensitive. Commercially sensitive business data or sensitive environmental data may also require confidentialisation. For example information about the location of populations of some endangered native species may be confidentialised to reduce the risk of harm.

Confidentialisation provides more protection for data than de-identification by significantly reducing the likelihood of re-identification, but it's not possible to provide absolute protection. With the increasing availability of data and new technologies, it may become easier to re-identify data. However, improvements in confidentialisation methods are leading to more effective techniques being available to a range of users to deliver consistency in the level of protection.

Confidentialisation requirements in the Statistics Act apply to identifiable data about individuals, businesses, and organisations. Unless an exception applies, all official statistics produced by Stats NZ, and the results from research and analysis using the data held by Stats NZ, must be published in such a way that prevents any particulars about a person or undertaking (eg business or organisation) being identifiable by anyone (other than the person or undertaking who supplied the data). This means that data is confidentialised to a high level before publication (to prevent identification by anyone). [16]

15 This is consistent with Information Privacy Principles 10 and 11 of the Privacy Act, concerning the limits on use and disclosure of personal information, including that an agency must not use or disclose personal information unless it's to be used for statistical or research purposes and will not be published in a form that could reasonably be expected to identify the individual concerned.

16 This can be compared with the risk management approach to identification in the Privacy Act. The Privacy Act allows personal information to be shared and used for statistical or research purposes if the resulting information won't be published in a form that could reasonably be expected to identify the individuals concerned.

Researchers and analysts working with data covered by the Statistics Act are subject to the same confidentiality requirements as Stats NZ and the Government Statistician.

Challenges and opportunities

The more data is confidentialised, the less value can be obtained from it. This is because the process of confidentialisation (eg combining two or more groups, and changing the number of respondents in a group) makes the data less precise and removes detail. This is especially true for data about small population groups and small geographical areas.

The Statistics Act treats almost all data as being equally sensitive for de-identification and confidentiality purposes. This means key identifiers are removed before data is used for research and analysis, and data is confidentialised to a high level before being published.

There are some exceptions to these strict de-identification and confidentiality requirements, for example when there's consent in writing, the information is publicly available, or the information has been supplied by a local authority. Other exceptions include those relating to cargo, trade, and insurance offices.[17]

An exception-based approach to de-identification and confidentialisation means there's no flexibility in allowing identifiable information to be released when benefit outweighs risk.

For example Stats NZ may disclose an index or list of names and addresses of businesses, together with the number of persons engaged by the business and its industry classification but cannot disclose other useful but non-sensitive information. Every New Zealand business is allocated an institutional sector code by Stats NZ for producing key economic statistics (eg GDP (gross domestic product)). Institutional sector codes provide information about the economic role of businesses (eg banking services, managing investment funds, providing insurance). Sharing the institutional sector code with the Reserve Bank, and in turn with retail banks, would mean banking industry data could be created more efficiently, and be more accurate and consistent. It could significantly reduce the burden on businesses to supply that information themselves.

There would also be benefit in disclosing address information (without any associated personal information). Address data serves a broader purpose than the delivery of post, parcels and services – it locates dwellings, businesses, farms, forests, and community facilities to a specific place.

For example Stats NZ's Statistical Location Register is a combination of addresses and their geographic points, based on data sourced from Land Information New Zealand, NZ Post, the Census, the Business Register, and building consents. The Statistical Location Register could be used to link social, economic, and environmental data and help inform policies contributing to New Zealand achieving its sustainable development goals. The Statistical Location Register does not include the names or other details of people living at any address.

Proposals – tell us what you think

De-identification and confidentiality settings in new data and statistics legislation should reflect the sensitivity of the data, and the likelihood and impact of re-identification. Settings for specific types of data should be informed by a robust risk-management approach.

The confidentiality settings should apply to all decisions about disclosure and publication of data, subject to any express rules restricting, requiring, or permitting identified data to be disclosed or published. For example personal information protection, public register publication, or where there's consent.

Under the proposed risk-based approach, the level of confidentialisation for data relating to entities (households, businesses, organisations) would depend on whether the benefits outweighed other considerations,

17 Stats NZ's current policy is to only release this information to other organisations where the data will be used for producing official statistics of national importance.

such as sensitivity of data (and potential harm from releasing such information including harm to an individual associated with an entity). Any such disclosures and the reasons for them should be transparent.

New data and statistics legislation could provide for de-identification and confidentiality standards to ensure a coordinated and consistent approach across government. The standards could set out the characteristics that make data more sensitive. Strict de-identification and confidentiality requirements would need to be applied when data is highly sensitive. For example, information about child abuse and neglect, personal health and financial information, and commercially sensitive information. When data is less sensitive, more detailed data may be released.

Questions:

17. **Do you agree or disagree with introducing a risk-management approach to confidentiality settings, balancing benefits against the likelihood and potential impact of identification? Please give reasons why or why not.**
18. **Apart from sensitivity of data, what factors do you think should be considered when assessing the potential harm from releasing less-confidentialised data?**

Approving users and providing secure access

Under the Statistics Act, an individual user may access data for research and analysis only if they can be trusted to use data appropriately and follow procedures. The Government Statistician must be satisfied the person has the necessary research experience, knowledge, and skills to access and use the data. Approved users must follow the Statistics Act and Stats NZ's rules and protocols. Users who break the protocols can be banned or prosecuted.

Restricting the way users access data through secure settings or environments helps to protect the data. For example partially confidentialised data may be accessed by an approved user (for an approved research or statistical purpose) through a personalised and secure link provided by Stats NZ. Because there's a reduced likelihood of re-identification (due to the confidentialisation), the data can be downloaded by the approved user to their own device. It must be fully confidentialised on publication.

To protect data that's been de-identified but not confidentialised (eg data in Stats NZ's integrated databases, the IDI and LBD), approved users must access the data in a secure data lab environment. These users must agree to, and sign, secrecy declarations before access. Again, confidentialisation of the data is applied when results are published.

A data lab is a secure virtual environment sited within a secure room that approved users need to visit to access data. Computers are only connected to the Stats NZ network and Stats NZ staff must release required data to users. Approved users must sign in and can only access the data they need for their research or statistical analysis.

Secure data labs are available at Stats NZ offices in Auckland, Wellington, and Christchurch, and in approved research facilities, such as New Zealand universities. These labs must meet a range of conditions including physical security, researcher security and confidentiality practices, and IT systems security. Stats NZ undertakes regular audits of approved external data labs.

Stats NZ is trialling an international data lab in Australia. This external data lab is being used by Australian researchers doing research on behalf of New Zealand government agencies. The Australian data lab must meet the same government security and confidentiality requirements as New Zealand data labs. The only substantive difference is the physical location of the data lab.

Challenges and opportunities

New Zealand regularly produces world-leading research but, because we're a small country, we often draw on the expertise of international researchers or analysts. Increasing the ability of international researchers to undertake research using New Zealand data could greatly increase the value we gain from our data.

The current disclosure settings in the Statistics Act prevent New Zealand's involvement in international research programmes requiring de-identified, but not confidentialised, data to be held by and managed by trusted international organisations (eg national statistical offices and the Luxembourg Income Study described below).

International access would support new insights

The Luxembourg Income Study Database (LIS) contains five decades of income data from approximately 50 countries across Europe, North America, Latin America, Africa, Asia, and Australasia. Researchers can create aggregated data through a secure online tool but, if they want to undertake other analyses, they must be registered by LIS: Cross-National Data Centre in Luxembourg. They can then submit statistical requests which are automatically processed, and aggregated results returned to the researcher.

LIS data can be used to compare socio-economic outcomes between countries and explore the factors that shape those outcomes. LIS-based research has contributed to changes in national policies in several countries. International comparisons of poverty, inequality, and employment outcomes have been used by the UN and the OECD.

If New Zealand participated in LIS we could compare ourselves with other countries and increase our understanding of income inequality, poverty, and other issues.

Proposals – tell us what you think

New data and statistics legislation should:

- continue to provide for approved users and clarify that this includes international users
- set out additional considerations for data labs outside New Zealand
- enable provision of data to reputable international organisations (eg national statistical offices) for ongoing use, provided certain protections and conditions are met.

Questions:

19. **What do you think are the issues, if any, of allowing access to data by international researchers? How might these be addressed?**
20. **What do you think are the issues, if any, of approving data labs outside of New Zealand? How might these be addressed?**
21. **What do you think are the issues, if any, of providing data to reputable international organisations for their ongoing use? How might these be addressed?**

Transparency

Knowing why data is being collected, how it's being managed, and what it's being used for, helps increase value and maintain public trust and confidence. Transparency is increasingly important given the volume of data being collected,[18] and the rapidly changing data environment.[19]

The Statistics Act includes limited transparency requirements around the production and publication of official statistics.[20] It's only as a matter of best practice, rather than any legislative requirements, that Stats NZ publishes details about data integration, and the research and analytical projects for which access is granted. Knowing who's using government-held data, how they are using it, and what they are using it for, creates a check on the appropriateness of access and use.

Challenges and opportunities

When there's no active transparency about what data is being shared across government for research and analysis, there can be doubts about adherence to safeguards and protections. This is particularly relevant when data originally collected for one purpose is being shared and combined with other data for another purpose. People and organisations should be able to see where data relating to them is held.

Ensuring the results from research and analysis are publicly available and accessible helps to increase and demonstrate value. Releasing methodology alongside results is a fundamental requirement of the scientific method, as it enables checking and verification, invites debate, and increases confidence. It can also create communities of interest where researchers and analysts can collaborate, avoid duplication, and build capacity.

Proposals – tell us what you think

New data and statistics legislation should require government agencies to publish information about what data is being shared for research and analysis, who is accessing that data, and for what purpose. Researchers and analysts should also be required to publish results from their research and analysis, including methodology.

Questions:

22. What information about access to government-held data for research and analysis do you think should be made publicly available? Please give reasons.

23. Are there other aspects of data collection, management, and use that you think government agencies should be more transparent about? Please give reasons.

18 For example, the Privacy Commissioner John Edwards noted the greater expectation of transparency as unease about mass surveillance or mass collection of personal information grows https://www.privacy.org.nz/assets/Uploads/2016-09-27-Leadership-Integrity-Forum-speech2.pdf

19 Transparency is at the centre of the Data Futures Partnership's *Guidelines for Trusted Data Use* https://trusteddata.co.nz/.

20 The Government Statistician may release information about the methods, procedures, and definitions used for official statistics; comment publicly on Ministerial directions to collect or cease collecting statistics; and comment on the interpretation and validity of statistics.

Offences and penalties

Ensuring effective compliance with legislative requirements for collecting, managing, and using data is important for achieving value, keeping data safe, protecting privacy and confidentiality, and making sure data is used appropriately.

The Statistics Act includes two broad types of obligations: to provide information to produce official statistics, and to protect confidentiality of information. The Act's only enforcement mechanism for breaching these obligations is criminal prosecution. There are two corresponding groups of criminal offences:

- refusing to provide required information or providing false information
- improper release or unauthorised use of information held by Stats NZ.

Challenges and opportunities

The Statistics Act's compliance and enforcement provisions will be reviewed to:

- update and modernise current offences, including how they relate to other offending (eg crimes involving computers under the Crimes Act 1961)
- update penalties to ensure comparability with similar offences in other legislation (eg the Privacy Bill)
- identify any offences that are no longer necessary or appropriate
- enable an appropriate and proportionate range of compliance and enforcement activities to address a range of behaviour (eg guidance, warnings, fines, and prosecution).

Proposals – tell us what you think

New data and statistics legislation will maintain current obligations to provide information to produce official statistics and protect the confidentiality of information. The mechanisms for enforcing obligations will be proportionate to the nature of non-compliance.

Questions:

24. Apart from the two existing broad obligations – to provide information to produce official statistics, and to protect confidentiality of information – are there any other obligations you think should be able to be enforced?

25. Do you think the two broad types of obligations should be treated with the same level of seriousness? In other words, is failing to provide information as serious as failing to protect confidential information?

Part 3: How to have your say

How to have your say

Submissions

Part 2 of this document sets out challenges and opportunities with current legislation and discusses high-level proposals. These proposals have been developed through discussion with government agencies, and data users and suppliers outside of government. While the public consultation is underway, Stats NZ will continue to work with government agencies and key groups to further develop proposals for new data and statistics legislation.

We are interested in your views on the questions asked in Part 2 of this document (the questions are listed in Appendix 1) and would also like to hear any further suggestions you have to improve the government data system for New Zealand.

See www.stats1975.nz for a submission template.

You can email your submission to:
stats1975@stats.govt.nz

You can post your submission to:

Statistics Legislative Review
Stats NZ
PO Box 2922
Wellington 6011

Please send us your views by **5.00pm on Friday 9 November 2018.**

Short online survey

If you would prefer to answer a few quick questions, a short online survey is available at www.stats1975.nz.

Social media

We will also be posting to Facebook and Twitter.

Next steps

Your views will help us develop policy that may be put into law as new data and statistics legislation. After the consultation period closes, Stats NZ will provide policy options, which will take into account your views, to the Minister of Statistics.

The Minister of Statistics may then seek Cabinet's agreement to his preferred options. If Cabinet agrees, new data and statistics legislation (a Bill) can be drafted. If a Bill is introduced to Parliament, you will have an opportunity to comment to a parliamentary Select Committee.

Personal information and confidentiality

We will collect personal information from you, including your contact information and any information you supply in your submission. This information helps build a better understanding of New Zealanders' views on proposals for new data and statistics legislation. We will analyse the information to understand the views of different groups and the range of people we have reached.

We keep your personal information secure by protecting it from outside sources, making regular back-ups of our data and using the best security systems.

You have the right to ask for a copy of any personal information we hold about you, and to ask for it to be corrected if you think it's wrong. If you'd like to ask for a copy of your information, or to have it corrected, please contact us at stats1975@stats.govt.nz.

We may publish the submissions we receive and provide a summary on our website www.stats.govt.nz. Please let us know if you do not want your name to be included in any submissions or summary of submissions that Stats NZ may publish. We will not publish your contact details (eg email address, phone number, or postal address).

Stats NZ may be asked to release submissions under the Official Information Act 1982. This Act has provisions to protect sensitive information given in confidence, but Stats NZ can't guarantee the information can be withheld. If you don't want information contained in your submission to be released, you need to tell us which information should be withheld and explain why. For example, you might want some information to remain confidential because it's personal or commercially sensitive.

Appendix 1:

Questions in this discussion document

1. Do you think these proposed outcomes are the right ones for new data and statistics legislation? Please comment on any of these outcomes, and/or list any other outcomes you think should be considered.
2. How do you think the Treaty of Waitangi should be recognised across the government data system?
3. How do you think iwi and Māori interests in collecting, managing, and using data should be recognised?
4. Do you agree or disagree with the proposed functions, duties, and powers of the Government Statistician listed above? Please comment.
5. Do you think there are any other functions, duties, or powers for leading and coordinating the Official Statistics System the Government Statistician needs to have?
6. What are your suggestions for ensuring transparency, trust, and integrity in the production of official statistics across government?
7. Do you think there should be an opportunity for public input when deciding on New Zealand's most important statistics? Please explain.
8. Do you agree that high-quality statistics produced outside of government should be able to be recognised as reliable and trustworthy? Please explain.
9. What do you think about the Government Statistician being able to choose the best data source (administrative data or survey data) and require the data to be provided?
10. Do you have any suggestions about what the Government Statistician should consider when deciding the best data source needed to produce official statistics?
11. Do you think public consultation should be required before decisions are made on new or altered content for the Census? Please give reasons.
12. What things do you think are important when deciding to make data open?
13. Do you agree or disagree that new data and statistics legislation should clarify that data can be shared across government so that it can be used for research and analysis, with appropriate safeguards and protections? Please give reasons why or why not.
14. What protections and safeguards do you think should apply when organisations outside government want to combine their data with government data for research and analysis?
15. Do you agree, or disagree, that new data and statistics legislation should clarify the public interest test considerations for access to government-held data for research and analysis? Please give reasons for your answer.
16. Data sensitivity, likelihood of harm, and public expectations are three possible factors to consider when assessing the benefits and risks of research or analysis using government-held data. What other factors do you think should be considered and why?
17. Do you agree or disagree with introducing a risk-management approach to confidentiality settings, balancing benefits against the likelihood and potential impact of identification? Please give reasons why or why not.
18. Apart from sensitivity of data, what factors do you think should be considered when assessing the potential harm from releasing less-confidentialised data?
19. What do you think are the issues, if any, of allowing access to data by international researchers? How might these be addressed?

20. What do you think are the issues, if any, of approving data labs outside of New Zealand? How might these be addressed?

21. What do you think are the issues, if any, of providing data to reputable international organisations for their ongoing use? How might these be addressed?

22. What information about access to government-held data for research and analysis do you think should be made publicly available? Please give reasons.

23. Are there other aspects of data collection, management, and use that you think government agencies should be more transparent about? Please give reasons.

24. Apart from the two existing broad obligations – to provide information to produce official statistics, and to protect confidentiality of information – are there any other obligations you think should be able to be enforced?

25. Do you think the two broad types of obligations should be treated with the same level of seriousness? In other words, is failing to provide information as serious as failing to protect confidential information?

Appendix 2:
Governance of the data system

Governance of the data system is the framework of arrangements, responsibilities, and processes to ensure the strategic direction, effectiveness, oversight, and overall accountability for the data the government holds on behalf of New Zealanders. It's about having the right set of mechanisms to make decisions balancing maximising value for New Zealanders from data use, with keeping New Zealanders' data and the use of that data safe (eg privacy, confidentiality, and ethics). It's also about supporting the Treaty relationship between Māori and the Crown in relation to data, including mechanisms for recognising Māori interests in governance.

An effective governance framework is critical to driving increased value from data for all New Zealanders while protecting trust and confidence, and generating social and cultural license [21] in the government's data practices.

Functions of a strong data system governance framework[22]

- **Anticipate, monitor and evaluate:** consider alternative futures, manage risks, keep pace with changes, and reflect on performance.
- **Build practices and set standards:** enable and continuously improve well-founded practices that can be spread quickly across relevant sectors and uses.
- **Clarify, enforce and remedy:** ensure sufficient arrangements for evidence gathering, debate and decision-making, and for action in the form of incentives, permissions, and remedies for harm, incentives and penalties.

There are multiple ways to carry out these functions. One organisation or group doesn't need to carry out all the functions. For example, a range of roles already carry out governance functions in New Zealand's data system, both in specific domains and across them:

- Government Statistician – coordinates statistical activity across government including production of official statistics.
- Privacy Commissioner – addresses privacy concerns relating to personal information across the public and private sectors, including considering individual privacy complaints and conducting inquiries into privacy-related issues. This includes concerns about collection, management, and use of personal information data, eg inappropriate release of personal information or re-identification of de-identified data.
- Government Chief Privacy Officer – responsible for developing expectations, issuing guidance, and providing assurance to support the public service build capability in privacy and security management.

21 Community acceptance of the costs, risks and benefits of data sharing and use.

22 Based on British Academy for the Humanities and Social Sciences and The Royal Society (June 2017). *Data management and use: Governance in the 21st century: A joint report by the British Academy and the Royal Society.*

- Government Chief Data Steward (GCDS) – the functional lead for data across government, established by the State Services Commissioner to provide effective leadership of the government data system and ensure government-held data is stewarded as a system asset (the Chief Executive (CE) of Stats NZ has been given this role).
- Government Chief Digital Officer (GCDO) – the functional lead for driving digital transformation across government and positioning government to be more responsive in a changing digital world (the CE of the Department of Internal Affairs performs this role).
- Digital Government Partnership Chief Executive group – leads and governs digital and data transformation of the public service, and supports the GCDS and GCDO to maintain alignment across senior leaders and decision-makers.
- The Minister for Statistics and the Minister for Government Digital Services are working with Ministers in relevant portfolios (Justice, Social Development, etc) to support the work of the GCDS and the GCDO and drive better use of data and digital technologies across government.
- Chief Archivist – the Public Records Act 2005 establishes a regulatory framework for information and records management throughout the public sector. This Act covers information compiled, recorded, or stored in any form created or received by public offices (including Ministers) in the conduct of their affairs. The Chief Archivist is responsible for the related Information and Records Management Standard. Archives New Zealand issues standards and other guidance for organisations on how to meet their information and records management obligations. The Act aims to ensure the Government has reliable recordkeeping as a way of ensuring accountability, integrity of Government records, and the protection of New Zealand Government's memory.
- Ombudsman – an independent Officer of Parliament, whose primary role is to investigate complaints, generally on behalf of individuals such as consumers or taxpayers, against public authorities. The Ombudsman's overall purpose is to investigate, review, and inspect the administrative conduct of public sector agencies, and provide advice and guidance, to ensure people are treated fairly in New Zealand. Over time, the Ombudsman's role has been extended in specific ways. For example to investigate agencies failing to provide information requested in accordance with the Official Information Act, to protect whistleblowers, and to investigate the administration of prisons and other places of detention. Complaints about a government agency's processes for managing data, and decisions made about access to, and release of data, can be made to the Office of the Ombudsman.
- Auditor-General – an independent Officer of Parliament with responsibility for undertaking both financial audits and performance audits of public entities. The financial audit role is about providing assurance to Parliament on how public money has been used and what's been achieved with it. The performance audit role involves providing assurance to Parliament about a public entity's effectiveness and efficiency, compliance with statutory obligations, waste, probity, and financial prudence. The Auditor-General has associated powers to inquire into any matter concerning an entity's use of its resources. The Auditor-General could inquire into concerns about one or more government agencies' processes for managing data, including how they decide on access and release of data.
- Courts – decisions on the collection, management and use of data under the Statistics Act can be reviewed by the courts (this is called judicial review). Judicial review is available to consider any adverse effects that might occur because of the discretionary powers relating to the management of data.

There are also multiple layers of Māori participation in governance and management of the government data system. For example the Data Iwi Leaders Group, established by the Iwi Chairs Forum, provides a forum for discussing governance of Māori data and working with government to address data governance issues. Te Mana Rauranga (Māori Data Sovereignty Network) advocates, and provides support, for Māori data sovereignty. Te Pae Whakawairua provides independent advice to the Chief Archivist to ensure services meet the needs of Māori.

A range of sector-specific committees provide advice on ethical issues associated with the use of data.

- The National Ethics Advisory Committee advises the Minister of Health on ethical issues in health services and research, and determines national ethical standards for the health sector.
- Health and disability ethics committees, institutional ethics committees and government agency ethics committees (eg Ministry of Social Development, Accident Compensation Corporation), provide advice on specific uses of data. The Ministry of Social Development's ethics committee can be used by other government agencies.
- The Ministry of Social Development's Privacy, Human Rights and Ethics (PHRaE) framework encourages staff to think about the rights of people whose information they're using, as they design what they are going to do with the information. Work is underway to develop PHRaE for wider use across government.


New Zealand Government